

**FACTORS INFLUENCING STUDENTS' ACADEMIC PERFORMANCE IN UGANDAN  
SIGN LANGUAGE COURSES AT KYAMBOGO UNIVERSITY, UGANDA**

**BY**

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**A THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR  
THE DEGREE OF MASTER OF EDUCATION IN SPECIAL NEEDS EDUCATION**

**MASENO UNIVERSITY**

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**DECLARATION**

**DECLARATION BY THE CANDIDATE**

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Most thanks to the Almighty God.

## **DEDICATION**

This thesis is dedicated to all Ugandan Sign Language learners and users.

## ABSTRACT

Ugandan Sign Language (USL) training for students improves service delivery to members of Uganda Deaf Community. Kyambogo University (KyU) was the only public University in Uganda which trained students in USL. From 2007 to 2012 students' performance in USL had been low (mean = 46 and mean = 42) in comparison to their performance in other courses offered for students pursuing Bachelor of Adult and Community Education (mean = 73) and Bachelor of Arts in Community Based Rehabilitation (mean = 78) respectively. This raised concern as to why students' performance in USL was persistently low. Factors that influenced the low performance had not been established. The purpose of this study was, therefore, to ascertain factors that influenced students' academic performance in USL courses at KyU. Objectives of the study were to: determine how teaching strategies used by lecturers influenced students' academic performance in USL courses, find out how lecturers' competence levels in USL influenced students' academic performance in USL courses, determine how students' attitudes towards learning USL courses influenced their academic performance in the courses and to ascertain how students' entry behavior influenced their performance in USL courses. The study was framed within behaviorist theory of language learning by Hussein which stipulated that language is learnt behavior through acting in a particular way and forming routine habit. The theory guided framing of conceptual framework that illustrated relationships among independent, confounding and dependent variables of the study. Descriptive survey and correlation research designs were used for the study. Target population comprised 1,260 students and 26 lecturers. Simple random and saturated sampling techniques were used to select 504 students and 22 lecturers respectively. Instruments for data collection were: questionnaires, video based-observation checklist, interview guide and document analysis guide. Face and content validity of the instruments were determined through support from experts in the department of Special Needs Education and Rehabilitation – Maseno University. Reliability coefficients; ( $r = 0.76, 0.71, 0.69$  and  $0.73$  respectively) of the instruments were attained through test-retests in pilot studies involving 10% of the target population. Data obtained through questionnaires and document analysis guide were analyzed through frequency counts, percentages and Pearson's correlation coefficient. Data generated from video based-observation checklist and interview schedule were organized, categorized and transcribed into emergent themes and sub-themes and reported. Findings of the study indicated that: English language 10 (45.5%) and Signed Supported English 3 (13.6%) were majorly used to teach USL courses. Lecture method 10 (45.5%) was always used to teach USL courses. Most lecturers 4 (18.2%) had weaker abilities to appropriately use USL. Most students felt that USL courses were complicated, hard, and difficult to learn. Most students 258 (51.2%) had never gotten any basic training at all in USL courses. And there was strong linear relationship ( $r = -1.000^{**}$ ) between mean marks attained by students who prior got basic trainings in USL courses and those who had not. Students performed poorly in USL courses because; no specific language was used for teaching USL courses, majority of lecturers were not competent enough to teach USL, most students had negative attitudes towards learning USL course and did not see any values in learning it. Majority of them also had poor background knowledge and skills in USL. These findings can guide in policy making on USL teaching at KyU. It is recommended that lecturers should use only USL to teach USL. They should also use teaching strategies that enable every student to participate actively during USL lessons, among other recommendations. It is suggested that further study be done on impact of USL learning to people who are deaf and other community members at large both at school and out of school settings.

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## **ABBREVIATIONS AND ACRONYMS**

### **ABBREVIATIONS**

|                        |  |
|------------------------|--|
| <b>ASL:</b>            | American Sign Language                             |
| <b>BCBR:</b>           | Bachelor of Arts in Community Based Rehabilitation |
| <b>BSL:</b>            | British Sign Language                              |
| <b>CD:</b>             | Compact Disk                                       |
| <b>DVDs:</b>           | Digital Versatile Discs                            |
| <b>FSL:</b>            | French Sign Language                               |
| <b>ISL:</b>            | Irish Sign Language                                |
| <b>Km<sup>2</sup>:</b> | Square Kilometers                                  |
| <b>KNCSS:</b>          | Kenyan National Council of Social Sciences         |
| <b>KSL:</b>            | Kenyan Sign Language                               |
| <b>NZSL:</b>           | New Zealand Sign Language                          |
| <b>RSL:</b>            | Rwandan Sign Language                              |
| <b>SGS:</b>            | School of Graduate Studies                         |
| <b>SL:</b>             | Sign Language                                      |
| <b>SNE&amp;R:</b>      | Special Needs Education and Rehabilitation         |
| <b>TV:</b>             | Television   |
| <b>USL:</b>            | Ugandan Sign Language                              |
| <b>USL-CUs:</b>        | Ugandan Sign Language Course Units                 |
| <b>UTC:</b>            | Coordinated Universal Time                         |

### **ACRONYMNS**

|                |   |
|----------------|---|
| <b>AUSLAN:</b> | Australian Sign Language                          |
| <b>BACE:</b>   | Bachelor of Arts in Adult and Community Education |
| <b>CUs:</b>    | Course Units                                      |
| <b>KyU:</b>    | Kyambogo University                               |
| <b>SASL:</b>   | South African Sign Language                       |
| <b>SNE:</b>    | Special Needs Education                           |

