

**Evaluation of an in-service degree programme at a Nigerian University**

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**UNIVERSITY of the  
WESTERN CAPE**

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**Co-supervisor: Dr Cynthia Fakudze**

**May, 2019**

# ABSTRACT

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## ABSTRACT

The Sandwich degree programme is an in-service training programme run by Nigerian Universities for primary and secondary school teachers who either do not have a first degree or those who do not have professional teaching qualifications. The main aim of this study was to evaluate the Sandwich degree programme at Fountain State University in Nigeria, and determine its impact on improving the subject content knowledge of teachers. This study was spurred by the poor performance of some learners in both external and internal examinations despite several efforts made by the government to improve the quality of education in Nigeria. The poor performance of learners has often been blamed on teachers who have no teaching qualifications and hence lacked pedagogical knowledge. The study therefore investigated the Sandwich degree programme at Fountain State University which was specifically designed to upgrade the qualifications of teachers. The study investigated the Sandwich degree programme to determine whether it adequately enhanced teachers' content and pedagogical knowledge. The evaluation of the Sandwich degree programme was carried out using Kirkpatrick's Four-Level Training Evaluation Model. The study employed a qualitative research paradigm. The research sample comprised of three university lecturers (Sandwich degree lecturers), the director of the Sandwich degree programme and eight high school teachers purposively sampled who are graduates of the Sandwich degree programme. Data collection was achieved by means of questionnaires, semi-structured interviews and documentary analysis.

The results of the study reveal that contrary to the views of the Nigerian public, the Sandwich degree programme is at par with the regular degree programme offered by the university in question with only a slight difference in the timing of the two programmes. The course contents show that the types and number of courses per year for the Sandwich degree programme are similar to those offered in full-time programme. The only significant difference observed was that the courses spread for the two semesters for full-time students were merged into a single contact session for the Sandwich degree students. The Sandwich teachers who were the main recipients of the programme were positive about the quality and quantity of the courses offered in the programme. However, some of the teachers are of the opinion that some courses are irrelevant because they could not link the importance of the

## ABSTRACT

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courses to their profession as teachers. The programme handbook revealed that the modules in one contact time are too many for the teachers. Heavy workload for both lecturers and teachers may lead to poor-performance. In terms of the quality of the personnel involved in teaching in the Sandwich degree programme, the study shows that the lecturers who teach in the programme are highly qualified. Apart from the fact that some of the lecturers have PhD degree, some of the lecturers have professional certificates as trained teachers. The Sandwich degree programme can be referred to as a suitable and relevant programme for reform-based pedagogical practices and upgrade teachers' qualifications for better performance.

The perceptions of the lecturers and teachers on the Sandwich degree programme indicate that the programme has positively enhanced the teachers' ability to deliver the knowledge acquired. The Sandwich teachers who participated in the study expressed favourable views about the effectiveness of the programme in enriching their subject content and pedagogical knowledge. The responses of the teachers show that Sandwich degree programme has positively enhanced their teaching skills and improve their confidence and self-esteem. However, the issue of balancing the theory and the practical approach during the training programme was a concern to some of the teachers. Apart from the fact that the programme is more of theory-oriented, the responses of the Sandwich degree graduates highlighted some other flaws of the programme, which include too much workload of courses, limited teaching practice duration, sub-standard accommodation as well as inadequate lecture halls. This study then reveals that whilst on paper the degree programme looks good and on par with the normal degree programme, in practice there are a number of shortcomings which need to be addressed to give a quality output.

The study recommends that practical demonstration in various subjects be given more attention and teaching practice should also be strengthened. The workload of lecturers and the Sandwich teachers needs to be moderately reduced in order to aid active performance of the lecturers in teaching the pedagogical knowledge content extensively.

## KEYWORDS

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### KEYWORDS

Programme evaluation; Sandwich degree programme; In-service training; Subject content and pedagogical content knowledge; Lecturers' and graduates' perceptions; Kilpatrick's evaluation model



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# DECLARATION

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## DECLARATION

I declare that *Evaluation of an in-service degree programme at a Nigerian University* is my own work, that it has not been submitted before for any degree or examination in any other university, and that all the sources I have used or quoted have been indicated and acknowledged as complete references.

**Abiodun Folakemi Fatoba**

**May 2019**

Signature.....



# ACKNOWLEDGEMENTS

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# DEDICATION

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## DEDICATION

The research work is dedicated to the Almighty God who spared my life and saw me through the doctoral degree programme.



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# TABLE OF CONTENTS

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## TABLE OF CONTENTS

ABSTRACT.....	2
KEYWORDS.....	4
DECLARATION.....	5
ACKNOWLEDGEMENTS.....	6
DEDICATION.....	7
TABLE OF CONTENTS.....	8
LIST OF FIGURES.....	12
LIST OF TABLES.....	13
CHAPTER ONE.....	1
INTRODUCTION, RESEARCH QUESTIONS AND OVERVIEW.....	1
1 Introduction.....	1
1.1 Rationale.....	2
1.2 Conceptual Framework.....	3
1.3 Problem Statement.....	5
1.4 Aim and objective of the study.....	6
1.5 The objectives of the study are;.....	6
1.6 Research questions.....	6
1.7 Significance of the study.....	7
1.8 Delimitation of the study.....	7
1.9 Limitations of the study.....	7
1.10 Outline of the subsequent chapters.....	7
1.11 Conclusion.....	8





# TABLE OF CONTENTS

---

CHAPTER TWO .....	9
LITERATURE REVIEW .....	9
2 Introduction .....	9
2.1 Meaning and concept of evaluation .....	9
2.2 Purpose of Evaluation .....	11
2.3 Evaluation Models.....	12
2.3.1 Kirkpatrick’s Evaluation Model .....	13
2.4 Higher Education in Nigeria .....	15
2.5 In-service training .....	20
2.6 Sandwich degree programme .....	22
2.7 Evaluation of education programmes in Nigeria.....	25
2.8 Conclusion.....	28
CHAPTER THREE .....	29
RESEARCH METHODOLOGY.....	29
3 Introduction .....	29
3.1 Research Design.....	29
3.2 Research site.....	31
3.3 Participants in the study .....	32
3.3.1 Lecturers’ profiles .....	33
3.3.2 Teachers’ profiles.....	34
3.4 Instruments for data collection.....	34
3.4.1 Interviews.....	34
3.4.2 Questionnaires.....	36
3.4.3 Documents .....	36
3.5 Procedure for data collection.....	37

# TABLE OF CONTENTS

---

3.6	Data analysis .....	38
3.7	Validity and Reliability Test .....	39
3.8	Ethical Considerations.....	41
3.9	Conclusion.....	42
CHAPTER FOUR.....		43
DATA INTERPRETATION, FINDINGS AND DISCUSSION.....		43
4	Introduction .....	43
4.1	Research Question One .....	44
4.1.1	Information from the university website.....	44
4.1.2	Information from the University handbook .....	45
4.1.3	The perceptions of Sandwich lecturers regarding the types of training or courses offered in the Sandwich degree programme at Fountain State University.....	46
4.1.4	The perceptions of Sandwich teachers regarding the types of training or courses offered in the Sandwich degree programme at Fountain State University.....	51
4.2	Research question two.....	54
4.3	Research question three.....	57
4.4	Research question four.....	61
4.4.1	Perception of Sandwich teachers on the Sandwich degree programme .....	61
4.4.2	The perception of Sandwich lecturer on the overall impact of the programme on teaching skills of teachers.....	65
4.5	Conclusion.....	69
CHAPTER FIVE .....		70
CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS .....		70
5	Introduction .....	70
5.1	The main findings.....	70
5.1.1	Question one: .....	70
5.1.2	Question two .....	73

# TABLE OF CONTENTS

---

5.1.3	Question three .....	73
5.1.4	Question four .....	75
5.2	Implications of the study .....	75
5.2.1	Implications for the programme.....	76
5.2.2	Implications to Sandwich teachers.....	78
5.3	Recommendations .....	79
5.4	Conclusion.....	80
REFERENCES	.....	82
APPENDIX A	.....	99



UNIVERSITY *of the*  
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# LIST OF FIGURES

---

## LIST OF FIGURES

Figure 1.1: Conceptual framework for the evaluation of Sandwich degree programme.....	4
Figure 3.1: A pictorial Representation of the Research Design.....	31
Figure 4.1: Copy of the University handbook showing the course outline for B.Sc. (Ed) Economics (Sandwich degree programme) .....	46
Figure 4.2: Copy of the University handbook showing the course outline for B.Sc. (Ed) Economics (Full-time degree programme) Why do you insert a text box?.....	46



# LIST OF TABLES

---

## LIST OF TABLES

Table 3.1: Profiles of the lecturers that participated in the study .....	33
Table 3.2: Profiles of the teachers that participated in the study .....	34
Table 3.3: Different phases of data collection process .....	37
Table 4.1: Names (pseudonym) and academic qualifications of lecturers who participated in the study .....	55



# CHAPTER ONE

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## CHAPTER ONE

### INTRODUCTION, RESEARCH QUESTIONS AND OVERVIEW

#### 1 Introduction

Education is valued as an essential human endeavour which is intended to boost the national economy because of its capacity to increase human capital in all sectors of the state (Ashikhia, 2010). It has been recognized as a basic human right since the 1948 adoption of the Universal Declaration of Human Rights (Lillis & Turner, 2010). On the basis of this recognition, a sizeable percentage of the finances of each nation is invested in the growth and development of the educational institutions (Ololube, 2011; Offor, 2001). Educational institutions all over the world have several educational programmes established to meet the demand for skilled manpower and quest for knowledge. Despite the scarce resources for higher education, particularly in the developing countries like Nigeria, higher educational institutions are being asked to uphold and maintain high education standards (Vilakazi, 2000). To achieve this, most of the universities in Nigeria, have established part-time degree programme called Sandwich degree programmes. The purpose of introducing Sandwich degree programme into the Faculties of Education in most of the universities in Nigeria is to upgrade the qualification of teachers, especially those who did not have the opportunity to attain a University degree but are teaching at primary and high school levels with basic teacher training qualifications (Kpovovie, Ololube & Ekwebelem 2011). The Sandwich degree programme at Fountain State University in Nigeria was designed for both primary and high school teachers to acquire BEd (Hons) and BSc.Ed (Hons) degree in different disciplines on a part-time basis. The Sandwich degree programme was anticipated to improve the standard of education in Nigeria as the acquired knowledge and improved approach to teaching skills by teachers would help build their content and pedagogical subject knowledge and consequently in turn transfer knowledge to their students.

# CHAPTER ONE

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In order to determine whether the goals of introducing an educational programme are achieved or not, there is a constant need to evaluate the programmes. It is necessary to regularly evaluate educational programme such as the Sandwich degree programme run by Nigeria universities to determine the impact of the programme on the teaching skills of the participants. Evaluation of educational programme often reveals the extent to which the objectives of the programme are achieved (Herman, Morris & Fitz-Gibbon, 1987), as well as creating room for improvement on the particular programme. Ashcroft & Palacio (1996) note that unless the evaluation of a programme is conducted regularly, the assessment of the quality of the programme by the stakeholders might prove difficult.

An educational programme is said to be successful when the goals set are achieved and when such programme delivers at its capacity justifiable facts and content to the recipients. This has to do with having qualified practitioners teaching in such programmes as well as mastery and understanding of the curriculum by students. However, it has been discovered that the success of a programme does not only lie on the mastery of the curriculum but also on how useful information about the programme is circulated to stakeholders (Laboskey, 1994). The interpretation of the curriculum is also a key to the success of a programme in order to come up with innovative and creative ideas to achieve the set goals. Therefore, the qualification and the ability of teachers in a particular subject, their confidence to communicate effectively with learners, and how well they are able to interpret the curriculum will authenticate the viability and sustainability of the programme.

## 1.1 Rationale

Sandwich degree programme was introduced into Nigerian educational system with the aim of assisting teachers to improve their academic qualifications and skills in order to improve the quality of education in Nigeria (Ajayi, 2012; Akinwumi & Adeyanju 2011). Sandwich education was designed to influence the professional ability, disciplinary expertise and development of teachers. Akinwumi & Adeyanju (2011) comment that the public expects that teachers should improve their professional ability during the Sandwich degree programme to enable them undertake and accomplish their professional responsibilities. Any qualification may be discredited when professional ability cannot be justified. In her view, Seotsanyana (2002) explains that professional ability improves skills and expertise. It helps teachers to be

# CHAPTER ONE

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productive in their chosen career if they are professionally qualified. The study consequently itemized the features of a teacher who has professional ability to comprise understanding of the subject content, knowledge about teaching strategies and learning styles, knowledge of the curriculum and interpretation, knowledge of the education system, knowledge of teaching duties, assessment, marking, grading, recording, classroom methodology, classroom discipline, understanding classroom dynamics and understanding the nature of teaching and learning in a wider perspective (Seotsanyana, 2002). From the discussion so far, it is deduced that the proficiency of the teacher in the subject content not only determines the quality of educational programme, but also has to do with how such knowledge influences the teachers who are being trained and their effectiveness in their various disciplines (Ajayi, 2012; Akinwumi & Adeyanju, 2011; Ajayi & Ekundayo, 2010; Seotsanyana, 2002). In other words, the newly acquired qualification through educational programmes such as the Sandwich degree programme should impact the professional ability and skills of the teachers? The professional ability of the teachers are determined and appraised through the display of the teachers' expertise and performance.

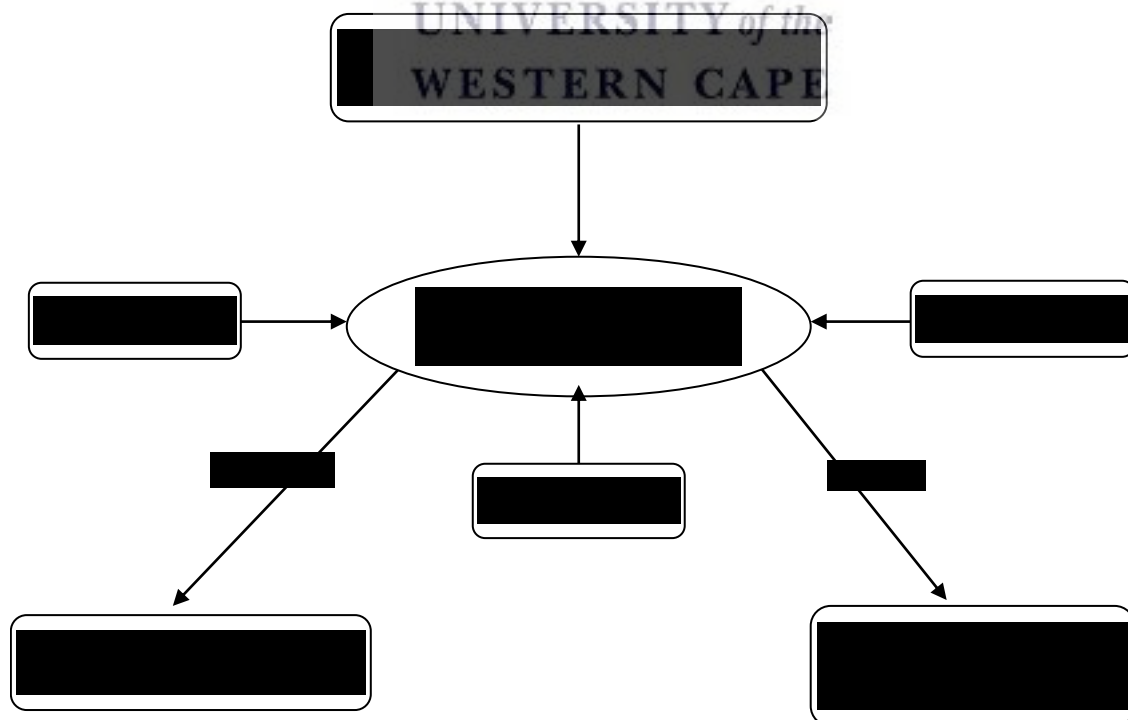
## 1.2 Conceptual Framework

Evaluation study is one of the most complex and controversial of human resource management techniques (Roberts & Gott, 2004). Evaluation of any programme is an important tool that can be used to improve programme operations and ensure the quality of the programme. Programme evaluation reveals the extent to which the objective of a programme is achieved (Christian, 2000; Herman, et al., 1987) as well as creating room for improvement on the programme. In the context of this study, the impact of the Sandwich degree programme at improving the teaching skills and the academic performance of the teachers was respectively evaluated by obtaining, analysing and interpreting information on the programme. The evaluation study used Kirkpatrick's (1998) evaluation model which measures parameters such as reaction, learning, behaviour and the results of a programme. The parameters measure by Kirkpatrick evaluation model has been found useful for the evaluation of educational programmes by other researchers (Kirkpatrick, 1959; Veney and Roehrig and Luft, 2004).



# CHAPTER ONE

Figure 1.1 below presents the conceptual framework which was used in this study to evaluate the impact of Sandwich degree programme on the academic performance of teachers. To evaluate the impact of the programme on the performance of the teacher, Kirkpatrick's model mentioned above was employed. Hence Kirkpatrick's levels namely, reaction, learning, behaviour and results of the teachers who got their degree through the Sandwich degree programme were appraised. This was done by determining the perceptions of the teachers towards the programme, the quality and perceptions of the lecturers involved in the Sandwich degree programme, the learning materials available, amongst others. The results were determined by the perceptions of the participants on the impact of the Sandwich degree programme at improving the teaching skills of the teachers involved. The trend on how the study was carried out is presented in the flow-chart presented below (Figure 1.1). The flow chart is actually a cryptic representation of Kirkpatrick's evaluation model. In terms of this model reflected in figure 1.1, the study sought to analyse how the participants respond to the evaluation programme in terms of Kirkpatrick's model namely, reaction, learning, behaviour and results. Figure 1.1 shows that an alternative programme may be recommended if the expected results were not achieved. On the other hand, if the expected results based on the perception of the participants are met, an improvement or modification may be recommended to strengthen the Sandwich degree programme.