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# CHAPTER ONE

## INTRODUCTION

### 1.1 Background to the Study

Language is a system of communication that uses conventional symbols and body parts to convey people's thoughts and feelings. It consists of sounds, signs and/or written symbols (Suzette, Igin & Fischer, 2014). Signed Languages (SLs) used by Deaf Communities are distinct from spoken languages and are visual-gestural in perception and articulation. SLs simultaneously use systems of manual, facial and body movements to convey messages (Reag & Mothy, 2010). In their study on Language Acquisition in England, Ambridge and Lieven (2011) noted that language acquisition and development in children were influenced by the children's surrounding environment. Children learnt language based on behaviorist reinforcement principles through words with meanings.

Various theories and hypotheses associating about second-language acquisition and learning derived from studies in the same field are more related to; linguistics, sociolinguistics, psychology, neuroscience and education. Most of these are linked to one or more disciplines where each can enlighten on one or more parts of language learning process (Cook, 2008). This study was framed within behaviorist theory of language learning stipulated by Hussein (2006). The theory stipulates that, language is learnt behavior through acting in a particular way and forming routine habit. It emphasizes that drills are some techniques used for language teaching and learning. My study was framed within the behaviorist theory of language learning because my focus was on factors that influenced students' academic performance in Ugandan Sign

Language (USL). I looked at USL as a study course rather than investigating on its linguistic structure; therefore, linguistic theories would not be applicable to guide the study.

In a related study on factors that influence acquisition of second language ( $L_2$ ) in Nigeria, Elsi (2014) noted that external and internal factors influenced language acquisition and learning in children. Internal factors were learners': age, personality, self-motivation, experiences, cognition, and knowledge of native languages. External factors were situations that characterize a particular language; such as curriculum aspects, medium of instruction, cultures and status, external-motivation, and ability to access native speakers of the language. This means that there are many factors that determine language acquisition, learning and development both within and outside children. My study sought to investigate whether this is true for Ugandan Sign USL learning by students at university education level.

Children acquire mother tongue through interaction with care-givers and surrounding environment (Dalia, 2014). Elsi (2014) on the other hand noted that there is innate capacity in every child to acquire a language. The child can acquire first language ( $L_1$ ) without need of systematic study when he or she is exposed to the language and engaged in meaningful communication.  $L_2$  learning happens almost identically as the  $L_1$  acquisition in children but it may differ in adults. Dalia (2014) reported also that most teachers focus on communicative aspects of language they teach rather than focusing on its rules and patterns for learners to repeat and memorize. Dalia found out that  $L_2$  teachers for adults emphasized the importance of communication in their learners and their ability to memorize language rules. Language training for this case revolve; around grammar, patterns, repetitions, drillings and rote memorization. Dalia recommends that, teachers who teach  $L_2$  to adult learners should use sources of natural

communication which focus on text of communicative language taught other than its form. This means that there are many factors determine language acquisition, learning and development in both children and adult learners. In this study, I attempted to determine factors in learning USL that influence students' performance in the USL course at Kyambogo University.

Suzette, Igin & Fischer (2014) remarked that there is need for prior arrangements to teach a language so as to enable students learn it. Such arrangements include teaching strategies, approaches and methods. Jerine (2013) considered teaching strategy as a generalized plan for a lesson including structure, instructional objectives and outline of planned tactics necessary for implementation. Westland (2014) reported that appropriate strategies in teaching and learning American Sign Language (ASL) engaged students in conversations that used ASL. This helped students to develop active listening, communication and body language behaviors like nodding or responding. Reag and Moth (2010) identified three strategies for teaching South African Sign Language (SASL): text-based, communicative, and process orientated strategies. Imbiti, Awori and Kwena (2014) noted strategies for teaching and learning Kenyan Sign Language (KSL) as engaging students in using KSL dictionaries, charts, televisions (TVs) and computers.

Sheilla (2011) reported from her study on teaching reading and writing to deaf learners in primary Schools in Uganda that teaching methods used for teaching reading and writing were characterized by use of elements of USL, demonstrations and illustrations. Sheilla's study used only qualitative study method, and was carried out in primary schools rather than university education level where my study occurred. Sheilla did not include the number of teachers who used the strategies she mentioned. Mere mentioning of the strategies indicates that there could be some other strategies teachers use to teach USL. My study employed use of both qualitative and

quantitative methods which Sheilla did not use. I also assessed strategies used by lecturers in teaching USL course at Kyambogo University (KyU).

Language competence is another factor that can influence students' academic performance in language learning. It is an ideal system that facilitates production and understanding of infinite number of sentences in a language and ability to distinguish grammatical sentences from ungrammatical sentences (Chomsky, 2015). As reported by Ongodia (2014) teachers who were competent in using written and oral communication skills in English enhanced learners' academic performance in English. These teachers eloquently spoke, listened, read and wrote using English language. Their competencies may not necessarily be the required ones for teaching USL for which my study was based on. Reported by Jakuma (2011) on his study on proposed standards for teachers of ASL, his subjects (teachers) were proficient in signing and listening/observing. Mertanzi (2009); however, recommended that knowledge of at least two languages is essential for teaching and learning British Sign Language (BSL). Ngaboyera (2012) agreed with Mertanzi in his evaluative study of communicative competencies in conversational English among English language learners in Rwanda by noting that Rwandan Sign Language (RSL) teachers were competent in using RSL to create and comprehend utterances covering language functions like requesting for a need, refusing a request and promising something to someone. This is indicative that use the same language in teaching that language plays a great role to enhance students' performance. Reag and Moth (2010) in addition noted that a person's ability to; acquire basic language and communication skills, observe a signer, articulate signs and comprehend what has been signed, spoken, brailled or written are other vital language competencies required for teaching and learning SASL.



Sheilla's (2011) report indicates that USL Dictionary helped teachers and learners gain USL competencies; while that of Lule (2012) indicates that provisions of non-verbal communication skills and language development nurtured through USL instruction enhanced USL proficiencies in children with hearing impairment. Sheilla and Lule did not specify the kind of language competencies required for teaching USL which is a focus of my study. The reports were on deaf children at primary schools and pre-primary education levels respectively yet my study analyzed lecturers' competence levels in USL at KyU.

Attitude can also influence students' academic performance in language learning. Attitude is behavior portrayed by an individual that involves the person's own feeling or opinion about something or someone (McLeod, 2012). It can either be negative or positive. Positive attitude in most cases lead to an agreement while negative attitude may lead to disagreement. This is confirmed by Giar (2013) who noted that positive attitudes exhibited by teachers and learners of ASL in California enhanced teaching and learning processes. This in turn facilitated safe learning climate that motivated the teachers to teach ASL and their students felt comfortable and motivated to learn the ASL's essential aspects. Thony and Penelope (2013) reported on teaching sign language in Cameroon that most students had negative attitudes towards learning ASL which impacted negatively on their competencies and achievements in the language. McConnell (2014) who studied on the benefits of sign language in Australia found out that children with hearing impairment who were involved in learning Australian Sign Language (AUSLAN) had positive attitudes towards learning it. They felt motivated and enjoyed learning AUSLAN by singing songs using AUSLAN, and also fingerspelt words using AUSLAN manual alphabet. McConnell concluded that children with good attitudes towards AUSLAN enjoyed educational advantages which improved their language and literacy skills, as well as intelligence. This thus

indicates that both positive and negative attitudes towards learning a language or any other discipline can impact on a student's academic performance in different ways.

Attitude does not only stop at influencing students' academic performance and their interest to learn a language or other disciplines. Lutalo-Kiingi (2014) studied on descriptive grammar of morphosyntactic constructions in USL and noted that, USL teachers who had more positive attitudes towards teaching USL influenced the development of the language and courses for teachers of people who are Deaf in Uganda. Lutalo-Kiingi also noted that, negative attitudes based on considering USL as an art discipline made the Uganda government's funding for USL training courses reduce. This affected students' enrolment for USL training at KyU. This, therefore, indicates that attitudes of people in authority can indirectly impact on students' learning and performance in a language. Lutalo-Kiingi's study did not assess University student's attitudes towards learning USL yet my study analysed students' attitudes on learning USL at KyU.

Entry-behavior involves prerequisite background knowledge, skills, attitudes, experiences, and grades already possessed by a student or group of students that are relevant to tasks or subject matter taught (Campbell & Libeth, 2013). A student's entry-behavior in an academic discipline can influence his/her later academic performance. Koche, Weil and Calhoun (2011) identified students' entry-behavior in learning BSL to involve prior knowledge and application of basics of the BSL. Campbell and Libeth noted that students who join secondary schools with good grades or good background experiences and skills always perform well in their studies. Ken, Cheri and Ella (2012) indicated students' entry-behavior for learning ASL to focus on background knowledge of different language skills intended to be achieved at a stipulated level of study.

Odumpe (2012) rather indicated that students' entry-behavior for learning SASL was based on prior acquisition of SASL skills for academic learning and fulfillment of social activities. Kimani (2012); however, reported that initial and appropriate entry-behavior for learning KSL needed prior knowledge and use of KSL manual alphabet and fingerspelling activities.

Maina's (2009) study on factors influencing performance of deaf students in Mathematics in Kenya certificate of secondary education (KCSE) examination indicated that deaf students' entry-behavior at secondary schools in Kenya impacted negatively on their academic performance. This was because majority of these students joined secondary schools with Kenya certificate of primary education (KCPE) total marks of 150 to 199, being less than the average mark of 250. This indicated that a student's entry-behavior in an academic discipline can influence his or her academic performance. Maina's research was focused on students' entry-behavior on learning mathematics at secondary education level but my study was set to evaluate the influence of students' entry-behaviors on performance in Ugandan Sign Language.

Kyambogo University (KyU) is the only public University in Uganda which offers training in USL. From 2007 to 2012 students' performance in USL has been low with (mean = 46 and mean = 42) in comparison to their performance in other courses offered to students pursuing Bachelor of Adult and Community Education (mean = 73) and Bachelor of Arts in Community Based Rehabilitation (mean = 78) respectively as indicated in Table 1.