**Figure 1.1: Conceptual framework for the evaluation of Sandwich degree programme**

# CHAPTER ONE

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## 1.3 Problem Statement

The quality of education in Nigeria until the late 1980s was very high (Moja, 2000). Among the geographic Regions in Nigeria, Fountain State in the South Western Nigeria was considered an “Education State” due to the quantity and quality of the scholars produced annually. This brought about a unique name for the state “Fountain of Knowledge” due to the excellent performance of the scholars and the high quality standard of education. The very high quality and standard of education which produced world renowned scholars later declined to the level that some of the scholars could not confidently defend their academic qualification in the labour market. The quality of education started degenerating since the early 1990s. The situation got worse in the early 2000 (Ajayi, 2012). The decline in the quality of education in Nigeria was blamed on several factors such as unattractive condition of service for teachers, poor physical facilities and inadequate funding by the government (Ajayi & Osalusi, 2013). In some cases, the blame was put on the parents for not motivating the learners while teachers were also blamed for lack of dedication to duty. The lack of qualified professional teachers was also attributed to the decline in the standard of education in Nigeria. The need to improve the quality and standard of education by training and retraining teachers, especially those teachers without first degrees, necessitated the introduction of several education programmes such as “Sandwich degree” programmes in higher educational institutions in Nigeria. The Sandwich degree programme was designed to train teachers and improve the teaching skills of those teaching without BEd or BSc.Ed (Hons) degree. The improved quality of teachers was expected to translate into excellent performances by the students and thereby raise the quality of education in Nigeria. However, findings on the academic performance of students in examinations showed that some of the students did not perform as expected in both internal and external examinations (Ajayi & Ekundayo, 2010; Akanle, 2007). The search of the literature has shown that the impact of Sandwich degree programme on the teachers’ skills and the performance of the learners has not been extensively evaluated to determine if the programme is worthwhile. This study has consequently been designed to evaluate the impact of the Sandwich degree programme in order to understand how to weigh its effects on the quality of education in Nigeria.

# CHAPTER ONE

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## 1.4 Aim and objective of the study

The aim of this study is to evaluate the Sandwich degree programme at Fountain State University, Nigeria, to understand the impact of the programme on the subject content knowledge and teaching skills of teachers.

## 1.5 The objectives of the study are;

- a. To understand the type of courses the Sandwich degree programme offers and personnel involved in Sandwich degree programme
- b. To ascertain qualifications of the personnel running the Sandwich degree programme at Fountain State University
- c. To determine how effective is the Sandwich degree programme at Fountain State University in enriching teachers' subject content and pedagogical knowledge
- d. To establish how the Sandwich degree programme is perceived in terms of its overall structure, operations and impact on the teachers' ability to apply the knowledge acquired.

## 1.6 Research questions

To achieve the aim and objectives of this study, answers were sought to the following questions;

- a. What are the types of courses offered in the Sandwich degree programme at Fountain State University, Nigeria?
- b. What are the qualifications of the personnel running the Sandwich degree programme at Fountain State University?
- c. How effective is the Sandwich degree programme at Fountain State University in enriching teachers' subject content and pedagogical knowledge?
- d. How is the Sandwich degree programme perceived in terms of its overall structure, operations and impact on the teachers' ability to apply the knowledge acquired?

# CHAPTER ONE

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## **1.7 Significance of the study**

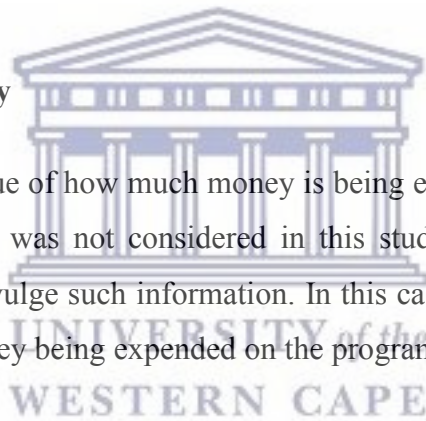
The significance of the study is to provide insight into the Sandwich degree programme as well as how the programme influences the teaching skills of the teachers who were trained through it. Moreover, it is also anticipated that the findings from the study would provide useful and functional information on how teachers who attended the programme can improve the standard of education through the knowledge they have acquired through the programme.

## **1.8 Delimitation of the study**

The study relied on the University lecturers and administrator in-charge of the Sandwich degree programme to collect data through interviews and questionnaires. The study also focused on the teachers who were trained under the Sandwich degree programme to understand how the programme affects their teaching skills.

## **1.9 Limitations of the study**

An in-depth study into the issue of how much money is being expended and disbursed on the Sandwich degree Programme was not considered in this study as the management of the institution was reluctant to divulge such information. In this case, it was difficult to properly evaluate the aspect of the money being expended on the programme.



## **1.10 Outline of the subsequent chapters**

Chapter 2: Literature review

This chapter presents the review of what other researchers have done on evaluation of educational programmes in different countries. The studies carried out on in-service training and Sandwich degree programme were also reviewed in the chapter. The chapter also presents the literature review on Kirkpatrick's Evaluation Framework.

Chapter 3: Methodology

The research approach, methods of data collection where the data were collected are presented in this chapter.

# CHAPTER ONE

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Chapter 4: Data interpretation, findings and discussion

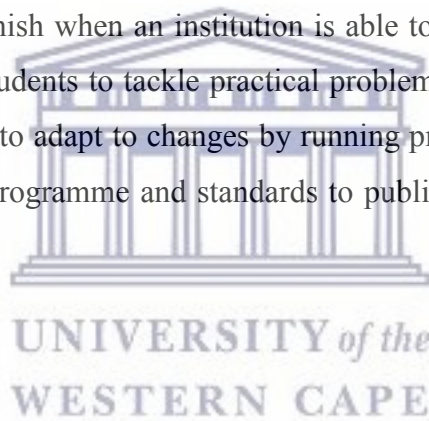
This chapter presents the interpretation of data and the discussion of the findings of the study on the evaluation of Sandwich degree programme

Chapter 5: Conclusion, implication and recommendation

The major findings of the study are presented in this chapter. Implication of the study and recommendations for future study were also presented in this chapter.

## **1.11 Conclusion**

Programme evaluation is worth the effort because it provides the necessary conceptual knowledge upon which to address social problems and provide solutions. The quality of a programme in an institution builds up the aspirations and desires to fulfil the needs of society for which that institution was established. The fear of not meeting contemporary needs and future challenges would diminish when an institution is able to adapt to changes by running programmes which help its students to tackle practical problems faced by society. However, the capacity of the institution to adapt to changes by running programmes is not unrelated to its willingness to expose its programme and standards to public scrutiny through systematic evaluation.



# CHAPTER TWO

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## CHAPTER TWO

### LITERATURE REVIEW

#### 2 Introduction

This chapter presents the literature review performed under certain constructs. Some of the themes considered in this chapter include the following:

- The meaning and concept of evaluation
- Purposes of educational evaluation
- Evaluation Models
- Kirkpatrick's evaluation framework
- Concept of in-service education programme
- Concept of Sandwich degree programme

#### 2.1 Meaning and concept of evaluation

Programme evaluation has been defined in different ways by various scholars. Some scholars define evaluation as a task that estimates the worth of a particular human endeavour. Scriven (2007) defines evaluation as an undertaking that measures the value of a thing, institution, program or human effort. Farrell, Valois & Meyer (2002) define evaluation as a means devised to rate the worth and usefulness of a programme. Looking at these two definitions critically, it makes the justification of programmes possible. Milstein et al. (2000), describe evaluation as an analytical review on the completion or achievement of a programme. This type of evaluation does not only have interest on the implementation of the programme alone, but also on the execution so as to know if the programme has actually made an impact on the right recipients or has fully accomplished its purpose. Munthe (2001) describes evaluation as thorough and methodical collection and appraisal of certain information to provide functional responses about some programmes. All the definitions attest to the fact that evaluation is a way of understanding the worth of a programme through assessment. These definitions

## CHAPTER TWO

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highlight the collection of information or data, the filtering of the information gathered, assessing the reliability of the information collected and the significance and conclusion of the results obtained. Some scholars view the evaluation concept differently. For example, Kahan & Goodstadt (2005) view evaluation as prepared research questions and techniques equipped to assess the implementation and outcomes of programmes for the purposes of upgrading and enhancement. Loizou (2009) and the London government social research unit (2007) define evaluation as an analytical way of investigating programmes, projects and other types of social interventions through policy, with the intention to enhance the general well-being of people. The motivation for putting evaluation in place is beyond merely assessing a programme. It is to make good use of the information collected to improve the services and the delivery of the programme (Farrell, Valois & Meyer, 2002). Other scholars emphasize the outcome of evaluation as a way of defining it. According to Fatoba (2013) and Seotsanyana (2002), programme evaluation is a measurement, investigation, appraisal and assessment of the impact of a programme based on the specific criteria which include: Effectiveness, Efficiency, Relevance and Impact.

These constructs are defined as follows:

**Effectiveness** is regarded as the level to which the set goals of the programme have been achieved. **Efficiency** has to do with the connection between the quantity and quality of goods and services made available for the recipients which has to do with the method and process of acquisition. **Relevance** is the link between the goals of the programme and the necessity or demand to be met by the recipients. Fatoba (2013) appropriates the definitions of Seotsanyana (2002) and Ogunniyi (1996) when she describes evaluation as a practice or methodical way of appraising the impact of a programme, project or a policy when the programme is still functioning or after the programme has ended. This has to do with the critical analysis of the programme through a thorough review of effectiveness, efficiency and its relevance. Evaluation identifies the usefulness and the limitation of a programme for the purpose of amending or making alterations to it (Fatoba, 2013). This is the comparison of the actual project against its set goals. This is related to how the project can be worked on and improved to accomplish the set objectives. In view of the above, the present study has as its major concern on the evaluation of a degree programme in a Nigerian University.



## CHAPTER TWO

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### 2.2 Purpose of Evaluation

There are various ideas about the significance of evaluation. Perry (1999) discussed the usefulness of using evaluation to investigate the success of educational programmes at institutions of higher learning. He mentioned how some institutions have made use of evaluation and how this has helped them improve and amend their programmes for the better. Braskamp & Ory (1994) identified eight methods that can be used to gather information on evaluation. They include:

- (i) Written appraisals
- (ii) Rating scales and checklists
- (iii) Interviews
- (iv) Observations
- (v) Video recording
- (vi) Measuring importance, standard, qualification and effect of programme
- (vii) Measuring consequences and results
- (viii) Documentation

Petit, Axelson, Ferguson & Rosenbaum (2015), examined effective teaching and what medical students value when they develop evaluation instruments. Fourth year medical students at the University of Iowa Carver College of Medicine were employed as participants in the study. All of them registered for teaching an elective course and were asked to model evaluation instruments to measure effective teaching. A total of 193 medical students participated in the study and were able to model thirty-six instruments for use in evaluation. Petit, Axelson, Ferguson & Rosenbaum (2015) spotted four main concepts that were common to them. These include:

- (i) Subject and Pedagogical Content Knowledge
- (ii) Teaching and learning environment
- (iii) Teacher's personal attributes and
- (iv) Teaching methods

The modelled instruments designed by the medical students provided an answer to the purpose of evaluation in education. In other words, these assessments can be integrated into medical teacher appraisal instruments. In addition they may be generalised into other regions



## CHAPTER TWO

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for similar studies. However, evaluation should not be seen as an instrument to investigate programmes only. Evaluation can also assist teachers to improve their teaching ability. In a similar vein, Kraft & Gilmour (2015) considered evaluation as a way to foster teachers' growth in their chosen career. He observed twenty-four principals in an urban district in his study. These twenty four principals who were randomly picked were interviewed based on observation and feedback from teachers under their supervision (Petit, Axelson, Ferguson & Rosenbaum (2015); Marsh, Hau, Chung, & Siu (1997)). Nevertheless, going to classes to monitor all teachers in classes did not make the result of the observation and feedback completely reliable. The participating principals suggested four basic resolutions to overcome these obstacles. These included:

- (i) Scheduled and specific evaluation for a particular purpose
- (ii) Reducing the duty of leaders to ensure efficiency
- (iii) Engaging coaching experts
- (iv) Making available to principals preparatory classes and guide

Shasha, Glassett & Copas (2015), reviewed the factors influencing professional development. The study explains that there are certain factors that negatively affect teachers' professional development. Some of these factors include:

- (i) Unqualified and under-qualified teachers.
- (ii) The situated nature of teacher learning. This refers to learning environment issues and activities that happen around the school.
- (iii) Negotiation: It was described as an act of participating in discussion, sharing of opinions, feelings belief, views, theories, skills, areas of expertise, to bring solution to the existing problems.

### 2.3 Evaluation Models

Evaluation of a programme can be carried out using different methods. Madaus, Scriven & Stufflebeam (2012) state that "Evaluation models" are universally adopted techniques by which the concise purpose and vision of a programme can be revealed. They mention various evaluation frameworks that can be used for different evaluation measures. These frameworks include: The discrepancy evaluation model by Andres Steinmetz; course improvement through evaluation by Lee Cronbach; the Context, Input, Process and Product (CIPP) model

## CHAPTER TWO

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for programme evaluation by Daniel Stufflebeam; the evaluations of broad-aim programmes by Robert Weiss and Martin Rein; responsive evaluation by Robert Stake and the Kirkpatrick model, which provides an analytical framework for this study. A number of models have been used in the evaluation of programmes in government and non-government organizations. Some of these establishments include business ventures, governments, parastatals, religious bodies, healthcare as well as academic programmes. The focus of this study is an academic programme in a Nigerian university. The findings of each of these studies are different.

### 2.3.1 Kirkpatrick's Evaluation Model

Kirkpatrick's evaluation model is a four-level evaluation framework that focuses on reaction, learning, behaviour and results. Several studies have utilized Kirkpatrick's model but a few limited studies evaluated programmes utilizing all the four levels of Kirkpatrick's model. For example, Lockwood (2001) evaluated the impact of an orientation programme for new employees in an organization using level 1 and level 2 of Kirkpatrick model. Nineteen (19) questions were designed focusing only on two levels (reaction and learning) of the model to evaluate the presentations of the orientation programme. All the participants scored the presentation of the programme high and above 90%, indicating that the programme was well presented to the recipients. Another series of questions were developed a month after the orientation programme to monitor the impact of the orientation programme on the services of the new employees. Findings showed that the orientation programme has positive impact on the new employees. The study showed that the expectations of the managers and the supervisors on the new employees were met in the way they discharged their duties.

Attia (1998) used Kirkpatrick's model to investigate 101 sales supervisors of a large multinational company based in Egypt. The purpose of the study was to examine the appropriation of the evaluation model that was adopted for sales training courses. Even though, the study used all four levels of Kirkpatrick model, his attention was basically around levels 3 and 4. From the findings, it was understood that there were no significant differences between the experimental and control group. However, the study showed with pre and post-test that there was a positive response and change of behaviour between the attendees and non-attendees of the programme. Furthermore, there was little or no significant change

## CHAPTER TWO

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between the attendees and non-attendees when self-evaluation and supervisory evaluation was done. The study concluded that even though the perceptual change of the attendees was insignificant in terms of self-evaluation and supervisory evaluation, it was observed that the evaluation of the effectiveness and trainer's exploration of attendees brought harmonious benefits to both the company and the attendees. This substantiated the money expended on the training.

Kim (2006) conducted a study evaluating an instructor training program in a church setting. The study used Kirkpatrick's model to understand the effectiveness of instructor's training programme in a church setting. 405 members of the church participated in the programme as trainees. 269 of the participants accepted to participate in the survey. The majority of trainees who participated in the study revealed that the training has tremendous positive impact on them in discharging their duties as instructors. The findings of the study also showed that the trainees were well pleased with the outcome of the training.

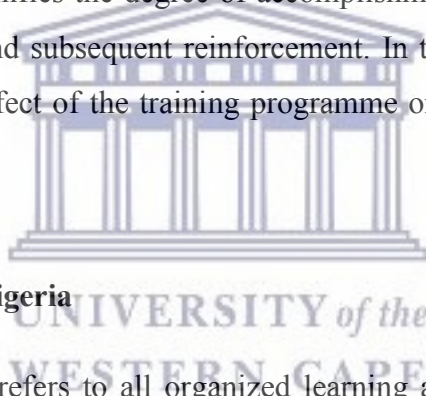
The study of Chang (2010) used Kirkpatrick's evaluation model to examine the end result of a training programme on the employees in a hospitality industry. The purpose of the study was to evaluate the effectiveness of the training programme on the participants. The study focused on investigating the impact of the training on the skills acquired through the training, experience or education gained from the training, the theoretical or practical understanding of a subject matter, as well as the overall impact of the training on the organization. In addition, the study was used to investigate the relevance of Kirkpatrick model to project the overall effect of the training on the organization. The study used 69 sales agents who concluded their training programme to investigate the impact of the training. It was revealed from the findings that there was a significant improvement in the mastery of the jobs of the participants who completed the training. The study further showed that the acquisition of skills in the training programme strengthened the relationship between the employees and the clients of the hospitality industry. This, in turns, has positive impact on the organization as more profits were added due to increased sales.

In this case of this study, four elements (Reaction, Learning, Behaviour and Results) of Kirkpatrick's evaluation framework are focused on. Reaction, indicates the degree to which participants react favourably to the learning event. As regards the evaluation of Sandwich

## CHAPTER TWO

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degree programme, reaction evaluation presents personal responses of the recipients to the programme. In other words, it is referred to as the experiences gained during the programme. Learning, on the other hand, indicates to what extent the participants have acquired the intended knowledge, skills and attitudes based on their participation in the learning event. In relation to the Sandwich degree programme, learning evaluation helped the study to understand the level of increase in knowledge or intellectual capability of the recipients after the programme. This entails ability to receive intended knowledge and to know to what extent is the development, improvement or change in the recipients after the programme. Behaviour, on its part explains the extent to which the participants apply the knowledge acquired during the training when they are back on the job. Looking at behaviour, in relation to the evaluation of the impact of the Sandwich degree programme on teachers, it deals with the application of the knowledge and skills acquired during the programme. Behaviour, also deals with the noticeable change in the teaching styles of the recipients after the programme. Result, on the other hand, signifies the degree of accomplishment of targeted outcomes as a result of the learning event and subsequent reinforcement. In terms of the Sandwich degree programme, it explains the effect of the training programme on the academic community at large.



### **2.4 Higher Education in Nigeria**

Higher Education in Nigeria refers to all organized learning activities at the tertiary level. According to the National Policy on Education (2004), higher education was defined to include, universities, colleges of education and polytechnics. Higher education was established with the aimed to; a) contribute to national development through high-level relevant manpower training, b) develop and inculcate proper values for the survival of the individual and society, c) develop the intellectual capability of individual to understand and appreciate their local and external environment, d) acquire both physical and intellectual skills which will enable individuals to be self-reliant and useful members of the society, e) promote and encourage scholarship and community services, f) forge and cement national unity; and g) promote national and international understanding and interaction.

## CHAPTER TWO

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The first higher education institution in Nigeria, “Yaba Higher College”, was established in 1934 during the Colonial rule. The establishment of the institution was sequel to a realization by Mr E.R.J. Hussey who was the country’s colonial Director of Education that:

the number of Europeans in posts in Nigeria, not only of senior but also of junior ranks, was very large and that situation could not continue indefinitely. Indeed British personnel were performing duties which already in other countries in Africa were being performed by Africans. It was obviously necessary to start an institution which in the first instance would be a “Higher College” and develop in due course into a University (Hussey, 1959:91).