**Table 1: Mean Scores of Examination Results Offered at the Faculty of Special Needs and Rehabilitation – Kyambogo University**

| Study Programme       |         | Bachelor of Adult and Community Education (BACE) |         |         |         |         | Bachelor of Arts in Community Based Rehabilitation (BCBR) |         |         |         |         |         |
|-----------------------|---------|--|---------|---------|---------|---------|---|---------|---------|---------|---------|---------|
|                       |         | ACE 211  | ACE 212 | ACE 213 | ACE 214 | ACE 215 | CBR 111   | CBR 112 | CBR 113 | CBR 114 | CBR 115 | CBR 116 |
|                       |         | 58   | 82      | 85      | 80      | 44      | 77  | 59      | 60      | 80      | 79      | 42      |
| <b>2006/2007</b>      | GPA (%) | 62   | 74      | 78      | 84      | 47      | 79  | 60      | 73      | 85      | 89      | 46      |
| <b>2007/2008</b>      | GPA (%) | 66   | 59      | 78      | 79      | 43      | 80  | 65      | 63      | 90      | 80      | 40      |
| <b>2008/2009</b>      | GPA (%) | 59   | 55      | 69      | 75      | 50      | 66  | 69      | 67      | 87      | 86      | 39      |
| <b>2009/2010</b>      | GPA (%) | 74   | 69      | 66      | 80      | 49      | 79  | 73      | 65      | 80      | 92      | 43      |
| <b>2010/2011</b>      | GPA (%) | 81   | 76      | 73      | 81      | 45      | 59  | 78      | 60      | 83      | 78      | 42      |
| <b>2011/2012</b>      | GPA (%) | 67   | 69      | 75      | 80      | 46      | 73  | 67      | 65      | 84      | 84      | 42      |
| <b>Average Scores</b> |         | <b>73</b>  |         |         |         |         | <b>78</b>   |         |         |         |         |         |

**Source:** Summary of Examination Results – Faculty of Special Needs and Rehabilitation – Kyambogo University

**KEY:**

- ACE 211 – Management of Adult Education Organizations
- ACE 212 – Development Issues in Adult and Community Education
- ACE 213 – Community Development
- ACE 214 – Ugandan Sign Language
- ACE 215 – Braille
- CBR 111 – Community Based Rehabilitation
- CBR 112 – Special Needs Education
- CBR 113 – Management of Disabilities
- CBR 114 – Ugandan Sign Language
- CBR 115 – Braille
- CBR 116 – Communication Skills for Community Workers
- GPA – Grade Point Average
- % - Percent

Range of grading system used by Kyambogo University for its undergraduate programmes is as indicated: 80-100% marks scored by a candidate is 5 grade point (GP); (grade A), 75-79.9% is 4.5 GP (grade B+), 70-74.9% is 4 GP (grade B), 65-69.9% is 3.5 GP (grade B-), 60-64.9 is 3.0 GP (grade C+), 55-59.9 is 2.5 GP (grade C), 50-54.9 is 2.0 GP (grade C-), 45-49.9 is 1.5 GP (grade D+), 40-44.9 is 1.0 GP (grade D), 35-39.9% is 0.5 GP (grade D-) and below 35% is 0 GP (grade E). The pass mark is 50% (Mugerwa, 2010). This means that with  $m = 46$  and  $m = 42$  in USL courses offered to students pursuing BACE and BCBR respectively there were more failures realized, hence a cause prompting this study to be carried out.

## **1.2 Statement of the Problem**

USL training as a course unit to students pursuing Bachelor of Adult and Community Education (BACE) and Bachelor of Arts in Community Based Rehabilitation (BCBR) improves their abilities to deliver inclusive services to community. Therefore, people who are Deaf that require USL for communication and fulfillment of other social and community needs shall equitably be served and attended to by these students once they graduate. KyU is the only public university in Uganda which offers training in USL to the students pursuing BACE and BCBR programmes. These students on completion of their programmes work with community as rehabilitation officers, social workers, adult educators and community development officers. Data attained from Mugerwa (2010) in Table 1 show that the students' performance in USL has been low ( $m = 46$  &  $m = 42$ ) in USL courses as compared to their performance in other courses ( $m = 73$ ) and ( $m = 78$ ) offered for BACE and BCBR students respectively. This has been noted for six consecutive academic years, 2006/2007 to 2011/2012. The persistent weak performance in USL might limit the students' chances, opportunities and abilities to include people who are Deaf in community and

social services when they graduate from KyU. My study was; therefore, carried out to investigate on how these factors; (strategies used by lecturers in teaching USL, lecturers' competence levels in USL, students' attitudes towards learning USL, and relationship between students' entry behavior) influence the students' academic performance in USL course units at KyU.

### **1.3 Purpose of the Study**

The purpose of this study was to ascertain factors that influence students' academic performance in Ugandan Sign Language at Kyambogo University, Uganda.

#### **1.3.1 Objectives of the Study**

Objectives of the study were to:

- i) Determine how teaching strategies used by lecturers influence students' academic performance in Ugandan Sign Language courses at Kyambogo University.
- ii) Find out how lecturers' competence levels in Ugandan Sign Language influence students' academic performance in Ugandan Sign Language courses at Kyambogo University.
- iii) Determine how students' attitudes towards learning Ugandan Sign Language courses influence their academic performance in the courses at Kyambogo University.
- iv) Ascertain how students' entry behavior influence their performance in Ugandan Sign Language courses at Kyambogo University.

### **1.3.2 Research Questions**

This study intended to answer the following questions:

- i) How does teaching strategies used by lecturers influence students' academic performance in Ugandan Sign Language courses at Kyambogo University?
- ii) How does lecturers' competence levels in Ugandan Sign Language influence students' academic performance in Ugandan Sign Language courses at Kyambogo University?
- iii) How does students' attitude towards learning Ugandan Sign Language courses influence their academic performance in the courses at Kyambogo University?
- iv) How does students' entry behavior influence their performance in Ugandan Sign Language courses at Kyambogo University?

### **1.4 Scope of the Study**

This study ascertained factors that influenced students' academic performance in Ugandan Sign Language at Kyambogo University, Uganda.

### **1.5 Significance of the Study**

Results of this study were expected to be of benefit to:

- i) Guide in policy making on Ugandan Sign Language teaching at Kyambogo University.
- ii) Curriculum developers in enriching areas of curriculum about sign languages that may need improvement.
- iii) Guide educators in Ugandan Sign Language training, especially on strategies for teaching the language.

## **1.6 Assumptions of the Study**

Assumptions of this study were that KyU has curriculum for USL course units and students are enrolled for the courses. It is also assumed that there are significant factors like; strategies used by lecturers in teaching USL, lecturers' competence levels in USL, students' attitudes towards learning USL, and relationship between students' entry behavior that influence the students' academic performance in USL course units at KyU

## **1.7 Theoretical Framework**

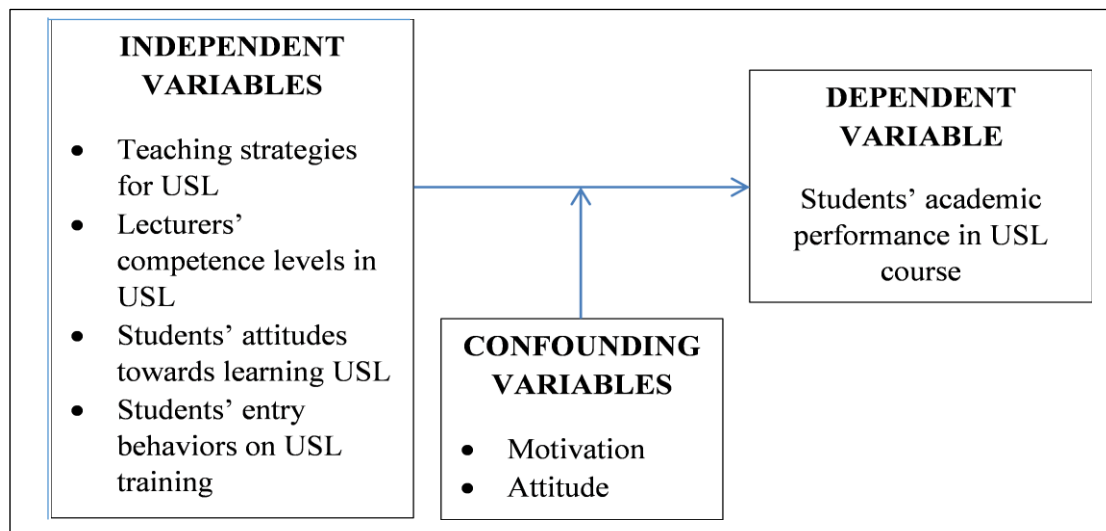
This study was framed within behaviorist theory of language learning by Hussein (2006). The theory stipulates that, language is learnt behavior through acting in a particular way and forming routine habit. It emphasizes that drills are some techniques used for language teaching and learning. In relation to my study the drills include strategies used in teaching USL. Lecturers' competence levels in USL, students' attitudes, and relationship between students' entry behavior and academic performance are more linked to behaviors that can influence academic performance in USL. This is why I chose the behaviorist theory to guide the study. The conceptual framework presented in 1.8 is built on from the chosen theory.

## **1.8 Conceptual Framework**

A good academic performance (output) depends on favorable inputs like appropriate teaching and learning strategies, relevant language competency levels used in facilitating learning, positive students' attitudes towards learning, and good entry-behavior on learning the specified subject matter. The inputs influence each other directly or indirectly, and are also influenced by other confounding variables like students' and/or lecturers' intrinsic/extrinsic motivation and attitudes which can positively or negatively impact on the output. An improved academic performance in Ugandan Sign Language (output) may require that: lecturers use good and



appropriate strategies for teaching Ugandan Sign Language (USL) course units, lecturers have higher USL competence levels, relevant and good teaching and learning resources are used for USL, students have positive attitudes towards learning USL, and students have relevant and good entry-behaviors on USL training. Figure 1 illustrates the relationship among independent variables, confounding variable, and dependent variable for this study. Hence, good teaching and learning strategies for USL coupled with other independent and confounding variables like application of good motivation strategies can result to an improved academic performance in USL course units.



**Figure 1: A Conceptual Framework Showing Interaction of Determinants of Students' Academic Performance in Ugandan Sign Language**

**Source:** Adapted from Koche, Weil and Calhoun (2011)

## 1.8 Operational Terms

|                              |   |
|------------------------------|---|
| <b>Academic performance:</b> | Overall grade attained by a candidate(s) after being assessed and evaluated in a formal academic discipline like USL-CUs within a specified period of time.   |
| <b>Attitude:</b>             | Students' overt and/or covert responses, behaviors, feelings, interests, opinions, and motivations on learning USL.   |
| <b>Competencies:</b>         | Ability to use language such as Ugandan Sign Language.  |
| <b>Deaf:</b>                 | A person with hearing loss who openly uses sign language and accepts other cultural values, beliefs, norms and practices of Deaf Community.   |
| <b>Entry-behavior:</b>       | Student's prior knowledge and experiences on learning a particular subject. This includes students': motivation, earlier basic training levels, expectations and interests in learning, and earlier skills. |
| <b>Hearing impairment:</b>   | Partial or total loss of a person's ability to hear ordinary speech sounds.   |
| <b>USL Competence:</b>       | Ability to use USL for instruction and communication during teaching and learning sessions for USL-CUs.   |
| <b>Teaching:</b>             | Facilitating/instructing students to learn a subject/course unit at an educational institute.   |