In 1943 the British colonial government set up an *Asquith Commission* to consider the principles which should guide the promotion of higher education, learning and research and the development of universities in the country. An outcome of the Commission’s report was a recommendation for “the creation of a university college in an area of approximately five square miles on the outskirts of Ibadan” (Ejiogu, 1986:51). In 1948, the first university college was established in Ibadan. But due to how the university was being run, University College Ibadan was criticized by some Nigerian nationalists for its overt colonial orientation in staffing and course offerings. Apart from that, the university was run as an annex of University of London where graduates of the college received degrees of the University of London after completing their study. The clamour for a full-fledged “African” university came to reality after Nigerian Independence in 1960 when University of Nigeria, Nsukka was established. Two years after independence, Ahmadu Bello University, Zaria, University of Lagos, and University of Ife were established in 1962 based on “Ashby Commissions” recommendation. The University of Benin was established in 1970. These universities are known as the first generation universities in Nigeria.

In the Third National Development Plan (1975-1980), the Federal Military Government of Nigeria established seven universities, namely: Universities of Calabar, University of Ilorin, University of Jos, University of Sokoto, University of Maiduguri, University of Port Harcourt and Ado Bayero University, Kano. These are referred to as the second generation universities (Olaniyan and Adedeji, 2007; Ejiogu & Sule, 2012). The third generation universities were those established between 1980 and early 1990. These include: the Federal Universities of Technology situated respectively in Owerri, Makurdi, Yola, Akure and Bauchi. Also



## CHAPTER TWO

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established during this period were state (regional) universities of Imo, Ondo, Lagos, Akwa-Ibom, and Cross River States (Ejiogu & Sule, 2012). The fourth generation universities are those established between 1991 and the present date. According to National Universities Commission (NUC) (<http://nuc.edu.ng/>), as at January 2019, Nigeria has 169 Universities (43 Federal government-owned; 47 state/regional controlled; and 79 private owned).

The management of higher education institutions is the responsibility of an individual or a group of people assigned with the responsibility to control, manage, and organise both human and material resources of the institution. Higher education institutions, especially universities are managed externally by the Federal Government of Nigeria through the National Universities Commission (NUC). National Universities Commission is a body charged with the coordination of university management, with the aim of ensuring the development of university education in Nigeria, to maintain high standard and to ensure adequate funding of universities. Apart from the external management, each of the university in Nigeria has internal management structure that oversees the day-to-day activities of the university. The first member of the internal management structure is the Visitor, who is usually the Head of Government that established the university (The President or the Governor). After the Visitor is the Chancellor, who by law guiding the university management, takes precedence before all other members of the university, and when he is present, presides at all meetings of the convocation held for conferring degrees (Ajayi & Haastrup, 2008). The Governing Council, headed by the Chairman (Pro-Chancellor) is next to the Chancellor. The functions of the Governing Council include, setting goals, policy formulation, staff development, general discipline, budget approval and liaison activities with the government. The Senate is part of the management structure which regulates the academic activities of the university following the general guidelines provided by the NUC. The Vice-Chancellor, who is the head of the Senate, manages the day-to-day activities of the university. Apart from the Vice-Chancellor are the Registrar, Bursar and Librarian who are members of the senior management team (Ajayi & Haastrup, 2008; Ibukun 1997).

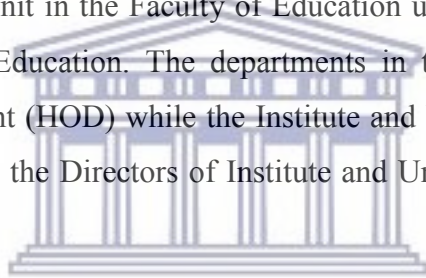
Most of the universities in Nigeria are multidiscipline but for few ones that are specialized universities. These include University of Agriculture, University of Education, Federal University of Technology and State University of Science and Technology. The universities in Nigeria have different faculties such as Faculty of Arts, Sciences, Economics and

## CHAPTER TWO

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Management, Medicine, Agriculture, Education, Social Sciences, Humanities etc. Under each of these faculties are different departments and units.

Fountain State University which is the university used for this study is a state-owned university. It has several faculties, which include Faculty of Sciences, Education, Arts, Medicine, Engineering, Social Sciences, Law Management Sciences and Agricultural Sciences. In the Faculty of Education at Fountain State University are several departments, institutes and units. The departments and institute include; Adult and Community Development, Arts and Language Education, Educational Management, Guidance and Counselling, Institute of Education, Human Kinetics and Health Education, Science Education, Social Science Education, Vocational & Technical Education. The Sandwich Programme was one of the programmes that were under the Institute of Education until year 2002 when the University Management reorganized the departments in the faculty and made the Sandwich Programme a Unit in the Faculty of Education under the direct supervision of the Dean of the Faculty of Education. The departments in the Faculty of Education are headed by Head of Department (HOD) while the Institute and Unit are headed by Directors. All the Heads of departments, the Directors of Institute and Unit report directly to the Dean of Faculty of Education.



The establishment of higher education institutions was to train and produce high level of manpower for economic growth. In Nigeria, a crop of well-educated and highly skilled graduates have been produced, and are readily making contributions in all spheres of the country's development (Jaja 2013). However, despite this achievement, many factors have been identified as challenges to the sustainability of quality higher education in Nigeria. These factors as identified by the World Bank (1994) include; decline in public expenditure, deteriorated infrastructure/facilities/equipment for teaching, research and learning, student unrest and constant strikes by both students and academic staff amongst others.

The major challenge facing the management of university system in Nigeria is inadequate funding. Ajayi & Ayodele (2002) argued that there was an increase in the proportion of total expenditure devoted to education, but this has been considered to be rather grossly inadequate considering the increase in student enrolment and increasing cost. The apparent shortage of

## CHAPTER TWO

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fund available to the university system has been responsible for declining library, social and laboratory facilities in Nigerian universities in recent years (Ajayi & Haastrup, 2008).

Ogbogu (2011) examined the sudden shift in the financing of higher education in Nigeria since the first university was established in 1948. It was uncovered that the money expended on wages and salaries for teaching and non-teaching staff, administration and research grants, building facilities, staff allowances, are insufficient compared to the available funds on ground. Although, it was argued that government inadequacies to finance university education satisfactorily was due to the economic downturn and recession that are being experienced by various developing countries including Nigeria, the effect of inadequate funding could be devastating on higher education.

Akinyemi & Ayo-Shobowale (2013) uncovered how financial challenges have brought setbacks to learning, teaching and research activities as well as quality of education in almost all institutions of higher education in Nigeria. Adequate funding is the tool to receiving quality education. They suggested that higher education must be appropriately funded to bring about quality education. In a study carried out by Iruonagbe, Imhonopi, & Egharevba (2015) on the causes of emergence of private universities in Nigeria, they observed that, apart from the inability of the public universities to adequately meet the demand of the country in terms of increase in the enrolment, lack of adequate funding of public institution led sudden emergence of private universities. The study found that lack of adequate funding has led to incessant strikes and unrests by academic staff and students respectively, which has disrupted the academic calendars and making parents and students to lose interest in public institutions.

Due to lack of funds, most of the higher institutions in Nigeria struggle to maintain their facilities (Ofide, Jimoh & Achuen 2015). Apart from the effect of inadequate funding on infrastructure, lack of proper monitoring and adequate maintenance of facilities in the higher education institutions has affected the infrastructures in universities in Nigeria. In the study carried out by Sani (2015) on the practices of the university management in maintaining the building facilities, it was found that no maintenance manual was put in place in the higher institutions that participated in the study, and that no computerised maintenance management system (CMMS) to monitor and record maintenance around the campuses. In a similar by Oyenuga, Akinsola, Hussaini & Fatokun (2012), lack of adequate maintenance policies in



## CHAPTER TWO

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higher institutions, inadequate hands to sustain the maintenance, lack of safety and security system to provide maximum security against destruction of facilities are the causes of infrastructure deterioration. Good maintenance culture and policies must be put in place to sustain the facilities. Failure to adhere to the rules of the facilities maintenance in the higher institutions may cause disruption of proper teaching and learning.

### **2.5 In-service training**

Esu (2006) defines in-service training as extra activities and services one engages in when one is involved in active service. One sees in-service training as a way of increasing one's knowledge and ability to fill the gap of pre-service training. Okobia (2013) defines in-service training as a continuous updating of teachers' knowledge, skills and interests in their chosen field during their service. He also sees it as a way of promoting professional growth of educational personnel. Borisade (2007) stated that in-service training brings invaluable reformation in the lives of recipients. For Ibrahim (2015), in-service education is any programme that is meant to improve the recipients in an already appointed task. These definitions, in various ways express what in-service training is all about. In-service education in Nigeria became popular among the working class due to the fear of losing a job, and inability to afford the cost of full-time training in a university. Bandele (2003) argues that the prevailing situation of Nigerian's economic situation compelled some Nigerian Universities to start certain programmes like the Sandwich degree programmes, distant learning programmes to augment the inadequacies of pre-service training. The two main reasons for these extended programmes include:

- To find lasting solution to the urge of working class who were afraid to leave their jobs for professional improvement
- To boost the internally generated revenue of these universities.

However, Bandele asserts further that inadequacies of University funding by government also led to the emergence of private Universities. Nigeria was flooded with private Universities owned by privileged individuals and groups. This led to the quality of education being compromised in certain areas in government owned Universities, as some of experienced lecturers took up an appointment at private university due to higher salary. Apart from its effect on the quality of education, the cost of University Education has become very high and

## CHAPTER TWO

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not-affordable for most of the citizens with low income. The shortcoming and the need for teachers to improve their educational skills and techniques have led some institutions to develop in-service educational programmes to enhance, maintain and improve educational standards. The in-service training is a transformation that was conceived by government with universities from perceived developmental needs of teachers. The in-service teacher education, as indicated out in Nigerian teachers' manual (1987) includes:

- Short time courses
- Full time courses
- Evening courses
- Vacation courses
- Workshops
- Sandwich degree programmes
- External degree programmes
- Part-time/holiday programmes etc.

According to The world Confederation of Organizations of the Teaching Profession (WCOTP) (1982), the common and intended aims of in-service courses for teachers among other things include consistent professional development of teachers to keep the pace with an innovative and enterprising society.

In-service training programme have been applied in many countries in the world to train the working class who are interested in furthering their studies. Despite the acceptance of in-service training to providing higher education, it is necessary to regularly assess the programmes in order to understand their impact and challenges. A study conducted by Donkor & Banki (2017) assessing the effect of in-service programmes on primary school teachers, found out that the in-service programme was worthwhile. The participants, especially the teachers in the West District of Ghana acknowledged that the in-service training exposed them to the required knowledge and skills that were needed for professional development and competency. Based on the impact of the programme, the study suggested that regular professional training be organized for teachers to update their knowledge and skills for efficient delivery on their jobs. In another study, Issaka (2018) appraised the needs and access of in-service education and training for teachers in primary schools for the Deaf in

## CHAPTER TWO

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Ghana. The study identified insufficient funds as one of the major factors hindering the organization of in-service education.

Uztosun (2018) investigated participants' perspective of in-service teachers' education in Turkey. Findings showed that the programmes were effective in terms of promoting their professional personal development, and cooperation between colleagues. However, the study revealed the weaknesses of the programmes which include limited number of programmes on offer, lack of qualified trainers, insufficient practical focus, poor lecturing, inconvenient time and place, and the perfunctory nature of the in-service teacher education offered.

Shah & Yousaf (2018) investigated the impact of in-service education and training of secondary school science teachers. Questionnaires were administered to two thousand one hundred and ninety one (2191) secondary school science teachers and one thousand five hundred and nine (1509) head teachers working in districts of Southern Punjab in Pakistan. The study revealed that the in-service training course has significant impact on the professional skills of the participants. However, the materials and the methods used in the training were obsolete. It was suggested that the training should be revised by using modern techniques of teaching so as to have better impact on the skills of the participants. The study of Ashrafuzzaman (2015) focused on the impact of in-service training on primary teachers' classroom practice at the English in Action (EIA) intervention schools in Dhaka, Bangladesh. Interviews, class observations and focus group discussions were used to collect data from five (5) teachers who participated in the study. The findings revealed that the training enhanced the teaching competences of the attendees. Teachers learnt many new things such as giving instruction in English and the use of teaching technologies.

### **2.6 Sandwich degree programme**

Sandwich degree programmes were started in the United Kingdom (UK) in the 1950s by the Ministry of Education with the aim of giving students the opportunity to have industrial experience as they studied for their degrees. According to Davis (1979), Sandwich course proposals were formulated with the aim of developing close association between industry and colleges thereby encouraging movement of students and researchers between academia and industry. The Sandwich course in the UK is a degree course that requires students to work in

## CHAPTER TWO

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industry or business for a period of time before coming back to the university to complete the study. In the United Kingdom, the Sandwich programme is divided into two namely; thin-sandwich and thick-sandwich programmes. Thick-sandwich is when a student has one long job placement in-between the study period while in the thin sandwich, the student has two or more job placement periods before the end of the study. The Sandwich programme in the UK runs across different fields of study such as Pure Sciences, Engineering, Built Environment, Business, Finance, Management, Languages and Social Sciences. On the other hand, the Sandwich degree programme run in Nigerian University is slightly different to the way it is being run in United Kingdom.

In Nigeria, the Sandwich degree programme is an in-service training programme designed specifically for primary and secondary school teachers who do not have a first degree or those who do not have professional teaching qualifications. This is to enable them undertake further study in Education whilst still be in the service of their employer. Apart from the need to improve the academic qualifications of teachers teaching without first degree, there are other needs identified by some universities in Nigeria. Adesina (2001) highlighted some of the reasons for the emergence of Sandwich degree programme in some of the Nigerian Universities. These reasons include;

- Need for qualified and effective teachers
- Development of teachers
- To enhance research and teacher techniques
- Generation of funds
- Exposure of teachers to present-day technique, which will in turn help the teachers to update the learners with essential skills and knowledge.

The University of Ibadan was the first institution in Nigeria to moot the idea of Sandwich degree programme in 1970. The then University of Ife, which later became Obafemi Awolowo University, followed in 1972 after a National Curriculum Conference. The University of Ado-Ekiti which was later renamed Ekiti State University is one of the universities in Nigeria that embraced the Sandwich degree programme in 1988. According to Borisade (2007), Sandwich degree programme is an aspect of in-service training that serves people especially teachers who already got a paid job for his/her upgrade, performance enhancement, and to obtain higher certificates as evidence of skills improvement. Unlike the

## CHAPTER TWO

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Sandwich degree in the UK, Sandwich degree programme is run during school holidays to enable interested teachers participate in the programme. This helps the Sandwich participants to use the opportunity to gain full access and the attention of their lecturers. The fact that the programme is run during school holiday helps the students gain full access to the university facilities, resources and university community life experiences like full time students.

Sandwich degree programmes were designed to equip the participants with necessary knowledge required in the teaching profession. According to Odu, Akanle, Osakinle, Alade, & Ogunlade (2009), Sandwich degree programmes provide information on new teaching methods and sharpen teachers' skills and knowledge for effective teaching and learning. Teachers are also exposed to skills that help them communicate effectively with their students. Odu et al (2009) found that the Sandwich degree programme is one of the programmes that help teachers improve their teaching skills, which in turns have a positive impact on the academic performance of their students. It was therefore suggested that efforts must be made to ensure that the Sandwich programmes are sustained. Ikeoji & Agwubike (2007) examined the role of the Sandwich degree programme in training Agricultural Science teachers in one of the states in Nigeria. Data were collected from 391 Agricultural Science teachers who got their BSc (Hons) degree through the Sandwich programme between 1989 and 2004. The study revealed that the Sandwich programme had significantly made an impact by producing over 74% of the Agricultural Science teachers who are currently working in public schools. In addition, the study suggested that government should focus on making available facilities that would be utilised by students in the Sandwich programmes.

Sandwich degree programmes have taken root in the educational system of Nigeria. According to Okobia (2013), in-service teachers who went through Sandwich programmes have experienced a sense of achievement and fulfilment in satisfying their ambitions with respect to their teaching careers. The significance of Sandwich degree holders to educational system in Nigeria is huge. The Nigerian government, as one of the main stakeholders of education, has made higher education accessible through the provision of Sandwich programmes. Omotoso (2002) noted that teacher's educational development in Nigeria is largely dependent on the Sandwich degree programme, not because it is the only avenue for teachers to obtain their degrees, but because it is considered affordable and gives opportunity to work and study simultaneously. The emergence of Sandwich degree programme in Nigeria



## CHAPTER TWO

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is very significant as it came when some of the teachers almost lost hope of having opportunity to further their education because of their inability to enrol for full time degree programme due to financial constraints. Apart from financial difficulty, commitment to family responsibilities are barriers to most non-graduate teachers from full time studies in the university until the emergence of Sandwich degree programme (Adesoye & Amusa, 2011). Gbadamosi, Evans & Obalola (2015) proposed that full time programmes in Education should be discontinued due to exorbitant fees. The Sandwich degree programme was found to be financially affordable as compared to full time degree programmes (Adesoye & Amusa (2011), and this serves as a motivating factor for some of the teachers that study through the Sandwich degree programmes in Nigeria.

Despite the acceptability of the Sandwich degree programme, some challenges have been identified that may negatively affect the quality of the programme if not properly and promptly attended to. Even though Sandwich degree programme is considered a viable educational option, frequent strikes by lecturers of the universities have a negative effect on the programme. The initially stipulated time for the programme cannot be strictly adhered to because both full-time and Sandwich degree students are affected by the frequent strikes. Another challenge is the lowering of the entry requirement to allow students who graduated with West Africa Examination Certificate (WAEC) or Senior School Certificate Examination (SSCE) to register for the programme. Initially, the minimum admission requirement was either National Certificate in Education (NCE) or Ordinary National Diploma (OND) for a 4-year Sandwich degree programme. The Sandwich degree programme has started accepting WAEC or SSCE certificate holders for a 6-year programme Sandwich programme (Borisade (2007).

### **2.7 Evaluation of education programmes in Nigeria**

The need for quality assurance of programmes in higher education institutions makes it necessary for all educational programmes to be evaluated. This helps to determine if the goals of the programme have been accomplished.

Nomadic Education Programme in Nigeria was evaluated by Osokoya et al. (2010). The aims of the study were to investigate the extent the programme has fulfilled its primary function of

## CHAPTER TWO

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providing relevant and functional basic education to the nomads in Nigeria and to investigate the major constraints facing the programme. It was revealed from the responses of over 77 % of the participants that the programme has assisted the beneficiaries to read and understand what they have read, do simple calculations and keep simple domestic records. The overall assessment is that the programme has fulfilled its primary function to a high extent among the beneficiaries. However, some challenges such as inadequate funding, inadequate infrastructural facilities, indiscriminate transfer of teachers, teachers' truancy, and lack of incentives for the teachers and supervisors were identified in the programme. The study opined that a lot could be achieved if the government adequately fund the programme, supply adequate infrastructural facilities and train and employ adequate teaching staff.