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Teaching Strategies for Sign Languages**

Strategy is procedures and methods by which objectives and goals of teaching are realized during teaching and learning process. Teaching strategy is generalized plan for a lesson including; structure, instructional objectives and outline of planned tactics necessary for implementation. It consists of teaching; structures, objectives and techniques of evaluation (Jerine, 2013). Teaching strategy considers the importance of realization of objectives other than presentation of the lesson. It does not follow a single track all the time, but changes according to demands of the situations like; ages, levels, needs, interests, and abilities of students. Teaching strategy is more comprehensive than teaching method. Its appropriate selection ensures effective achievement of instructional objectives and ensures smooth delivery of instructions in lesson presentations to aid learning (Nafees, Ghulam & Tahirkheli, 2012).

Westland (2014) reported from his study that appropriate strategies in improving skills in learning ASL engaged students in: following conversations that used ASL, focusing on signers' faces to maintain eye-contact in conversations, developing active listening behaviors like nodding/responding, participating actively by adding comments and agreeing or disagreeing, maintaining signing environments in and out of class and avoiding habits of missing learning sessions in order to form language community and cohesiveness, and also discouraging the use of oral or spoken language in class. Students were encouraged not to worry about signs missed or not mastered but to get the gist of conversations. Odumpe (2013) identified text-based, communicative, and process orientated strategies for teaching and learning SASL. Text-based

and communicative strategies are dependent on continuous use and production of texts. Text-based strategy (TBS) explores how texts work. Its purpose is to enable learners become competent, confident and critical “readers”, authors, viewers and designers of texts. The strategy involves observing, “reading”, viewing and analyzing texts to understand how they are produced and what their effects are. This helps learners develop ability to evaluate texts. In addition, TBS involves producing different kinds of texts for particular purposes and audiences. It focuses on understanding of how texts are constructed.

Communicative Strategy (CS) suggests that when teaching a language, a learner should be immersed in the language and given extensive exposure to the target language and many opportunities to imitate and practice or produce the language by communicating for social or practical purposes. It requires that learners imitate and practice the target language and use it through discussions for social interactions. Language learning is carried over into the classroom where skills are learned through frequent opportunities to view and record texts. Language teaching happens in an integrated way, with the teacher modeling good practice and learners practicing appropriate skills in groups before applying it on their own. The structure of each lesson engages the whole class before practicing in groups and applying the new skills individually (Odumpe, 2013). Process Oriented Strategy (POS) is used when learners produce signed and recorded texts. The learners engage in different stages of observing, signing, visual reading and recording processes. They must think of the audience and the purposes during the processes to enable them communicate and express their thoughts in a natural way. For example, teaching of recording signed language video does not focus on the product only but also on the process of recording the video. Learners are taught how to: generate ideas, think about the purpose and audience, record drafts, edit their work, and present the recorded products that

communicate their thoughts (Reag & Mothy, 2010). Although Westland (2014) and Odumpe (2013) identified the strategies in used in teaching ASL and SASL respectively, it was not sure whether these were the same strategies used for teaching USL at Kyambogo University (KyU) where this research was carried out.

Imbiti, Awori and Kwena (2014) also reported on strategies that facilitated KSL progress in primary schools for learners with hearing impairments in western Kenya that majority of teachers and learners strategized in using KSL dictionaries, charts, televisions (TVs), computers and resource rooms to facilitate their progress in teaching and learning KSL. The KSL dictionaries and books were used for clarification of concepts rather than for instruction. Imbiti *et-al* added that use of human resources like teachers with hearing impairment (HI), teachers trained in KSL and other staff with HI also helped in teaching and learning KSL. Sheilla's (2011) report on USL; however, indicated that teaching methods used for teaching reading and writing to learners with hearing impairment were characterized by use of elements of USL, demonstrations and illustrations. Sheilla used only qualitative study method in primary schools rather than university level where my study took place. Sheilla's did not include the number of teachers who used the strategies she mentioned. However, mere mentioning of the strategies indicates that they could be some of the strategies Ugandan teachers use in teaching USL. My study employed the use of both qualitative and quantitative study methods which Sheilla did not use. It analyzed strategies used by lecturers in teaching USL at KyU.