The Federal Government of Nigeria with a view to make primary education compulsory for Nigerians launched the Universal Basic Education (UBE) policy in September 1999. The UBE policy was enacted as the Compulsory, Free Universal Basic Education Act in 2004. Alikor, 2014 carried out a critical analysis of the Universal Basic Education (UBE) Policy in Nigeria with the aim of investigating the extent of implementation of the programme. The study was carried out to determine the consequences of the extent implementation of free and compulsory education as stipulated in the UBE policy of Nigeria. Alikor, (2014)'s study focused on four selected schools in the Rivers States, Nigeria. He found out that the implementation of the UBE policy was faced with lots of challenges such as inadequate teaching materials/resources, poor funding, teacher shortages, payment of school fees and a non-conducive learning environment. He concluded that the UBE policy has been poorly implemented in the four selected schools in the Rivers States of Nigeria. The overall consequence of the extent of the poor policy implementation is that the provision of free and compulsory basic education, of good quality, has been rendered vulnerable. Alikor, (2014) suggested that adequate funding is necessary for effective implementation of the UBE programme, and provision of the fund should be made available by the government. He also suggested that in order to accommodate every child due to increase in the enrolment, more classrooms need to be built. The study suggested monitoring and evaluation system to be set up by the government to continuously monitor the implementation of the UBE programme.

Sani & Tihamiyu (2005) evaluated the effectiveness, as well as the status of new automated information services in selected Nigerian universities. The study was designed to compare the

## CHAPTER TWO

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existing information services with the new automated services, with the view to identifying progress and prospects of, and constraints to, the technological transformation of the universities. A survey was carried out to get the views of the stakeholders as well as information on services provided to them. The study revealed that changing from traditional way of teaching to technological way offers a lot of challenges as well as opportunities to the universities' communities. One of the benefits of the automated systems was that a lot of people in the university who had average or no knowledge of automated systems and services are now familiar and able to use the new systems. However, shortage of funds, inconsistencies in electricity supply, telecommunication connectivity and shortage of human resources to man the smooth running of the automated system posed a lot challenges. This has slowed down the switching over of some of the universities in Nigeria to automated systems.

In another study, Egoeze, Akman, & Colomo-Palacios (2014) investigated Information and Communications Technology (ICT) infrastructure and their applications in Nigerian universities. The study used descriptive survey to explore the application and utilization of ICT facilities in Nigerian universities. A total number of 452 participants were involved in the study. The make-up of the participants includes lecturers, administrators and students from 15 universities from various regions of Nigeria. They found that the application, accessibility and implementation of ICT facilities are poor in Nigerian universities. Egoeze, Akman, & Colomo-Palacios (2014) opined that university management should know that ICT infrastructures are not luxuries but important tools for teaching and learning. Time and information are managed in a more effective way with ICT infrastructure in place.

Evaluation of HIV/AIDS secondary school peer education in rural Nigeria was carried out by van der Maas and Otte (2009). The study assessed whether peer education is an effective method of HIV/AIDS awareness, in terms of knowledge, misconception and behaviour, among adolescents in the rural area of Nigeria. The study observed significant increase in knowledge and decreased misconception and sexual risk behaviour in adolescents receiving peer education when compared with youth not receiving peer education. van der Maas and Otte (2009) found that only the students in the intervention group (Peer-educated students) were generally aware that you need a test to know the HIV status of a person, while the majority of the control group thought that it takes only a few months after infection to get



## CHAPTER TWO

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signs and symptoms. It was also observed that peer-educated students understood that abstinence is an effective method to prevent HIV infection more often than non-peer-educated youth did. Furthermore, peer-educated students had less sexual partners but were not more consistent in using condoms. In general, the study demonstrated that HIV/AIDS secondary school peer education programme was properly implemented to achieve the objectives of the programme.

### **2.8 Conclusion**

Programme evaluation is an important aspect of education that can neither be undermined nor neglected. It is significant because it reveals positive and negative outcome in the short and long term. Evaluation study helps to determine if the objectives of a programme are met, and identifies the problems in a programme. It points out the existing performance and compares with the intended performance in order to know whether the goals of the programme have been achieved or not. Various studies reviewed showed the relevance of in-service education, part time and Sandwich degree programmes. Despite variations from one programme evaluation to the other, evaluation is one of the surest ways of pre-designing and redesigning the programmes. With the fallen standard of education being witnessed by some institutions around the world, it is important that education programme evaluation be taken as an important issue. This will enable higher institutions to discover areas of their weaknesses in order to meet the maximum standards of the academic enterprise. This forms the rationale for the current study, to determine the types of training and courses offered in the Sandwich degree Programme at Fountain State University in Nigeria. The study focuses on evaluating the impact of Sandwich degree programme at Fountain State University, Nigeria on the teaching skills of teachers. This study will use the four elements of Kirkpatrick's Evaluation Model to determine the impact of Sandwich degree programme on the skill of teachers

# CHAPTER THREE

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## CHAPTER THREE

### RESEARCH METHODOLOGY

#### 3 Introduction

This chapter recounts and catalogues the research approach and procedures used in the research. The research approach expounded in the study includes the research design and procedure, description of the Sandwich degree Unit, description of the participants, providing their demographic detail. The chapter also presents details of the methods of data collection including issues of validity and reliability and ethical considerations.

#### 3.1 Research Design

The study used a descriptive qualitative research design. A qualitative research approach is considered one of the best research methods because it seeks to appreciate and understand phenomena in context. According to Jacob (1987), qualitative research methodology attempts to present the data from the perspective of the participants in a way which ensures that the researchers' cultural and intellectual biases do not distort the collection, interpretation or presentation of data. Seliger and Shohamy (1989) point out that qualitative research is considered as synthetic or holistic and heuristic with little or no manipulation of the research environment. Qualitative research approach seeks clarification, understanding and extrapolation of findings (Hoepfl, 1997). According to Kandjeo-Marenga (2008), qualitative designs help to get deeper insight of a discussion so as to explore the dynamic nature of an organisation. The qualitative research method employed in this study enabled the study to follow the interaction between the director of the programme, the lecturers and the teachers so as to evaluate the Sandwich degree programme. A qualitative approach has different systematic procedures of analysing data that are not directly measurable (McMillan & Schumacher, 2001). Researchers employ different methods for analysing data for different studies. Some of the methods include observation, questionnaire, and interview to mention a

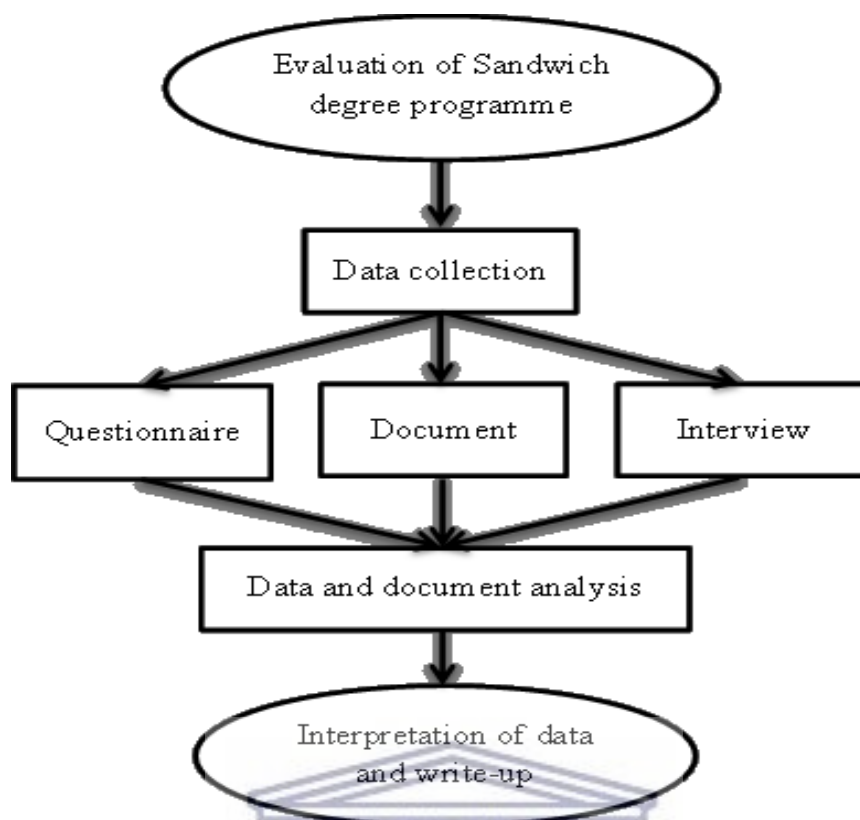
## CHAPTER THREE

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few. However, any method chosen must be logical, methodical, coherent, consistent, drilled, indisputable, unambiguous and explicit.

This study used a case study approach to explain the perceptions of the stakeholders (lecturers and teachers) on the Sandwich degree programme as regards to its impact on the teaching skills of the teachers. According to Stake (1995), a case study method is a strategy of inquiry in which the researcher explores in-depth a program, event, activity, process or one or more individuals. Dick & Ferguson (2008), note that case study is one of the main methods used in gathering qualitative data. Yin (2002) also sees case study as one of the unique techniques of qualitative analysis that is used to collect data directly from the source. Case study explores a case over time through detailed and in-depth data collection involving the use of a variety of data collection procedures over a sustained period of time. In this study, data were collected through semi-structured interviews, open-ended questionnaire and reviewed documents provided by the director of the Sandwich programme where the study was conducted. The interviews were audio-taped and the tapes were transcribed into word documents. The documents were reviewed and data analysed.

The pictorial representation below (Figure 3.1) is a flow diagram showing the process of data collection. It also illustrates how the research methods used in this study have been consolidated into a framework for effective evaluation of the Sandwich degree programme of interest. The enclosed activities in the figure show the interacting elements that were used for data collection in order to determine the nature of the training received in the programme. The data collected was analysed and used to interpret the perceptions of the stakeholders on the impact of the Sandwich degree programme.



**Figure 3.1: A pictorial Representation of the Research Design**

### 3.2 Research site

This section presents the details of the institution where the study was conducted and the lecturers and teachers who participated in the study.

#### 3.2.1 Faculty of Education at Fountain State University

The study used Fountain State University for the data collection. Fountain State University has several faculties, which include the Faculty of Education. In the Faculty of Education are several departments, institutes and units. The departments and institute include; Adult and Community Development, Arts and Language Education, Educational Management, Guidance and Counselling, Institute of Education, Human Kinetics and Health Education, Science Education, Social Science Education, Vocational & Technical Education. The Sandwich Programme was one of the programmes that were under the Institute of Education until year 2002 when the University Management reorganized the departments in the faculty and made the Sandwich Programme a Unit in the Faculty of Education under the direct

## CHAPTER THREE

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supervision of the Dean of the Faculty of Education. The departments in the Faculty of Education are headed by Heads of Department (HOD) while the Institute and Unit are headed by Directors. All the Heads of departments, the Directors of Institute and Unit report directly to the Dean of Faculty of Education. The Sandwich degree programme produces teachers at graduate and post-graduate levels who have mastery of various subjects, combined with a sound academic and professional training in education. In addition, teachers who graduated through Sandwich degree programme were used to evaluate the impact of the Sandwich degree programme on their teaching skills.

### 3.2.2 Academic structure of the Sandwich degree Unit

The Sandwich degree programme of the university is headed by a director. It was formerly under the Institute of Education in the Faculty of Education. The institute of Education focuses on teaching and research in nursery, primary and secondary education. It also offers diplomas and degrees in education including postgraduate degrees. In 2002, the faculty of Education incorporated the Sandwich degree programme into its curriculum as a Unit. The unit is headed by the director who reports the academic activities of the unit to the dean of the faculty. He/she also provides overall governance to the unit. The institute has 286 lecturers teaching in the Sandwich degree programme. Some of these lecturers come from different faculties of the university to teach various courses. The Sandwich degree programme focuses on awarding Honours degrees in the following areas:

- a. English, French, Yoruba, History and Religious studies-B.A (Ed)
- b. Biology, Chemistry, Physics, Mathematics, Computer Science, Agricultural Science, Vocational and Technical Education-B.Sc. (Ed).
- c. Accounting, Economics, Geography and Political Science-BSc (Ed).
- d. Guidance and counselling, Educational management, Adult Education, Nursery and Primary Education, Physical and Health Education, Integrated Science, Business Education and Social Studies-B.Ed.

### 3.3 Participants in the study

The director and three other lecturers of the Sandwich degree programme were involved as participants in this study. Moreover, eight teachers who completed their honours degrees

## CHAPTER THREE

through the Sandwich degree programme participated in the study. The director of the programme and the lecturers were interviewed. Open-ended questionnaires and semi-structured interviews were administered on the teachers who participated in the study. It took a considerable period of time to select the schools used for the study. This was due to my search for teachers who graduated with honours degree through the Sandwich degree programme. It was difficult to locate a suitable school that has Sandwich trained teachers but ultimately one was found.

### 3.3.1 Lecturers' profiles

The follow table (Table 3.1) presents the profiles of the lecturers who participated in the study. All the names used in this study are not real names of the lecturers.

**Table 3.1: Profiles of the lecturers who participated in the study**

Lecturer's Pseudonyms Name	Gender	Age	Highest Qualification	Teaching experience in years	Subject taught and other responsibility
Beatrice	Female	50	PhD (English Education)	20	Use of English
Beauty	Female	51	PhD (Educational Management)	12	Educational Management, Director of Sandwich degree programme
Dayo	Male	52	PhD (Curriculum Education)	15	Curriculum study, Educational Technology, and HOD Curriculum and Educational Technology
Dotun	Male	51	PhD (Economics)	22	Economics Education, Director of the Entrepreneurial skill centre

## CHAPTER THREE

### 3.3.2 Teachers' profiles

The following table reflects the profiles of the high school teachers who participated in the study. All the names used in this study are pseudonyms.

**Table 3.2: Profiles of the teachers that participated in the study**

<b>Teacher's Name (Pseudonyms)</b>	<b>Age (years)</b>	<b>Qualification BSc. (Ed) (Hons).</b>	<b>Teaching experience in years</b>	<b>Subject taught and other responsibility</b>
Nightingale	45	Economics Education	15	Economics
Louis	39	Economics Education	8	Economics
Nadia	30	Economics Education	3	Economics
Victoria	38	Mathematics Education	10	Mathematics
Joyce	38	Economics Education	6	Economics
Christiana	36	Computer Science Education	7	Computer Science
Loretta	41	Economics Education	10	Economics
Juliana	47	Educational Management	12	Social science

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### 3.4 Instruments for data collection

There were various instruments employed for data collection in this study. Among the instruments were semi-structured interviews with the participants, open-ended questionnaires for the teachers and documentary analysis

#### 3.4.1 Interviews

An interview is a conversation whose purpose is to gather descriptions of the life-world of the interviewee with respect to interpretation of the meanings of the 'described phenomena' (Kvale, 1996: 174). Schostak, (2006: 54) defines an interview as an extendable conversation between partners that aims at having an 'in-depth information' about a certain topic or subject, and through which a phenomenon could be interpreted in terms of the meanings



## CHAPTER THREE

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interviewees bring to it. Interviews are conducted to obtain a special kind of information; “the researcher may want to find out what is in someone else’s mind” (Merriam, 1998: 71). An interview is a flexible tool for data collection and the order may be controlled while still giving space for spontaneity. Crisp, Swerissen, and Duckett (2000) postulate that an interview may be used in three different ways:

- it may be used as the principal means of data collection
- it may be used to test hypotheses
- it may be used in conjunction with other methods in a research undertaking

Interviews are divided into four types viz: structured, semi-structured, informal and retrospective interviews. Frankel and Wallen (1993) described structured and semi-structured interviews as verbal questionnaires that can be formal and designed to elicit specific answers from the respondents. On the other hand, informal and unstructured interviews are conducted with minimal control. In the case of informal and unstructured interviews, the responses of the interviewee were freely expressed. An informal interview requires careful planning to ensure the establishment of rapport from the outset which is necessary to get the best results (O’Hanlon, 2003). Unstructured interviews centred round a topic may produce a wealth of valuable data when in skilled hands. However, such interviews require a great deal of expertise to control and a great deal of time to analyse (Bell, 1989). As a result, an unskilled or inexperienced interviewer may end up in interesting conversations that may not produce useful insights and may therefore lead to failure in acquiring necessary information (O’Hanlon, 2003).

In their study, Fontana and Frey (2000) summarized interviews into two types: structured and unstructured interviews. A structured interview is when the participants receive the same questions that are asked in a specific sequence by a researcher using the same protocol with all participants. This type of interview is not flexible. In the case of an unstructured interview, open-ended questions are used to encourage participants to tell stories about their experiences. An interview for research purposes must be done accurately and the interviewer must display some levels of decency. In this study, semi-structured interview was used as this gave room for flexibility of the pattern and presentation of the expression (McMillan & Schumacher, 2010). Each interview session lasted between 30-45 minutes. In addition, each session of the interview was recorded so as to ensure detailed collection of data.



## CHAPTER THREE

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### 3.4.2 Questionnaires

According to Goddard and Mellville (2001), a questionnaire can be defined as a printed list of questions that respondents are expected to provide answers to. Kumar (1999), described questionnaires as ideal research tools due to some advantages which include; i) ability to be administered to large numbers of participants, ii) allows for anonymity, and iii) relatively more economical to use. Ogunniyi (1984) also points out some of the advantages of questionnaire as including: i) no population limit, ii) facts can be drawn without stress, iii) personal experience and expression can be shared without prejudice, iv) time is not wasted and v) cheap means of collecting data. However, the disadvantages of questionnaires, according to Kumar (1999) and Ogunniyi (1984) are; i) limited to people that can read and write, ii) the rate of response may be low, iii) the researcher may not be able to clarify issues, and iv) the respondents are able to consult others.

In this study open-ended questionnaires were given to the Sandwich teachers of the secondary school (Dominion High School) identified for the study. The Kirkpatrick design of evaluation was used to divide the questionnaires into sections corresponding to elements of Kirkpatrick's evaluation framework. The contents of the questionnaire were designed by me, and validated by my colleagues (other postgraduate students) and supervisor.



### 3.4.3 Documents

Documents are written scripts, log and printed version of detailed information that are related to people, events, activities or actions studied. According to Simons (2012), document analysis in qualitative research is a systematic procedure for reviewing or evaluating documents, both printed and electronic material. In spite of the fact that a document may not be able to communicate all the needed information, there is still some important information that a document can supply and if this information is missing, it may render the study incomplete and defective (Thomas, 2011; Silverman, 2001). The fact that documents have been in existence prior to the research, may provide great benefit to the research. In qualitative research, document analysis requires that data be examined and interpreted in order to elicit meaning, gain understanding and develop empirical knowledge (Cordin and Strauss, 2008). In this study, apart from the interviews conducted and the questionnaires

## CHAPTER THREE

administered, an analysis of the university handbook containing Sandwich degree course outlines was carried out.