## **2.2 Competencies for teaching Sign Languages**

Language competence is a broad term which includes linguistic or grammatical, discourse, sociolinguistic or socio-cultural, and textual competencies. Specific learning outcomes under

“language competencies” deal with knowledge of the language and the ability to use that knowledge to interpret and produce meaningful texts appropriate to the situation in which they are used. Language competencies are best developed in the context of activities or tasks where the language is used for real purposes or practical applications (Manitoba, 2012). Oukaka (2014) noted that language competencies are active or passive and frequently separated into four interrelated skills of; listening, reading, speaking, and writing. Jopakalo’s (2011) study on proposed standards for teachers of ASL reported that proficiency in signing and perceiving ASL was essential in teaching and learning the language. In addition to paraphrasing and circumlocution skills, ASL teachers used ASL to sign daily school and work situations, and also discuss interesting topics. Use of differentiated vocabulary and visual-based intonation to communicate was also essential for teaching and learning ASL. Teachers and learners comprehended signed productions in video texts/pictures and made appropriate inferences. They also demonstrated understanding of parts of conceptually abstract signed productions. Signing of narrations and descriptions of factual nature drawing from personal experiences, readings and other verbal and non-verbal stimuli were other competencies noted in teaching and learning of ASL. Attending or listening proficiency like understanding culturally implied meanings of ASL and comprehending it was exhibited by the ASL teachers and learners. It was not clear from Jopakalo’s report if the language proficiencies for teaching and learning ASL could also be competencies required by lecturers at KyU to teach USL.

Reag and Moth (2010) noted that teachers and learners of SASL acquired language skills like observation, signing, reading/viewing and recording skills for academic learning of SASL. It was considered necessary the presence of audience, purpose and context in which SASL was used. SASL teachers and learners expressed and justified ideas, views and emotions using the language

which helped them be independent and analytical users. Reag and Moth noted that these teachers and learners exhibited competencies in using the SASL to: explore the environment, access and manage information in curriculum and different contexts, and critically and creatively think, among other aspects. Ngaboyera (2012) in his reported on an evaluation study on communicative competence in conversational English among English language learners in Rwanda that teachers and learners were competent in creating and comprehending utterances covering many functions like; requesting, refusing, promising, warning, denying, agreeing, disagreeing and expressing emotions using RSL. Ngaboyera recommended that functional language competencies are necessary for teaching and learning a language as RSL.

Sheilla (2011) reported that USL dictionary helped teachers and learners gain USL competencies; while Lule (2012) reported that provisions of non-verbal communication skills and language development nurtured through USL instruction enhanced USL proficiencies in children with hearing impairment. Both Sheilla and Lule did not specify language competencies required for teaching USL. They did not examine how lecturers' competence levels in USL could influence students' academic performance in USL course. Their focus was on Deaf children at primary schools and pre-primary education levels respectively. My study was therefore set to find out how lecturers' competence levels in USL influenced students' academic performance in USL course at KyU.

### **2.3 Attitudes in Teaching and Learning Sign Languages**

Attitude is a person's way of behaving, feelings or opinions about something or someone (Mcleod, 2012). It is to some extent not easy to change a person's attitudes; however, Giar (2013) noted that lecturers' and students' attitudes in teaching and learning a subject can be enhanced.

Giar suggested that teaching and providing safe climate for lecturers and students to feel comfortable and motivated can contribute in changing their attitudes towards teaching and/or learning. Students' learning can be facilitated by giving relevant information through processing and integrating knowledge and skills to be presented. There should be clearly set and achievable objectives for teaching a discipline prior to its teaching process to enable teachers leave indelible impressions on their students' attitudes. Bonn (2014) did not report on students' attitudes on USL training but noted that school experiences can mold, shape and influence students' attitudes inside and outside of school. Effective attitudes and actions employed by teachers ultimately make positive differences on their students' lives. Bonn identified five effective attitudes to be exhibited by teachers as: demonstrating caring and kindness behaviors to students, sharing responsibility with students, sensitively accepting diversity, fostering individualized instruction, and encouraging creativity of students. Elona (2010) noted that positive attitudes is a catalyst which can spark extraordinary results and cause a chain reaction of positive thoughts, events and outcomes.

Giar's (2013) study on strategies for teaching ASL reported that positive attitudes portrayed by teachers and learners of ASL in California enhanced teaching and learning processes. This created safe learning climate where students felt comfortable and motivated to learn essential aspects of ASL. Their teachers were highly motivated to teach ASL. McConnell (2014) in his study on benefits of sign language reported that children involved in learning Australian Sign Language (AUSLAN) had positive attitudes towards AUSLAN which helped them enjoy and remember what they learnt. They learnt AUSLAN as fun and felt motivated. These children were more engaged using different components and senses during their learning and loved using AUSLAN. They enjoyed singing songs and finger-spelt the AUSLAN alphabet to learn manual



spelling of words. McConnell added that hearing children with good attitudes towards AUSLAN enjoyed its educational advantages, improved upon their language, literacy and skills, and even had increased intelligence quotient. Thony and Penelope (2013) reported on teaching sign language in Cameroon that students (75%) who could hear had negative attitudes towards learning AUSLAN. Thony and Penelope recommended encouragement of these students to learn AUSLAN in order to support their peers who are deaf. The students required motivation to use sign language charts, books and videos to increase their enthusiasm and attain improved learning alongside with students who are deaf.

Lutalo-Kiingi (2014) researched on descriptive grammar of morphosyntactic constructions in USL. Lutalo-Kiingi reported that USL teachers who knew BSL had positive attitudes towards USL but taught using BSL. This made BSL to influence USL due to emerging field of sign linguistics and development of courses for teachers of deaf learners in Uganda. Lutalo-Kiingi also noted that the Uganda government's funding for USL training courses reduced because it was considered as art subject. This eventually affected students' enrolment in the discipline of USL studies. This indicated that the government's support towards a training course can also impact on students' learning and achievement. Lutalo-Kiingi's study did not determine how students' attitudes towards learning USL course influence their academic performance in USL at Kyambogo University of which my study focused on.