### 3.5 Procedure for data collection

As indicated above, the study employed a case study design in order to have deeper insight of the issues surrounding Sandwich degree programmes (Kandjeo-Marenga, 2008). This case study followed the six qualitative stages of a case study as described Kandjeo- Marenga (2008). The six stages include: (a) planning towards data collection (b) data collection launch (c) data collection (d) data collection ends (e) data collection conclusion (f) data analysis continuation. The following table shows the different stages of the data collection process:

**Table 3.3: Different phases of data collection process**

Week	Stage	Illustration
One	Stage one	Journey to the research site
Two	Stage two	Preparation for collection of data
Three	Stage three	Commencement of data collection
Four	Stage four	Collection of main data
Five	Stage five	Data collection concluded
Six	Stage six	Journey back to destination
Seven	Stage seven	Data analysis started

The data collection of this study was designed and executed with the research questions in mind. The instruments used were carefully prepared and reviewed before I left for data collection. The contents of the instruments were validated by my supervisors and my colleagues. All the participants were approached in order to obtain permission to carry out the study.

I started the journey on the 19<sup>th</sup> of May 2015 to where the data was to be collected. The journey took three days before I could finally get to my final destination. Fountain capital city has 32 public and private secondary schools in total. I moved round most of the public secondary schools in town to get the participants that I needed for the study.

## CHAPTER THREE

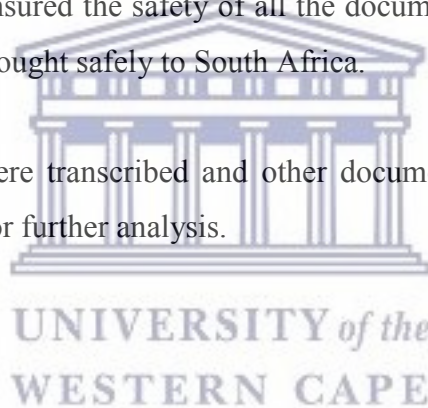
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The first few weeks were used to collect the data from the director of Sandwich degree programme and the lecturers at the university. After collecting the data at the university, I proceeded to collect data from the teachers who graduated from Fountain State University through the Sandwich degree programme. I obtained permission from teachers who participated verbally before I formally presented consent forms to them.

The fifth week of the data collection was spent to wrap up the data collected. The data collected was double checked to ensure the collection of inevitable documents before I left the research site. In addition, the brochure of the Sandwich degree programme was collected for analysis.

The moment I completed data collection procedure, I took a journey back to South Africa to continue with my studies. I ensured the safety of all the documents collected and that all the documents I collected were brought safely to South Africa.

The interviews I collected were transcribed and other documents like questionnaires were transferred into excel sheets for further analysis.



### **3.6 Data analysis**

Analysis of data is the process of systematically searching and arranging the interview transcripts, questionnaires, field notes, and other materials a researcher accumulates in order to generate a concise results for presentation to others (Merriam, 1998). Analysis involves working with the data, organizing it, breaking it into manageable units, synthesizing it, searching for patterns, discovering what is important and what is to be learned, and deciding what to tell others (Bogden & Bilken, 1982 as cited in Merriam, 1998). Analysis of data is an arrangement, ranking and ordering of data according to their categories and similarities for a common goal to be achieved (McMillan & Schumacher, 1993). Yin (1994) supports the idea of Bogdan and Biklen (1982) as they suggested that analysis of data is an important aspect of the study which match–make all evidences that are alike.

## CHAPTER THREE

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The data collected from the lecturers and teachers were analysed separately. The questionnaires and the interview transcripts generated in this study were read and compared. The findings were compared by looking for patterns in the data. The findings were sorted by putting the same information under one category. At the end of the process the comparison lists were brought together to construct the final list that served as the research findings (Merriam, 1998; Neuman, 2003; Huberman et al., 1994).

The audio-recorded interviews were listened to. This was done several times to get a clear understanding. The audio-recorded data was transcribed after the interviews were conducted. After all audio-recorded data were transcribed, the audio recordings were listened to again and crosschecked with the notes kept during the interviews to ensure that all data was captured. The data was encoded to facilitate the identification of common themes. A table which listed all responses was constructed. This assisted me to establish similarities in responses of the participants. After this process of listening, writing and coding, the data was sorted according to the themes that emerged. The data collected was used to give answers to some of the research questions.

The responses of the participants to the questionnaires were read thrice and compared to identify patterns in the data. The findings were sorted by categorizing the responses. At the end of the processes, the comparison lists were brought together to construct the final lists that serve as the research findings (Merriam, 1998; Neuman, 2003; Huberman et al., 1994). The data collected from the various instruments (questionnaires, interviews and document) were specifically aimed at evaluating the impact of the Sandwich degree programme at Fountain State University on the teaching skills of the teachers.

### **3.7 Validity and Reliability Test**

Reliability or dependability and validity or credibility (Denzil & Lincoln, 2003) are important aspect of quality research. If an aspect of a research is discovered to be unreliable or untrue, such a research loses its value and does not worth or merit any effort being put on it (Crisp et al., 2000). There are procedures researchers need to follow to measure the value and quality of the research. For example, before a validity and reliability can be authenticated, the trust

## CHAPTER THREE

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and truth must be tested through some witnesses that are involved and participated directly or indirectly especially in the area of data collection (Granić, 2008).

According to Maxwell (2005), there are different types of validity that exist. Among these are:

- detail/ingredient validity, which is an exact account of what happened without any falsification and polishing of the data
- conversion/translation validity, which is the demonstration of the in-built skills in researchers to copy out correctly the raw data collected from the field e.g. questionnaire, recorded audio (etc)
- philosophical/ideological validity, which explains the consistency of the researcher in coordinating and relating his/her discussion to the participants
- evaluative/feedback validity, a situation whereby validity is established through methodical willpower, determination of merit, worth and value of something

Reliability in statistics refers to the overall consistency of a measure. It represents the degree to which the same research procedure applied again to the same subject/object will give the same result. It is, in essence, the reproducibility of observed values. Reliability is a product of correct information or consistency of outcomes. In terms of evaluation, it is concerned with the correctness or precision in the input and the output of a programme or system in question. This means, the quality of the outcomes is dependent on the quality of the internal and external input (Ogunniyi, 1996). Validity connotes the relationship between the data collected and why the data was collected.

Cronbach's Alpha test developed by Lee Cronbach in 1951 was used in this study. Cronbach's Alpha test measures the internal consistency of a test or scale expressed as a number between 0 and 1. Internal consistency describes the extent to which all the items in a test measure the same concept or construct and hence it is connected to the inter-relatedness of the items within the test. In order to ensure the reliability and validity of the study, the instruments (questionnaires) used for the study were given to my colleagues (postgraduate students) and lecturers who are members of the Science and Indigenous Knowledge Systems Project (SIKSP). The panel scored the instruments based on their consistency, relevance and relatedness to the aims and objectives of the study. The scores were then subjected to

## CHAPTER THREE

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reliability and validity tests (Guba & Lincoln, 1989) to ensure the data collected based on the instruments were valid for the study.

### 3.8 Ethical Considerations

Educational research generates a lot of concern among people. This is so because of the personal contact involved in collecting the data. It is therefore advisable to handle the data collection with extra caution. Hence, there is a need for researcher to explain to the participants the essence of the research and why the data is being collected (Neuman 2003). In this study, the rights of the participants were stated out to them before they were allowed to participate in the study. Written consent was obtained from the schools' administrator of the selected school used in this study. The participants were informed of their right to withdraw the information he/she had provided if need be. The protection of the participants from harm, the assurance of the confidentiality of research data, and the question of deception of subjects were also highlighted as very important ethical principles (Frankel & Wallen, 1993). The protection of the anonymity of the participants was considered crucial in this study.

The participants used in this study were teachers that graduated through the Sandwich degree programme and the Sandwich degree programme lecturers at Fountain State University, Nigeria. In this regard, the researcher sought permission from the authorities of both institutions that were involved, after the aim and the purpose of the research had been explained to them. The researcher also took a further step to seek official consent from the principal and teachers of the high school. The Directors of Sandwich degree programme and the lecturers of the University involved were also consulted officially. After the approval had been acknowledged, the researcher briefly explained the nature of the project. In addition, the researcher highlighted how individual teachers, learners, state and the entire nation could benefit from the research. The participants were given consent form to complete as a sign of agreement to participate in the research.

Four Sandwich degree lecturers were interviewed. Some of the interviews took place in the offices of the participants while others took place in places comfortable for the participants at the University. The teachers interviewed were consulted earlier before the interview to



## CHAPTER THREE

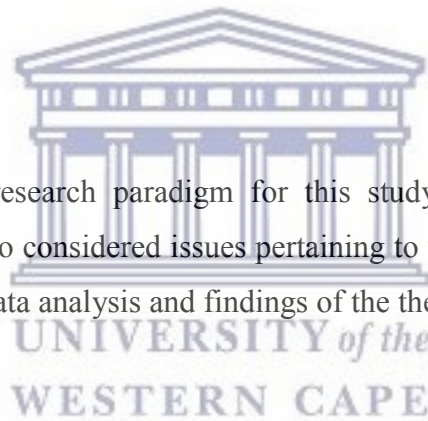
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confirm their readiness to participate. The teachers were well informed about the usage of audio tape and why it was important to record the interview. The teachers were also reassured of the confidentiality of the information they provided and their rights if any of the information is released without their permission (Kandjeo-Marenga, 2008). I exchanged my phone numbers with the participants, in case there are certain changes they may like to make or certain information they may like to add apart from the one they had already given.

From time to time, the participants were reminded of their involvement in the project as voluntary. Should they resolve to withdrawal their participation in the project, their decision would not be queried. The confidentiality was sustained by using fictitious names to describe and identify the participants. The information collected was kept in reserve for future electronic retrieval at a later date. The names of the participants, the school and the University are not real names but pseudonyms.

### 3.9 Conclusion

This chapter discussed the research paradigm for this study including methods of data collection and sampling. It also considered issues pertaining to validity, reliability and ethics. The next chapter focuses on data analysis and findings of the thesis.





# CHAPTER FOUR

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## CHAPTER FOUR

### DATA INTERPRETATION, FINDINGS AND DISCUSSION

#### 4 Introduction

This chapter presents the systematic data analysis, interpretation and a narrative account of the findings that emanate from the study. It also draws special attention to pertinent issues in the form of brief discussions, commentaries and interpretation.

In order to achieve the aim and objectives of this study, the study investigated how the programme is being run and the perception of the teachers after being trained through the Sandwich degree programme. The study was carried out using open-ended questionnaires, semi-structured interviews, and documents.

For ease of reference, the chapter spins around the four (4) research questions of the study. In this chapter, attempt was made to provide answers to the four research questions stated in section 1.6.

The chapter focused on examining:

- a. The types of courses offered in the Sandwich degree programme at Fountain State University, Nigeria.
- b. The qualification of the personnel running the Sandwich degree programme at Fountain State University.
- c. Effectiveness of the Sandwich degree programme at Fountain State University in enriching teachers' subject content and pedagogical knowledge.
- d. The perception of stakeholders on the Sandwich degree programme in terms of its overall

## CHAPTER FOUR

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structure, operations and impact on the teachers' ability to apply the knowledge acquired

### 4.1 Research Question One

**What are the types of courses offered in the Sandwich degree programme at Fountain State University, Nigeria?**

#### 4.1.1 Information from the university website

Sandwich degree programme at Fountain State University is a unit under the Directorate of Part-Time Programmes. The following are the programmes run under the Sandwich degree programme unit;

**a. Curriculum Studies:** Science Education – Biology, Chemistry, Physics, Integrated Sciences and Mathematics. Education Arts – English Language, French Language and Yoruba Language

**b. Educational Foundation and Management:** Educational Management, Adult Education, Business Education, Economics Education, Health Education, Physical and Health Education, Social Studies, Accounting Education, Political Science, Geography, History and Religious Studies.

**c. Guidance and Counselling:** Guidance and Counselling, Nursery and Primary Education

**d. Post graduate Diploma in Education (PGDE)**

**e. Master of Education Degree (M.Ed):** Educational Management, Guidance and Counselling, Physical and Health Education, Philosophy of Education, Language Education, Tests and Measurement, Curriculum and Instruction, Science Education, Educational Technology, Social Studies Education and Educational Psychology (<http://www.eksu.edu.ng/index.php/eksu-sandwich-programme/>).

The time of completion of honours degree in the Sandwich degree programmes vary from 4 to 6 years depending on the entry qualifications of the student/applicant. In this study, the focus is on 4-year honours degree obtained through the Sandwich degree programme. The honours degree

## CHAPTER FOUR

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programmes are run at 3 contacts per year during high school holidays in April, August and December for a period of four academic years.

### 4.1.2 Information from the University handbook

The Sandwich degree handbook containing the course content for degree in Economics Education (BSc Ed. Economics) was examined to show the type of courses offered in Sandwich degree programme. The course contents for Sandwich programme were arranged into three contact times instead of into semesters like the full-time programme (Figure 4.1). Looking at the course outlines for Sandwich degree programme, the types and number of courses per year for the programmes are similar to those offered in full-time programme. The only significant difference observed was that the courses spread for the two semesters for full-time students were merged into a single contact session for the Sandwich degree students. The number of units for Sandwich degree courses per year (three contact times) was observed to be more than the number of units for full-time course per year (first and second semesters). The course contents of the handbooks gave a clear indication that Sandwich degree programme is of the same quality and standard with the full-time degree programme in Education. The analysis and interpretation of the handbooks was considered of utmost importance because it presents needful information about teaching, assessment as well as the courses offered in Sandwich programme.

## CHAPTER FOUR

ADE 303	Industrial Education, training and development in adult education	3C
ADE 305	Modern Philosophies of adult Educ.	2C
ADE 306	Application of Statistics of Adult Education Community Development and Social Welfare	2C
ADE 309	Field Work in Adult Education	3C
GST 101B	Use of English II	2
GST 102		2
GST 104		2
GST 105B	Teaching Practice I	3
CUS 204	Ten unit course from the teaching subjects	10
<b>5<sup>th</sup> of 6 / 4<sup>th</sup> of 5 / 3<sup>rd</sup> of 4</b>		
ADE 308	Community Development in Comparative Perspective	2C
ADE 302	Economics of Adult Education Community Dev. And Social Welfare	2C
ADE 401	Trade Union Education	2C
ADE 402	Comparative Adult Education	2C
ADE 403	Current Issues And Problems of Adult Education	2C
ADE 405	Organisation and Administration of Adult Education in Nigeria	2C
ADE 406	Management of Adult Education Community Dev. And Social Welfare	2C
EGC 301	Organisation of G& C in Schools	3C
SSE 303	Mass Media	2C
SSE 304	Social Problems	2C
ADE 308	Community Development in comparative Perspective	2C
CUS 304	Teaching Practice II	3C
EGC 322	Psychology of Education II	2C
<b>6<sup>th</sup> of 6 / 5<sup>th</sup> of 5 / 4<sup>th</sup> of 4</b>		
ADE 407		
ADE 408		
ADE 406		
ADE 411		
EGC 402	Test and Measurement	2C
EDF 403	Principles of Educational Measurement	2C
46		
EGC 405	Introduction to G& C	2C
CUS 498	Project	4C
<b>B. Sc. (Ed) Economics</b>		
<b>1<sup>st</sup> of 5</b>		
ECO 101	Introduction to Economics I	3C
ECO 102	Introduction to Economics II	3C
ECO 103	Introduction to Business Econs	3C
ACC 101	Introduction to Management	3C
EDF 102	Education Development in Nigeria	3C
EDF 101	History of Education	2C
ECO 104	Basic Accounting Concept	3C
FSS 001	Introduction to social studies & Data Processing	3C
CUS	Introduction to the Teaching Prof.	2C
<b>2<sup>nd</sup> of 5: 1<sup>st</sup> of 4 year course</b>		
GST 101A	Use of English	2C
GST 201	Introduction to Computers	2C
GST 105A	Citizenship Education	2C
GST 105B	Human Environment	2C
EDF 201	Philosophy of Education	2C
EDF 203	Sociology of Education	2C
EGC 202	Educational Psychology I	2C
CUS 205	Introduction to Curriculum Studies	2C
ECO 201	Principles of Economics I	2C
ECO 205	Business Economics	3C
ECO 202	Principles of Economics II	3C
ECO 204	Statistics for Economics	3C
ECO 206	Structure of Nigeria Economics I	3C
ECO 207	History of Economic Through I	3C
ECO 208	Money and Financial Institutions	3C
ACC 206	Principles of Accounting	3C
3 <sup>rd</sup> of 5: 2 <sup>nd</sup> of 4		
GST 101B	Use of English II	2C
ECO 206	Principles of Accounting	3C
GST 202	Application of Computers	2C
EGC 220	Psychology of Learning	2C
CUS 230	Educational Technology	2C
COS 216	Social Science Methods I	2C
ECO 301	Micro Economic Theory I	3R
47		

**Figure 4.1: Copy of the University handbook showing the course outline for B.Sc. (Ed) Economics (Sandwich degree programme)**

### 4.1.3 The perceptions of Sandwich lecturers regarding the types of training or courses offered in the Sandwich degree programme at Fountain State University.

This section focuses on the perception of the lecturers on the types of training or courses the teachers go through during the Sandwich programme. The four lecturers who participated in the study (Beauty, Beatrice, Dayo and Dotun) gave information on the types of training and courses offered in the sandwich degree programme.

## CHAPTER FOUR

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### *4.1.3.1 Beauty's perception about the types of training offered in Sandwich degree programme*

**Beauty** said that Sandwich degree programme is not one of the short courses offered to refresh the knowledge of teachers but it is a programme geared towards the development of teaching skills of the participants. **Beauty** enumerated various benefits that the Sandwich degree programme has offered in terms of development of the pedagogical knowledge of their students.

When asked during the interview about the ability of the lecturers to impact the Sandwich students with the needed professionalism and expertise, Beauty responded that Sandwich lecturers give them their best and teach them all what is required to be professional teachers. She mentioned that the training given by the lecturers to the Sandwich degree students did not only improve their academic skills during the programme but also improve their leadership skills that helped them impact their society. Beauty explained;

*to some extent, the students are well taught because we have many of them doing well in the society. Many of our students who have finished the Sandwich degree programme here have even gone for their Masters and PhD degrees. We have produced lot of them even with PhDs now. So I feel it is really helping to develop and to help the society.*

**Beauty** expressed her views on the impact of the training the Sandwich degree teachers undergo:

*Yes, I think the Sandwich degree programme has sufficiently prepared teachers for their careers or their teaching profession. Aahm the Sandwich degree programme has been able to build up the teachers especially in their teaching skills. It has developed them, it has widened their knowledge and it has helped many people even to acquire more knowledge in their specific area of specialization.*



## CHAPTER FOUR

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### *4.1.3.2 Beatrice's perception about the types of training offered in Sandwich degree programme*

Beatrice, in her response to a question on the types of training offered in Sandwich degree programme during the interview, answered by comparing the academic programme of both Sandwich degree programme with that of full time. She said,

*the contents are the same. We teach the same content. The only difference, the major difference is that it is offered during school vacations. You know, looking at that word; sandwiched. It is a training you go through while working. So you don't expect it to be the same as full time programme. But in terms of knowledge dissemination, it is the same. The materials used to teach them are the same. And ehn, the same competent hands handle them. So I don't think there is any major difference between them. Like I said the other time, their level of maturity is quite different from the regular students. So these are the few areas of differences that I can really pinpoint. In all other areas, we disseminate the same thing, we do the same thing, we are the same people who teach the regular and the Sandwich and they have been performing well*

When Beatrice was asked further about the differences she could notice between the two programmes, she explained to the best of her knowledge that the two programmes are run the same way except that one is run full-time and the other during school holidays. The excerpt below gives a detailed of regarding the difference she noticed in the two programmes:

*“One, the timing is an issue. Except for one or two occasions where there are clashes, they run smoothly. But most times, you see that the students come on board during holidays, during long breaks, short breaks where the regular students are at home. Another major difference which I just discovered recently is that the Sandwich students really require resource materials, reading materials. For the undergraduate programme, I do tell them “submit your assignments, go to the internet, do this, do that, then they bring it”. But for the Sandwich students, aah that looks like a cumbersome activity. So you understand that the methods of learning, their rates of learning, and their enthusiasm*

## CHAPTER FOUR

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*about ultimatums are really different from the full time students. So those are some of the major differences”.*

### **4.1.3.3 Dayo’s perception about the types of training offered in Sandwich degree programme**

Dayo explained that Sandwich degree and full time degree programme are the same depending on the angle one viewed them. As he put it:

*“Ehn, it depends on the platform from which we want to make the comparison. If we are talking about the course contents, they are the same. But if we talk about the approach or the method by which they are handled, they are different.”*

He expatiated further that the main differences noticeable between Sandwich degree students and full-time degree students is that Sandwich lectures are run during school holidays (three contact sessions per year) while the other is full-time (two semesters per year). Dayo also mentioned the challenges faced by the programme alongside the achievements. He confirmed that due to many things they have to attend to, Sandwich degree programme suffer inattention from the lecturers most of the time. He said

*“Yes, the achievement so far in the Sandwich degree programme and apart from the issue of the general dimension, if you want to talk about challenge first, it’s time. You know as you are here with me now, primarily I’m employed to be a teacher, a lecturer. I am supposed to go into research. There are three components of our job – teaching, research and community service. There is a difference between the town and the gown, you are supposed to influence the environment where you are, you are supposed to carry out research that can better the lot of humanity and also to teach. Those are the primary duties and functions. And while doing this, there are extra works for you. So at times you become to handle administrative work. Like I’m here now, I’m here not as a lecturer but as a Director of Entrepreneurship Centre, I have to carry out that one, and at the same time I have to go to Sandwich centre, at the same time I have to write papers and do research. But what has been helping us is that if you are in academics, you try to reproduce yourself. So we have a lot of PhD students now, who are lecturers among us,*



## CHAPTER FOUR

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*so at times I may even distribute the courses to them to go and teach. Then I monitor what they are teaching, when they are writing exams I know what they are...otherwise because the energy is not there to do all these. That's a serious challenge because the same set of people that are teaching the regular will still supervise postgraduate students. You have postgraduate students to supervise, you have Masters Students to supervise, you are supposed to attend conferences, you are supposed to do all manner of research and you are still going to do those extra jobs. So the time and the energy to combine all these things at times may not be there.*

In sum, Dayo considered Sandwich degree programme as well established programmes in terms of the quality of training and education. Dayo advocated for the sustenance of the programme because of the job satisfaction the employers derive from the graduates of the Sandwich degree programme. Adesoye & Amusa (2011) and Adeyemi & Osunde (2005) corroborate Dayo's opinion that the Sandwich educational programme has significantly made a positive impact on the output of teachers who were not privileged to attend full time degree programme.

#### **4.1.3.4 Dotun's perception about the types of training offered in Sandwich degree programme**

Dotun responded to the research question by comparing the quality and standard of the training provided in Sandwich degree programme with that of full time degree programme. The excerpts explain the detail of his perception:

**Dotun** *"The objective of the programme is for the students to get a degree and in our country today you know well like secondary school, the minimum qualification you can have is at least a degree from your chosen field. I've seen a lot of my students that have gone through that programme. We admitted them for Masters and they performed very well. In fact, one of them who finished from Sandwich was pursuing PhD in US. He came to me personally to write a recommendation letter two years ago. He was one of the students I produced in Sandwich in 2003 and today he is running PhD programme in the United States of America. So that shows that the standard is very okay".*

## CHAPTER FOUR

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When he was asked about the commitment of the members of the institute to the programme, Dotun said:

*Yes, we have a directorate for the programme. And there is a Director; the Director of the programme is a Professor. The commitment is highly commendable. The present Assistant Director is an Associate Prof. The husband happens to be in the Faculty of Education for five years ago and was our immediate Deputy Vice Chancellor. So we are always there, and then we are very content with the programme. We attend classes regularly, we allow the students to come and dialogue with us in our offices and then we try as much as possible to identify their areas of strengths and weaknesses, and then we put appropriate measures in place to strengthen all those areas.”*

According to Dotun,

*Sandwich degree programme is a part time programme designed to help those who cannot come for regular (full-time) programme so that they can progress in their profession. So it's B.Sc.Ed and B.Ed. programme. The activities we normally engage in is that we teach. Many of us are not from Faculty of Education but because they take courses that we teach, especially those who are in social sciences, we participated in the Sandwich degree programme. First goal there is for us to teach, then examine students and submit scores.*

### **4.1.4 The perceptions of Sandwich teachers regarding the types of training or courses offered in the Sandwich degree programme at Fountain State University.**

The Sandwich teachers were asked to mention courses that are not so relevant in enhancing their skills. Some of the teachers mentioned the courses they considered not so relevant but some of the teachers said they have forgotten some of the courses and the course codes. Some of the courses mentioned include GST 201 (Computer Education), GST 202 (Application of computers), GST 105A (Citizenship Education), FSS 001 (Introduction to Social Studies and Data Processing) and ECO 303 (Econometrics) among others. The list of courses that were

## CHAPTER FOUR

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considered irrelevant came mostly from the courses offered within the Faculty of Education. The teachers considered some of the courses as irrelevant because the teachers could not link the importance of the courses to their profession as teachers. However, some of the teachers differed in their comments. Some teachers regarded all the courses that they offered during the programme as beneficial and relevant to their academic and professional development. In my opinion, the reasons why some of the courses are regarded as irrelevant is because the Sandwich teachers were looking at the immediate relevance of these courses to the subject they teach at school. I would state that although some of the courses may be considered irrelevant to the present needs of the teachers they may be beneficial in the long run in their professional careers.

Some of the teachers also commented that the contact time allotted for the programme is not enough considering the number of courses they do per year. They mentioned that instead of having courses that are not relevant, the limited contact times must be used for courses that are relevant to the subjects they teach. However, one of the lecturers after an interview with him indicated that Sandwich trained teachers have negative attitude towards other activities that will benefit their profession as teachers. He further emphasized that Sandwich teachers did not acquire adequate professional skills due to their attitudes towards some courses during lectures. The questions remain, should the Sandwich teachers only focus on courses related to the subject they teach at school and not have the knowledge of other subject areas? If teachers do not have knowledge of social related matters and other social activities apart from their subjects, how will they expose the learners to other social activities that can benefit them apart from academics? The fact is that attention should not only be focused on obtaining the certificate in one's subject area, but more importantly on acquiring knowledge that can benefit one's professional skill and social life.

The teachers were also asked to comment on teaching practice in secondary schools before they concluded their Sandwich degree programme. The study took the time to find out the opinion of the Sandwich teachers because it is the general belief that the teaching practice empowers, promote innovative educational instructions and enhances educational practices. The teachers

## CHAPTER FOUR

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commented that the university allows them to go for teaching practice twice before they conclude their programme. The teachers said the teaching practice helped them to gain more confidence and enriched their teaching skills. Below are some of the benefits they listed in their comments:

- It makes the teacher to gain more confidence
- Teachers get more experience
- It helps teachers to know their strengths and weaknesses
- Teachers' mistakes are corrected during monitoring
- It helps teacher to inculcate the habit of preparing ahead of learners
- It prepares teachers to prepare and adjust adequately to the system
- It assists teachers to put into practice what they have learnt

In addition, the teachers were asked to suggest ways to improve on the training offered in Sandwich degree programme. The following are their proposals:

- A resource centre for Sandwich students
- The scheduled time for the programme should be extended
- The workload in terms of number of courses offered per contact should be reduced
- The Sandwich students should be treated fairly by allowing them to have access to the same facility like the full-time degree students
- The school management should see to the welfare of the Sandwich teachers by providing adequate accommodation.
- Regular strikes by lecturers should stop
- Provision of conducive environment for learning

A very important issue that needs to be considered is the training period of Sandwich programme. According to responses from the lecturers and information from the University handbooks, the programme can be referred to as “a crash programme”. A lot of modules are compacted in the three contact periods making the Sandwich programme content heavy and thus

## CHAPTER FOUR

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putting students under a lot of stress. In fact, most of the teachers who went through Sandwich degree programme complained about the little time available to cover the curriculum.

The following are excerpts from interviews with some of some teachers who received their training through Sandwich degree programme:

**T3** *“No serious learning due to working class involved. Moreover due to the workload during the programme, there is no enough time for the lecturers to create time to help the students in the area of effective teaching and consultation”.*

Another comment made in support of what T3 said about the timing is as follows:

**T6** *“Lecturers do not have enough time for extra class. In addition, the workload is too much.*

These comments are in line with what some of the lecturers mentioned that the holiday period alone is not enough for the running of Sandwich degree programme. In addition, lecturers mentioned that their inability to consult with the students may rob students the opportunities to do well in the programme. Other areas mentioned by the teachers include the introduction of irrelevant courses, leaving students to read on their own, organisation and management of the programme, building facilities, giving tests and not getting feedback and lecturers not handling the courses with diligence among others.

### 4.2 Research question two

**What are the qualifications of the personnel running the Sandwich degree programme at Fountain State University?**

Table 4.1 shows the academic qualifications of the Sandwich degree lecturers who participated in this study. It shows that all the lecturers, including the director of Sandwich degree programme, are PhD holders which reveal that they are highly qualified in their disciplines.

## CHAPTER FOUR

**Table 4.1: Names (pseudonym) and academic qualifications of lecturers who participated in the study**

Lecturer	Qualification(s)
Beauty	B.Ed (Hons) in Social Studies Masters (M.Ed) in Educational Management Ph.D in Educational Management
Beatrice	B.A.Ed (Hons) in English Language Masters (M.Ed) in Language Education PhD degree in English Language Education
Dayo	PhD Curriculum Education BSc.Ed (Hons) in Physics Education Masters (M.Ed) and PhD in Education
Dotun	BSc (Hons), MSc and PhD in Economics

When interviewed on the qualifications of the personnel involved in the running of the programme, the following are the responses of some of the Sandwich lecturers;

**Dotun;** *Many of us are not from Faculty of Education but because they take courses, especially those who are in social sciences. So you take a course, though education is your major. In terms of the affiliate programmes Sandwich degree programmes, it's round the corner. Periodically they bring questions to me for moderation. In fact I moderated questions last week. Then whenever the school must have completed their programme that I have marked, then the university, initially we were travelling to those schools; we spend two or three days with them over there. But with this present university administration, we've not been travelling, they will come to us. So after coming down to us, so what they normally do is that they bring their results to us. And we go to our Sandwich village and we do the moderation. Then the other one, just because most of the participants in that programme they are teachers in secondary schools, they normally come during Easter breaks and the long holiday. So we go to the centre, we call it*



## CHAPTER FOUR

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*Sandwich village. We go there and teach them. So and then conduct exams. That's my involvement with them, especially those who are not in Faculty of Education".*

**Dayo**, another lecturer interviewed spoke about the qualifications of the lecturers in Sandwich degree programme.

*In Nigeria today, if you don't have a PhD, they don't recognize you as a university teacher. That's the minimum standard and if you go through that procedure now, that's why we are trying to produce some PhD so that we can reproduce ourselves. So, in the process of doing that, in my department we are 13 in number with only 5 PhD holders and that's a challenge. And NUC's Nigerian university minimum standard is that at least 70 percent of the lecturers must be PhD holders. So which means we are bottom heavy and that one is another challenge. So we want to, within ourselves I have seven Assistant Lecturers in my department and one Lecturer II that are yet to have PhD. And many of them will like to run their PhD within the system so as to reduce the cost and you are required to groom this people apart from the undergraduate you are going to teach, at the same time, you still go there. So that's why at times inadequate attention will affect the other one unless you have really reproduced yourself, you have a lot of PhD students you can delegate some functions of teaching and they go and teach and come back and perfect what they have taught. That is the major challenge we have".*

It is evident therefore, from the lecturers' perception that the lecturers who teach in Sandwich degree programme are well able as well as qualified to teach in Sandwich degree programme. **Beauty** further confirmed that most of the lecturers who teach in the Sandwich degree programme also teach in the full-time programme. The Director of Sandwich degree programme expressed her view in relation to personnel teaching and running the programme as well as the level of impact of the programme on the recipients.

*"Yes, the majority of us who teach the regular students also teach Sandwich degree students. Most of the lecturers are experts in their various fields and they are competent. Moreover, the Sandwich degree programme has been able to build up the teachers*



## CHAPTER FOUR

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*especially in their teaching skills. It has developed them, it has widened their knowledge and it has helped many people even to acquire more knowledge in their specific area of specialization. And apart from the development of their pedagogical knowledge, it has also helped in their moral development and other aspects of life”.*

She further added;

*“The same sets of people that teach in full time degree are also teaching in the Sandwich degree programme. Yes, even we make sure that the courses you teach at the regular are the courses you teach at the Sandwich. So it operates at the same level. You know in education, we have some courses that are housed in Faculty of Education. We also have some cognate faculties handling some courses like those who do Biology Education, Chemistry Education, English Education, Economics Education, Geography Education; some of those courses are usually taken in their various faculties. So for the Sandwich degree programme we also make sure that those who teach the regular students for all these courses at the cognate faculties are the ones that are also taking Sandwich students. That’s why we have large numbers of lecturers handling the Sandwich degree programme”.*

From Table 4.1 and by the contributions of the lecturers whom I interviewed, it is clear that the lecturers who teach in the programme are highly qualified. Apart from obtaining PhD in Education, some of the lecturers have professional certificates as trained teachers.

### 4.3 Research question three

**How effective is the Sandwich degree programme at Fountain State University in enriching teachers’ subject content and pedagogical knowledge?**

The effectiveness of a programme is the degree to which a programme is successful in producing a desired result. The effectiveness of the Sandwich degree programme in preparing teachers was investigated using two of the four elements of Kirkpatrick model; learning and results. This was

## CHAPTER FOUR

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done in order to understand the impact of the Sandwich programme on the skills of the Sandwich trained teachers. A total of eight teachers participated by responding to twelve (12) items on “Learning” in the questionnaire, and four (4) items on “Results” in the questionnaire.

The responses of the teachers to questions to understand how the Sandwich degree programme prepared them in developing their teaching skills are shown in Table A1. The response shows that all the eight (8) teachers who participated in the study agreed that they had clearer understanding on how to teach their subjects and how to handle them after studying through the Sandwich degree programme. Similarly, all the teachers stated that they understood all their lecturers and they could answer most of the questions given them in the examination. When asked if the Sandwich degree programme had proper organization and leadership, six (6) out of the eight (8) teachers which represents 75% agreed that the programme has proper organisation. However, two out of the eight teachers disagreed that Sandwich programme has proper organisation and leadership. The responses of the teachers shows that the Sandwich lecturers teach effectively and attend lectures promptly as five (5) out of the eight (8) teachers agreed to the forth item in Table A1. On the other hand, all the teachers agreed that the Sandwich lecturers exposed them to various teaching methods and that they used teaching materials relevant to their area of specialization. Similar responses were obtained when teachers were asked if lecturers helped facilitate the skill development of their students, as they all agreed with the statement.

In response to question regarding giving quick feedbacks on the tests and assignments given by lecturers, five (5) teachers answered in the affirmative while the remaining three (3), who participated in the study, disagreed that their lecturers give feedbacks on time. Furthermore, seven (7) teachers agreed that the classroom experience during the Sandwich degree programme allowed them to improve their teaching skills, and also allowed them to teach students how to apply different approaches to problem solving in their daily living and situations. Similar responses were obtained when teachers were asked if their degree allows them to make students aware of their environment and care for it, and if their degree also allows them to motivate students to participate fully in lessons they teach. Seven (7) out of the eight (8) teachers that

## CHAPTER FOUR

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participated in the study agreed with items 10 and 11 of the questionnaire, while only one (1) each disagreed with the items (Table A1).

The responses of the teachers to all the items in Table A1 shows that the Sandwich degree programme is effectively run satisfactorily as majority of the teachers in most cases responded positively to the items in the questionnaire. For example, the majority of the teachers agreed that the lecturers built in them the capacity to have accurate and deep understanding of the lesson taught. Their responses agree with Archibong & Nja (2011), which opined that effective teaching is that with designed lessons, the use of suitable teaching materials and techniques to enhance and improve learning for all learners. Although all teachers were generally positive towards the items that lecturers exposed them to various teaching method and facilitate skill development of their students, minority of the teachers seemed to disagree with the views of their colleagues. Based on Kirkpatrick model, items on “learning” have helped the study to understand the level of increase in knowledge or intellectual capability of the teachers after going through the Sandwich degree programme at Fountain State University, Nigeria.

Table A2 presents the responses of the teachers to the items relating to the “behaviour” in Kirkpatrick model. These items were designed to further understand the effectiveness of the Sandwich degree programme in preparing teachers. From the results presented in Table A2, six (6) out of the eight (8) teachers responded that their lecturers, through the Sandwich degree programme, helped them gain more confidence in teaching, while the remaining two teachers disagreed that their lecturers helped them gain more confidence in teaching. Also, six (6) out of the eight (8) teachers agreed that lecturers, through the Sandwich degree programme, helped them to establish instructional objectives in planning for a class, while only two of the teachers indicated their disagreement with the statement. When asked if Sandwich lecturers give their students insight on why they need to reflect on the lecturers’ teaching, almost all the teachers except one agreed that their lecturers did so. Responses to item 4 in Table A2 show that seven (7) out of the eight teachers were in agreement that education lecturers guided them on how to

## CHAPTER FOUR

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conduct daily lessons in their various fields, while only one (1) of the teachers disagreed with the statement.

From the analysis of the responses of the teachers as shown in Table A2, the majority of the teachers commented positively about their lecturers helping them to gain more confidence in teaching, helping them to establish instructional objectives in planning for classes, and emphasizing the importance of insight reflection and guide on how to conduct purposeful daily lesson. The teachers' responses on the emphasis and the need for lecturers to help them gain confidence as well as helping them with additional resources to enhance their teaching reveal that teachers are ready to construct and prepare active based lessons for their learners. However, from few of the teachers' point of view, lecturers are not helping them to establish instructional objectives in planning for classes. According to their responses, few of the teachers are of the opinion that there is need to improve upon certain aspects of the programme such as the behaviour of lecturers towards teaching skill development that could enhance teachers confidence.

In summary, the positive responses of majority of the teachers to the items in the questionnaire show that the Sandwich degree programme is effective in preparing teachers to teach their subjects at high school levels of education.

Apart from responding to the items of the questionnaires, the teachers were asked to comment and suggest how Sandwich degree programme could be improved. Their suggestions are as follow;

- Lecturers should be more committed
- Giving out resources that can be useful for the teachers
- Workload should be reduced
- Courses that are less relevant to the programme should be removed from the syllabus
- Enough time should be allotted to the programme to accommodate practicals
- Lecturers should give feedback on time
- More competent hands should be employed

## CHAPTER FOUR

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- Some of the courses that are similar should be merged
- Sandwich and full time students should be treated equally
- Conducive environment should be provided.

### 4.4 Research question four

**How is the Sandwich degree programme perceived in terms of its overall structure, operations and impact on the teachers' ability to apply the knowledge acquired?**

This section is divided into two parts; the first part focused on the perception of the Sandwich teachers which the second part focused on the perception of the lecturers on the Sandwich degree programme.

#### 4.4.1 Perception of Sandwich teachers on the Sandwich degree programme

This section evaluates the perception of Sandwich teachers on the overall impact of the Sandwich degree programme on their teaching skills. Questionnaires were distributed to Sandwich teachers to investigate their perceptions about the Sandwich programme and the lecturers, and the impact of the programme on their teaching skills. This items in the questionnaire were distributed according to the four elements of Kirkpatrick model; reaction, learning, behaviour and results. A total of eight teachers who were trained under the Sandwich degree programme participated in the study providing answers to the items in the questionnaire and made comments.

The responses of the teachers to 4 items in the questionnaire aimed at understanding their perceptions on the programme and the reaction of lecturers towards the Sandwich degree programme are presented in Table A3. The results show that five (5) out of the eight (8) teachers were of the opinion that the Sandwich degree programme is a well-managed and organized programme, while two (2) of the teachers were in disagreement with the statement. Also, in the

## CHAPTER FOUR

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responses of the teachers to the item on adequate class instruction, seven (7) teachers agreed that Sandwich lecturers had adequate class instruction, while one of the teachers strongly disagreed with the statement. The responses of the teachers showed that Sandwich lecturers had challenges paying attention to students' needs, as well as with organizing extra-time tutorials, as five (5) out of eight (8) teachers disagreed that lecturers pay attention to their needs. In a similar vein, getting feedback from lecturers was also problematic as five (5) teachers were of the opinion that lecturers do not give feedback on time.

Considering the significant number of teachers that were of the opinion that lecturers do not give adequate attention to their needs and that they do not give feedback on time, the attitude of some of the lecturers of the Sandwich degree programme calls for serious attention. At this juncture, it may be said that some of the lecturers abandon their duties and display unconcern attitudes to their duties. In any case, I am of the opinion that more efforts from the lecturers towards their duties and the participation of the management body of Sandwich programme in the activities of the lecturers could improve the attitudes of the lecturers towards the programme.

The results showing the responses of the teachers to the items in Table A4 indicate that six out of the eight teachers who participated in the study were in agreement that Sandwich lecturers used appropriate teaching strategies, while the remaining two teachers strongly disagreed with the statement. The comments of the teachers that disagreed were that, lecturers only exposed them to theory in the classroom and not considering the practical where necessary. Even though, some of the teachers agreed that the lecturers used appropriate strategies, some of the teachers in their comments mentioned that the Sandwich programme only exposed them to theory without practicals. In my opinion and in agreement with Hewson & Ogunniyi (2011), active lectures using various teaching strategies are essential if an education programme is to achieve its set goals of developing skilful teachers.

With respect to the content of instructional material, seven teachers responded that their lecturers' content matter was relevant while one teacher strongly disagreed with the statement.



## CHAPTER FOUR

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This gives an indication that the Sandwich teachers acknowledged that the content taught in the programme are beneficial to them and relevant to classroom teaching and learning in schools. According to Seotsanyana, (2002), application of the training is made easy when relevant training is received by the recipients. However, the content of the teaching materials for the programme may need to be improved on for better disposition. Responses of the teachers regarding the workload of lecturers indicate that five teachers were in agreement that their lecturers had reasonable workloads while the remaining three teachers had contrary opinion.

In summary, most of the Sandwich teachers confirmed that the programme delivered the content that helped them improve their teaching skills. This indicates, considering the responses to the adequate teaching materials, that the Sandwich degree programme is effective in preparing teachers to teach. It is remarkably interesting and impressive that the programme has contributed meaningfully to the pedagogical content knowledge of the teachers during the Sandwich degree programme.

The responses of teachers to the items on how the Sandwich training affected their behaviour as professional teachers are presented in Table A5. The results indicate that seven out of eight teachers agreed that their lecturers made them acquire thinking skills that could be developed in pupils, while only one teacher strongly disagreed with the statement. A similar result was obtained with regards to whether lecturers helped them to develop positive attitude toward teaching profession, as seven teachers agreed with the statement. Seven out of eight teachers who participated in the study agreed that their lecturers made them attain the major concepts needed for further studies in the field of education. However, a teacher felt that the programme did not help them to attain desired academic goals. Considering the responses of the teachers to the items in Table A5, Sandwich degree programme could be considered as an effective programme to develop the teaching skills of teachers while at work.

The responses of teachers to items aimed at determining the result of the Sandwich degree programme on their professional skills are presented in Table A6. From the results, seven

## CHAPTER FOUR

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teachers out of eight responded that their lecturers gave clarity on how to teach their subjects. On the other hand, seven teachers also agreed with the statement that their Sandwich lecturers taught them skills on how to prepare students to be useful in the community. With respect to whether the Sandwich degree programme is an appropriate programme for teacher training, seven teachers were in agreement that the programme is appropriate to train teachers while only one teacher disagreed that the programme is appropriate to train teachers. Also, seven teachers out of the eight that participated in the study were of the opinion that the Sandwich degree programme assisted them to make several changes and improve their students' thinking ability. Moreover, two of the teachers disagreed that adequate knowledge was passed across to them during their Sandwich degree programme, while six teachers agreed that adequate knowledge was passed across to them (Table A6). In response to having basic foundational knowledge of what university degree entails and its impact in my teaching career, only one teacher disagreed while the remaining seven teachers agreed that the programme had impact on their teaching career.

Evidently, from the responses presented in Table A6, majority of the teachers agreed with the items of the questionnaire, which could indicate that the programme yielded the desired result. However, despite the positive responses from majority of the teachers, a few were had contrary opinion. Few of the teachers observed deficiency in the programme. This indicates that more can still be done to improve the effectiveness of the Sandwich degree programme.

Table A7 presents the analysis of the responses of teachers to items on the questionnaire aimed at understanding their perception on the overall impact of the Sandwich programme on their teaching skills. All the eight teachers responded in agreement to the items in the questionnaire except one of the teachers who disagreed that her lecturers have made her practice activity based lessons when teaching. For instance, seven teachers agreed with the statement that their lecturers had helped them to develop thinking skills, while one out of the eight teachers strongly disagreed with the statement. This indicates that the lecturers who teach Sandwich degree programme at the Fountain State University makes substantial effort to develop thinking skills of the teachers. In my opinion, this will help the teachers in participatory teaching strategies which will make

## CHAPTER FOUR

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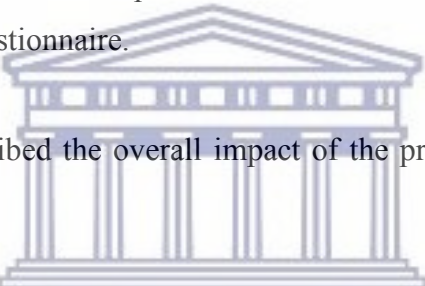
teaching and learning exercise fascinating and captivating. According to Hewson & Ogunniyi (2011), critical thinking skill helps one to process actively and skilfully conceptualizing, applying, analysing, synthesizing, and carefully evaluating information or ideas.

The responses of the teachers show that Sandwich degree programme has positive impact on their teaching skills and that the programme has assisted them to become professional and skilful teachers.

### 4.4.2 The perception of Sandwich lecturer on the overall impact of the programme on teaching skills of teachers

During the interview conducted for the lecturers of Sandwich degree programme, the comments of some of them corroborate some of the points that the Sandwich teachers mentioned in their responses to the items in the questionnaire.

Some of the excerpts that described the overall impact of the programme on the recipients are here below:



*Beauty; The Sandwich degree programme has been able to build up the teachers especially in their teaching skills. It has developed them, it has widened their knowledge and it has helped many people even to acquire more knowledge in their specific area of specialization. And apart from the development of their pedagogical knowledge, it has also helped in their moral development and other aspects of life”.*

**Beauty** further added that;

*“To some extent, they are well equipped because we have many of them doing well in the society. Many students that have finished the Sandwich degree programme there have even gone for their Masters and PhD. We have produced lot of them even with PhDs now. So I feel it is really helping to develop and help the society”.*

Another lecturer expressed a similar idea in the excerpt below:

## CHAPTER FOUR

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**Dotun (Lecturer)** *“Yes, the programme has impacted their teaching skills positively. Most of them, we have seen some of them showing signs during the programme to further their education to postgraduate level. Some of them after graduating with their honours degree have come to us for Masters and PhD. We have produced three PhDs out of them and that’s an indication that they have been very proficient, and they have been making the best use of the training acquired from the programme. We have seen a lot of them going to other universities as lecturers as well. After graduation, they come for postgraduate studies. So during teaching practice you see that most of them, they demonstrate very good understanding of what we are teaching them through that particular medium”.*

When interviewed on the overall impact of the programme, Beatrice, a lecturer also asserted that:

**Beatrice** *“Going by their outputs, recommendations from the place where they work, the programme has positively impacted the teachers in their teaching profession. And in some instances some of them come back to do their Masters or PhD programme and they showed that they have actually undergone the programme. So it’s beneficial to them”.*

Another lecturer added that:

**Dayo** *“I know that the programme has positive impact on the teachers because like ehn during accreditation, of which we are preparing for now, we received reports from the employers that we include in the accreditation report. So we always take all those things into consideration. And most of our students that we take their reports are from Sandwich. So that’s why I know they would have attained that level before they graduate from here”.*

Despite the criticism made by the teachers on Sandwich degree programme especially on lecturers and limited time for the programme, the comments of the lecturers show that certain beneficial effects are noticeable in Sandwich trained teachers. The lecturers placed great emphasis on the change that was observable from Sandwich degree programme trained teachers.

## CHAPTER FOUR

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The lecturers pointed out specifically and appreciated the way the teaching and learning of the programme had impacted the teachers positively. One of the lecturers (Dayo) during the interview explained expressly that Sandwich trained teachers are exposed to analytical thinking so as to enhance their orientation and line of thought about pedagogical way of teaching and learning.

From the study, it is evident that Sandwich degree programme has strengths and weaknesses. Regarding the programme strengths, the recommendation would be to reinforce things that seem to be working. But in relation with the programme weaknesses, there were a number of limitations that were identified in the present system. As a result, some measures need to be put in place to correct the irregularities. Probably, the application of the proposals of the lecturers and Sandwich trained teachers would lessen some of the limitations and improve the overall quality of the programme.

During the interviews with the lecturers, three out of the four lecturers were asked on how the attitude of the Sandwich teachers contributed to the overall impact of the programme on their teaching skills. The followings were the responses of the lecturers;

Beauty in her response described the Sandwich teachers as more matured compared to their counterpart doing full-time programme. According to her, this contributed immensely to their performance in their studies and in developing their teaching skills. Apart from that, she further explained that the Sandwich teachers are matured enough to take up the challenge of managing different responsibilities at a time. According to her, Sandwich teachers are more serious and cannot afford to waste their precious times not only because of maturity but because of other responsibilities such as work and family responsibility.

*Beauty said; “They know what they are doing, so that’s seems to help them. They look very serious whenever they are around and that seems to help some of them to perform better than the full time students even though the full time students are always on campus.*

## CHAPTER FOUR

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*The Sandwich teachers pay more, probably because of this, some of them will not allow their money to be wasted. So they seem to be serious because they know that if they fail a course, they will have to repeat it and pay for another year, so that keeps them busy and studious”.*

Beatrice, in her perception agreed with Beauty that maturity, exposure and former training that some of the Sandwich teachers had helped them to perform better than the full time degree students. According to **Beatrice**;

*You should understand that Sandwich teachers are mature. You will find out that they are not children or young people like the normal degree programme. They are not so young like that, some of them are working, some of them have graduated from secondary school or high school for close to five/six years. Some of them are married; some of them are working parents. And so they know the reason why they have come and they have to acquire the knowledge and they also showcase some of these competencies when we are teaching them. Maturity is one of the factors that help them to achieve their desired goals”*

In sum, Beatrice considered the maturity of the Sandwich teachers as one of the basic ingredients that helped them succeed in their endeavours. In her view, when a programme is not dominated with young people, the tendency to disrupt the smooth running of the programme will be minimal and the output of the programme will be increased (Olaleye, 2013; Okobia, 2013).

**Dotun** holds a contrary view on how the maturity of the Sandwich degree teachers contributed to their success. In his own perception, he believed that the age of the Sandwich teachers has negative influence on their academic performance. When Dotun was asked to explain, he said;

*That’s very good. You know in terms of age, the regular students are younger. So they don’t have any household chores, they don’t have any challenge coming from the family front. So when you see the Sandwich students most of them are married, some of them may be carrying pregnancy which is not that common among undergraduate. And because of*



## CHAPTER FOUR

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*the challenges of that you discover that some of them may not be able to concentrate at times.*

### 4.5 Conclusion

The findings of the study show that Sandwich degree programme at Fountain State University is effective at delivering the target goals of the programme. The qualifications of the lecturers employed to run the programme show that the programme is being run by qualify and professional personnel that can deliver the objectives of the programme. The types of courses run in the Sandwich degree programme are relevant to the teaching profession of the participants. For instance, the course outline for degree in Economics Education contains relevant Economics and Education courses that can prepare the teachers for their professional careers. The quality of lecturer and courses offered show that the programme is effective in preparing teachers to teach some core subjects at high school levels of education. Finally, the perception of the lecturers and teachers on the Sandwich degree programme indicates that the programme has positive impact in the teaching skills of the teachers, that the programme improves teachers' ability to deliver the knowledge acquired.

The next chapter gives detailed implications of the findings and recommendations.

# CHAPTER FIVE

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## CHAPTER FIVE

### CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

#### 5 Introduction

This chapter sums up the findings of the study. This concluding part of the study was framed and expatiated on in relation to the research questions stated in chapter one. In addition, the implications, recommendations, limitations and areas that need further probing are included in this chapter.

#### 5.1 The main findings

The available facts and information drawn from the study propose that the Sandwich degree programme is generally a well-designed training programme for in-service teachers. This was indicated in the favourable and constructive appraisal of the programme by the teachers and lecturers who participated in the study. The parties involved in the Sandwich degree programme positively rated the programme as suitable and relevant for the enhancement of teachers' subject and pedagogical content knowledge. Nevertheless, some flaws were highlighted in some areas of the programme that may require the attention of the management of the Sandwich degree programme.

##### 5.1.1 Question one:

*What is the type of courses offered in the Sandwich degree programme at Fountain State University, Nigeria?*

## CHAPTER FIVE

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The handbook containing the teaching contents of the Sandwich degree programme, when examined, showed that the course contents is of high standard, and are the same as the full-time degree programme run by Fountain State University. The only difference is that the course contents for Sandwich programme were arranged into three contact times instead of into semesters like the full-time programme. According to Ogunniyi (1996), the quality of a programme could be known through the content knowledge of the programme. The course content of the Sandwich degree programme comprises mainstream modules, which include Educational Foundation, Curriculum studies, General studies, Guidance and Counselling. The mainstream modules, which are spread across the four years of the programme, are expected to equip the teachers with the content learning standards. This includes the contents that the teachers have to learn, and the process through which the teachers can achieve their goals. The Educational Foundation modules prepare the teachers for professional development and general principles that guide their teaching assignment. Curriculum Studies expose the teachers to strategies and methodology of teaching. General Studies expose the teachers to academic writing skills such as essays, reports, languages, presentations and research papers. This helps them to develop adequate competence in the use of English language and to improve their communication skills. Moreover, teachers are developed to appreciate and expand the awareness of their social and cultural values. Guidance and Counselling provides knowledge to the Sandwich teachers enabling them to give career advice to learners and help them to achieve an optimal level of personal and social competence. This module equips the Sandwich teachers to work with both learners and parents to improve their academic performance. In addition, the module teaches to handle minor issues relating to learners and refer complicated issues to trained guidance and counsellors.

The responses of Sandwich teachers clearly indicate that Sandwich degree programme is the same as the other degree programmes and the spotted difference is the number of contact time. This statement agrees with Borisade, (2007) and Bandele, (1996) who explained that Sandwich degree programme is being run at three contact times during school holidays while the full-time programme is run at two semesters per year. The study shows that Sandwich teachers who were

## CHAPTER FIVE

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the main recipients of the programme were positive about the programme. However, some of the teachers are of the opinion that some courses are irrelevant because they could not link the importance of the courses to their profession as teachers. Although some teachers differ in their opinion on the irrelevance of some courses, this type of situation calls for the review of some of the modules so as to select the relevant modules and contents and discard the modules that are considered not relevant in order to reduce the workload of the teachers. The Sandwich teachers were concerned about the limited time allotted to the programme and suggested that instead of having courses that are not relevant, the limited contact times must be used for courses that are relevant to the subjects they teach.

The Sandwich lecturers also expressed their opinions about the programme. Some of the lecturers who were interviewed had opposing views to the Sandwich degree teachers' responses on the irrelevance of courses offered in the Sandwich degree programme at Fountain State University. The lecturers interviewed were of the opinion that the Sandwich degree is the same as the full-time programme except that Sandwich programme has three contact times per year while full-time programme has two semesters per year. They argued that, since the Sandwich degree programme is the same as the full-time programme, the courses offered in the full-time must also be the same as the courses offered in the Sandwich degree programme. In my opinion, some of courses such as GST 201 (Computer Education) and GST 202 (Application of computers) considered irrelevant by some of the teachers, will be useful on the long run in the profession as computer literacy is essential.

In summary, the finding on the type of courses offered in the Sandwich degree programme shows that the courses offered in the programme is the same as the courses offered in the full-time degree programme except for the contact times which is different. This indicates that the quality of the degrees offered through Sandwich degree programme is the same as the degrees offered through full-time degree programme.

## CHAPTER FIVE

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### 5.1.2 Question two

*What are the qualifications of the personnel running the Sandwich degree programme at Fountain State University?*

From the interview I had with the director of the programme and the lecturers at the university, I deduced that all the lecturers that are teaching in the Sandwich degree programme are qualified lecturers. The director of the programme who is also a lecturer in both full-time and Sandwich degree programmes confirmed that the lecturers who teach in the Sandwich degree programme are the same set of lecturers that teach the full-time degree students. This indicates that they are officially recognised as professional lecturers in their various fields. However, the Sandwich teachers argued that due to the shortage of lecturers, the programme employed some staff to teach some courses from other institutions. This was denied by the Director of the programme who insisted that all the lecturers are qualified and professionals who lecture in both full-time and Sandwich degree programme. Except for some of the lecturers who complained of having too much workload which may hinder their performance, the institution should be commended for employing capable lecturers to teach in the Sandwich degree programme. This gives opportunity for the Sandwich teachers to enjoy equal opportunities with their counterparts who were trained through the full-time degree programme at the same university.

### 5.1.3 Question three

*How effective is the Sandwich degree programme at Fountain State University in enriching teachers' subject content and pedagogical knowledge?*

The response of the teachers shows that the Sandwich programme enriched them in having more and clearer understanding on how to teach their subjects after studying through the Sandwich degree programme. The responses also show that the Sandwich degree programme is effectively run satisfactorily as the majority of the teachers agreed that the lecturers built in them the

## CHAPTER FIVE

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capacity to have accurate and deep understanding of the lesson taught through the use of suitable teaching materials and techniques. According to Archibong & Nja (2011), effective teaching is that with designed lessons, the use of suitable teaching materials and techniques to enhance and improve learning for all learners.

In spite of the fact that majority of the Sandwich teachers who participated in the study expressed favourable views about the effectiveness of the programme in enriching their subject content and pedagogical knowledge, the issue of balancing the theory and the practical approach during the training programme was a concern to some of the teachers. Some of the teachers indicated that the programme is more of theory-oriented than using other technique of teaching. It is important that the Sandwich teachers be equally exposed to practical where necessary instead of being exposed to only theory-oriented teaching. This will help the Sandwich teachers to get the content across to the learners in a more appropriate and easier way. This study suggests that the Sandwich teachers should be exposed to more teaching techniques and skills during the training in order to know and choose the appropriate strategies. This will help teachers in (a) interpretation of the concept and subject content materials (b) conveying the subject to the learners in a clear language (c) using the language of instruction appropriately to explain key concepts in learning area (d) preparing thoroughly and thoughtfully for teaching by drawing on a variety resources, knowledge and skills (e) adjustment of teaching strategies suitable for the developmental stages of learners (f) adjustment of teaching strategies to cater for different learning styles and mainstream learners with barriers of learning and (g) creating a learning environment in which critical and creative thinking is encouraged.

According to Oonk, Verloop & Gravemeijer (2015), practical is described as the application and implementation of the knowledge acquired through theory. Allen & Wright (2013) and Harris & Sass (2014) in a similar vein corroborate this and describe practical as a good method of developing competence and strengthening of teachers' professional ability. Choy (2014) also asserted that the combination of coursework and practicals make a lot of differences and change in the classroom performance and professional abilities of the teachers. Teachers should be given



## CHAPTER FIVE

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opportunities to develop their own teaching strategy that is ideal to their subject. This will greatly assist them to be successful in their teaching career. According to Smith & Lev-Ari (2005), practicals complement theory to improve professional capacity and skills of teachers.

### 5.1.4 Question four

*How is the Sandwich degree programme perceived in terms of its overall structure, operations and impact on the teachers' ability to apply the knowledge acquired?*

As regards the overall impact of the programme on the recipients, the director and the lecturers were satisfied about the outcome of the programme and therefore commended the programme in relation to the positive impact on the recipients. All the lecturers that were interviewed rated the quality of the programme high. According to Ball (2000) teachers only teach from the knowledge they have. To the lecturers, seeing some of their students doing well in their various fields is an affirmation of effective teaching. According to the lecturers, some of their students are now enrolled for Masters and PhD programmes all over the world. Some of their students are gainfully employed as lecturers in several universities. This is a good indication that the programme is productive and worthwhile. The Sandwich teachers also applauded and gave constructive comments about the programme that it was beneficial to them. The responses of the teachers show that Sandwich degree programme has positive impact on their teaching skills and that the programme has assisted them to become professional and skilful teachers. The teachers confirmed the positive noticeable changes to include; good teaching, confidence, self-esteem, enhanced performance and skills mastery among others.

### 5.2 Implications of the study

The finding of the study has significant implications for the programme, teachers, learners and Nigerian education system. Some of the implications of the findings are therefore based on these aforementioned stakeholders.

## CHAPTER FIVE

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### 5.2.1 Implications for the programme

The evidence gathered from this study reveals the broad gap between the teaching of theory and practice. The programme has not succeeded in combining theory with practice. The failure to combine theory with practice, specifically in the teaching and learning process has not given needful opportunities for the graduates of the programme to display their expertise. For example, a computer trained teacher who did not have access to the computer laboratory to practice what he/she learnt or an agricultural science teacher who has not been to the farm but only rely on the theory his/her lecturer taught in the classroom, cannot perform effectively. Kageyama et al. (2016) emphasize the need for theory and practicals in teacher education programmes. Teachers felt they needed to be introduced to the kind of situation where they might be able to balance the theory with the practicals. During preparation for teaching, lack of practical knowledge can make the teaching quite scholastic, instructional and teacher based, that cannot be backed up with evidences. A well trained teacher should be able to create an enabling learning environment as well as build confidence in his/her learners through combination of theory and practice.

Educational facilities are one of the ways to promote learning. Facility like information technology centre, accommodation, libraries must be prioritised among others for conducive atmosphere and easy access to learning. The objective of graduating well qualified teachers is unrealistic if the necessary academic support is not put in place. Adequate academic resource and support are needed to facilitate effective training and preparation of teachers. For example, tutors should be made available to assist the teachers during the training. Moreover, academic writing department should be created to help the teachers improve their academic writing skills. It is important to note that if the issue of lack of academic resource to support teachers during the training is not addressed, the teachers produced through the Sandwich degree programme may lack the needed expertise, skills, mastery and experiences that are required to improve their professional skills.

## CHAPTER FIVE

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The programme handbook revealed that the modules in one contact time are too many for the teachers. Heavy workload for both lecturers and teachers may lead to poor-performance. Therefore, this study is of the opinion that the workload needs to be revisited and redesigned to make teachers have the necessary teaching competences.

It was also noticed during the study and confirmed by the teachers that the tuition fees for the programme were considerably very high. Although tuition fees may be considered by the university as a way of generating income, very high tuition fees may have negative impact on the performance of the teachers as some of the teachers may not be able to pay on time due to other expenses and their meagre salary. The university should revise the tuition fees and so that teachers on training will have quality time to concentrate and focus on their studies with little or no disturbance. Ambos et al. (2008) advise that higher institutions should look for other means of generating income other than relying only on tuition fees from students.

The study has also shown that some of the lecturers do not attend their classes regularly but tend to leave the Sandwich teachers on their own without appropriate guidance and supervision. This should be properly looked into to prevent producing unqualified teachers. The lackadaisical attitude of some of the lecturers would not help the programme to achieve its goals. Therefore, the management should tighten up their employment policy and monitor the activities of the lecturers employed to teach in the programme. It is therefore important for the management to see to the day to day running of the programme as well as monitoring the lecturers to ensure that they do their work.

This finding corroborates the observation of Borisade, (2007) in his study where the issue of lack of commitment from the lecturers was raised. Borisade (2007) noted that even though all the lecturers teaching in Sandwich degree programme are permanent staff in their various departments at the university, the fact that most of the lecturers are engaged on a part-time basis, has made some of the lecturers not to be fully committed to the programme (Borisade, 2007). In most cases, examination scripts are not marked on time and the results are not processed and

## CHAPTER FIVE

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published on time. According to him, the majority of the lecturers are only concerned about their salaries and not about the quality of the programme. Examination duties are normally handled with much triviality because of lack of commitment. Egoeze et al (2014) in their study also mentioned some of the challenges that are affecting teaching and learning in the Sandwich degree programme. These include non-availability of resources in terms of human and capital resources, capable hands to teach the correct content, insufficient staff, paucity of sufficient space for proper teaching and learning, shortness of allotted time for the course, and insufficient seats for the Sandwich students.

### 5.2.2 Implications to Sandwich teachers

The study reveals that the teachers who were trained through the programme encounter setbacks in relation to some of the lecturers who do not come to classes regularly. Therefore, it may not be impossible for some of the Sandwich teachers to have little knowledge about the content. The inadequacy in the preparation of teachers towards achieving the necessary skills during training could cause a lot of problems in their teaching career. Although, the teachers may obtain their degree at the end of the programme but they will lack confidence and expected skills. Teachers who have limited knowledge about the content would lack pedagogical skills to enhance learning at school. Lack of knowledge of the content by the teachers may perhaps be one of the contributory factors to the poor performance of learners in examinations. It was observed that the failure of learners especially in West African Examination Council (WAEC) and National Examination Council (NECO) could come from the way the teachers handle the content in the classroom teaching. If the Sandwich degree programme is well designed to meet and equip the recipients' professional competence and virtues, learners' interest in academic could be aroused thereby improving their performance in examinations. The deficits regarding teacher's content knowledge revealed in this study calls for serious attention by the university to address these deficiencies.

## CHAPTER FIVE

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### 5.3 Recommendations

The introduction of information technology (ICT) into the Sandwich degree programme could improve the running of the programme. If the students are given more assignments and this is monitored through ICT this may enhance the programme in no small measure. The lecturers could use this medium as a means of communication with the teachers without necessarily meeting with them. This will also help reduce undue one on one meetings between the lecturers and the teachers except when it is unavoidably necessary. Lack of adequate accommodation for the teachers during the programme could jeopardise their chances of performing very well in their studies. The Sandwich degree programme could be made better if the Sandwich teachers are allowed to stay on campus during their programme. The University management should look for a way of bringing them close to the campus so that they can have access to the use of the library and ICT, as exposure to the use of the library and information technology will help them to acquire skills useful in their profession. It is therefore recommended that the university management should make it possible that the teachers reside on campus and have the filling of an academic environment. With good accommodation on campus and all other facilities in place, it is believed that the Sandwich teachers would be able to perform better.

Although the finding of the study shows that the courses offered in the Sandwich degree programme are the same when compared with the full-time programme, the management of the Sandwich degree programme should ensure that the courses that each of the lecturers teach in the full-time programme are the same as courses allocated to them in the Sandwich degree programme. In a situation whereby a lecturer is employed to teach a certain course at the full-time programme and teach a different course at the Sandwich degree programme can affect the performance of the lecturer. Therefore, extra caution should be taken during recruitment exercise so as to protect the image of the programme and the university at large.

A good relationship must be built between high schools and the Fountain State University for the latter to be regularly updated with the content of the syllabus in order to achieve a common goal. It is a common saying that the quality of an education system cannot exceed the quality of its

## CHAPTER FIVE

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teachers. Training of teachers should conform to the schools' content (syllabus) in order to equip the learners with the right content.

The study also recommends the following;

- The practicals teaching in various fields should be given more attention and teaching practice should also be strengthened. For instance the duration of teachers for teaching practice should be extended. This would enable them to put into practice the new knowledge they had gained from the theoretical courses they are exposed to during the programme.
- The workload of lecturers and the Sandwich teachers needs to be moderately reduced in order to aid active performance of the lecturers in teaching the pedagogical knowledge content extensively. This would also assist the Sandwich teachers to be more focused.
- During the study, it was observed that teachers are paying a lot of money as tuition fees. It is recommended that the university should reduce the tuition fees to ease financial difficulty that most of the teachers face in payment of their tuition fees. Sandwich degree programme, on the other hand, can also be regarded as capacity building programme. In this case, government should look for a way of assisting the Sandwich students in order to lessen their worries and help them concentrate on their studies.

### 5.4 Conclusion

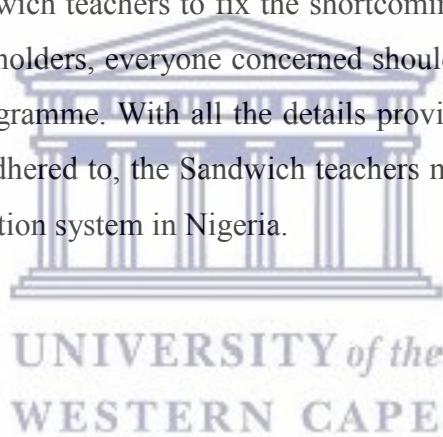
In conclusion, the Sandwich degree programme can be referred to as a suitable and relevant programme for reform-based pedagogical practices and upgrade teachers' qualifications for better performance. However, there are some concepts of the programme (like theory-based lessons, inadequate content knowledge) that need to be reviewed and revised for better productivity. It should be noted that before an educational programme can be certified



## CHAPTER FIVE

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appropriate to get positive reactions from the recipients, the programme should be able to impart learning skills, change the behaviour of the recipients as they extensively give a clear demonstration of positive result after training. The delivery of content of teachers after the programme must be thorough, refined, dignified and intelligible to build holistic learners in secondary schools. The evaluation of the Sandwich degree programme revealed the strength and weakness of the programme. Should the identified weaknesses in the programme receive prompt attention, the Sandwich degree programme will be regarded as viable and recognised as a quality teachers' education programme. The evaluation of Sandwich degree programme has also furnished the stakeholders with constructive and vitally important feedback about the quality of the programme, how the programme is being run and the impact of the programme on the teaching skills of teachers. It is not the sole responsibilities of the management of the Sandwich degree programme or the Sandwich teachers to fix the shortcomings of the programme but with the joint efforts of all the stakeholders, everyone concerned should see to the proper functioning and smooth running of the programme. With all the details provided in the study, and if all the recommendations are strictly adhered to, the Sandwich teachers may be part of a powerful tools of assessing the health of education system in Nigeria.



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## APPENDIX

### APPENDIX A

**Table A1: The effectiveness of Sandwich degree programme in preparing teachers**

<b>Learning</b>	Strongly disagree	Disagree	Agree	Strongly agree	Total
I have clearer understanding on how to teach my subject and how to handle my students	0	0	6	2	8
I understand all my lecturers and I can answer most of the questions in the exam	0	0	7	1	8
Sandwich degree programme has proper organization and leadership	1	1	6	0	8
Lecturers teach effectively, punctual, attend lectures promptly	1	2	5	0	8
Lecturers expose me to various teaching methods and the use of teaching materials in my area of specialization	0	0	7	1	8
Lecturers help facilitate skill development of their students	0	0	8	0	8
Lecturers give me quick feedback on the tests and assignments given by him	0	3	4	1	8
My degree helps me to use classroom experience to improve my teaching	0	1	7	0	8
My degree helps me to teach students how to apply different approaches to problem solving in their daily living and situations	1	0	5	2	8
My degree helps me to make students aware of their environment and care for it	1	0	6	1	8
My degree helps me to motivate students to participate fully in the subject(s) I teach	1	0	6	1	8
My degree helps me to make students	1	1	5	0	8

## APPENDIX

participate in the school development and community projects					
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**Table A2: The behaviour of Sandwich lecturers in preparing teachers to acquire teaching skill**

Behaviour	Strongly disagree	Disagree	Agree	Strongly agree	Total
Lecturers help me gain more confidence in teaching	0	2	6	0	8
Lecturers help establish instructional objectives in planning for a class	1	1	6	0	8
Lecturers give me an insight on why I need to reflect on his teaching	1	0	7	0	8
Education lecturers guide me on how to conduct purposeful daily lessons in my field	0	1	6	1	8

**Table A3: The perception of Sandwich teachers on the reactions of the lecturer towards the programme**

Reaction	Strongly disagree	Disagree	Not sure	Agree	Strongly agree	Total
Sandwich degree programme is a well-managed and organized programme	1	1	1	3	2	8
Sandwich lecturers have adequate class instruction	1	0	0	6	1	8
Pays attention to students' needs, extra-time tutorials	0	5	0	3	0	8
Has lecturers feedback on time	1	4	0	2	1	8

## APPENDIX

**Table A4: The perception of Sandwich teachers on learning tools available towards acquiring teaching skills**

<b>Learning</b>	Strongly disagree	Disagree	Agree	Strongly agree	Total
Has appropriate teaching strategies	1	1	5	1	8
Has relevant content matter	1	0	5	2	8
Has reasonable workload	1	2	4	1	8

**Table A5: The perception of Sandwich teachers on the ability of Sandwich degree programme to influence teachers' professionalism**

<b>Behaviour</b>	Strongly disagree	Disagree	Agree	Strongly agree	Total
Makes one acquire thinking skills that could be developed in pupils	1	0	6	1	8
Helps one to develop positive attitude toward teaching profession	1	0	5	2	8
Makes one attain the major concepts needed for further studies in the field of education	0	1	4	3	8

**Table A6: The perception of Sandwich teachers on the impact of the Sandwich degree programme**

<b>Results</b>	Strongly disagree	Disagree	Agree	Strongly agree	Total
Gives clarity about how to teach one's subject	0	1	4	3	8
Teaches me skills on how to prepare students to be useful in the community	0	1	4	3	8
It is an appropriate programme for teacher training	0	1	5	2	8
Will assist me to make several changes and improve my students' thinking ability	1	0	4	3	8
I learnt a lot during my Sandwich degree	0	2	5	1	8

## APPENDIX

education programme					
I have the basic foundational knowledge of what university degree entails and its impact in my teaching career	1	0	4	3	8

**Table A7: The perception of Sandwich teachers on the overall impact of the programme on their teaching skills**

<b>Results</b>	Strongly disagree	Disagree	Agree	Strongly agree	Total
My lecturers have assisted me to become an effective teacher	0	0	7	1	8
My lecturers have changed my way of thinking	0	0	5	3	8
My lecturers have taught me on how to make alternative solutions	0	0	8	0	8
My lecturers have helped me to develop thinking skills	0	0	8	0	8
My lecturers have made me practice activity based lessons when teaching	1	0	6	1	8

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