#### **2.4 Entry-behavior on Teaching and Learning Sign Languages**

Entry-behavior is characteristics shown by individual student at the beginning or before beginning any study/course. It involves prerequisite background knowledge, skills, attitudes, experiences, and grades already possessed by a student or group of students (Campbell & Libeth,

2013). These are relevant to tasks or subject matter to be taught and learnt. A student's entry-behavior in an academic discipline can influence his/her later academic performance. Campbell and Libeth noted that students who join secondary schools with good grades or good background experiences and skills always perform well in their studies. Teachers should therefore assess what their students can do before any formal teaching begins so as to determine their entry-behavior. They can combine a pre-test with an entry-test to verify that entry-behavior or prerequisites for a given subject can be demonstrated by each student before start of a study discipline.

Campbell and Libeth did not ascertain how students' entry behavior can influence their performance in USL which this study was interested on. To teach a particular subject, a teacher should bear in mind the following questions and then write or type a description of the target students: Who are the students taking the course? What is the total number of learners enrolled? What previous knowledge or experience do they have? What specific entry skills do they have? What special interests do they have? What general motivation do they have? What special problems or concerns do they have? What will be the consequences of success and failure? What language(s) do they speak or want the instruction in? What time do the participants have available? What is their attitude toward learning? (Campbell & Libeth, 2013).

Koche, Weil and Calhoun's (2011) study on models of teaching in England, identified students' entry-behavior in learning BSL to involve prior knowledge and application of basics of BSL. The ASL teaching curriculum presented by Ken, Cheri and Ella (2012) indicated students' entry-behavior for learning ASL to focus on background knowledge of different language skills intended to be achieved at a stipulated level of study. Reag and Moth (2010) noted that students'

entry-behavior for learning SASL was based on prior acquisition of SASL skills for academic learning and fulfillment of social activities. These studies by Koche, Weil and Calhoun's (2011), Ken, Cheri and Ella (2012) and Reag and Moth (2010) did not indicate how entry-behavior influenced students' performance in USL course as addressed by my study.

Kimani (2012) noted that the initial and appropriate entry-behavior for learning KSL needed prior knowledge and use of KSL manual alphabet and fingerspelling activities. While Maina (2009) who researched on factors influencing performance of deaf students in mathematics in KCSE examination reported that deaf students' entry-behavior at secondary schools in Kenya impacted negatively on their academic performance. This was so because majority of deaf students joined secondary schools with KCPE total marks of 150 to 199, being less than the average mark of 250. Dunn and Mark (2012) researched on gaps in children's academic and behavior skills in learning USL. Dunn and Mark reported that early exposure and use of USL by students who are deaf provided foundation for positive classroom adaptations which led to students to attain better academic achievement at secondary education level. Dunn and Mark's study, as well as that of Maina focused on students' entry-behavior in different academic disciplines rather than USL course. These studies were also carried out at secondary education level yet mine took place at university education level and ascertained relationship between students' entry behavior and their performance in USL at KyU.

## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.1 Research Design**

This study employed descriptive research survey design and correlational research design. Descriptive survey design is used to obtain information concerning the current status of phenomena and describe "what exists" with respect to variables or conditions in a situation (Nana & Jakuma, 2012). Correlation design measures the extent to which two or more quantitative variables from the same group of subjects is related (Creswell, 2012). Descriptive research survey design availed opportunities for respondents to share their opinions, experiences and perspectives as questionnaires and interview schedule were used for data collection. General overview got from this study gave valuable pointers as to what variables are essential for further studies on USL. Correlational research design helped me to ascertain how students' entry behavior and influence performance in USL at KyU. Mean scores for students who had earlier on got some basic training in USL were correlated to mean scores of students who had never got some basic training in USL so as to attain the results.

#### **3.2 Area of Study**

This study was carried out in Kampala district which is located between coordinates 0° 18' 56" North and 32° 33' 56" East (Maplandia, 2013). Total area coverage of Kampala is 236,040 square kilometers (Km<sup>2</sup>); where 36,330 Km<sup>2</sup> is covered by water and 199,710 Km<sup>2</sup> is on dry land (Aboo, 2013). Kampala's elevation above sea level/altitude is 1,190 meters (3,900 feet). Its time zone is East African Standard time, that is, Coordinated Universal Time (UTC) +3. The Ugandan population census held in 2011 estimated the total population of Kampala as 1,659,600 people,

whose density per Km<sup>2</sup> was 9,429.6 i.e. 24,423 people per square mile (Uganda Bureau of Statistics, 2012). Kampala district is both an administrative center and commercial capital city of Uganda situated on about twenty-four low hills that are surrounded by wetland valleys, characterized by an imprint of scattered unplanned settlements. Impacts of climate change in Kampala are manifested through; floods, decreased water availability, health and sanitation challenges. Many people in Kampala are vulnerable to climate change which is determined by social and economic factors depending on the magnitude of the climate change/variability, and the impact of economic and social development on natural systems (United Nations, 2013). Kampala district was chosen for this study because Kyambogo University an institution where the study took place is located within it. Kyambogo University was the only Public University among fourteen others in Uganda which offered training programs in Ugandan Sign Language course units (Kakungulu, 2014).

### **3.3 Target Population**

Target population of this study comprised 1,260 students who took Ugandan Sign Language course and 26 lecturers who taught Ugandan Sign Language course.

### **3.4 Sample Size and Sampling Technique**

Simple random sampling technique was used to select 504 students from the population. Simple random sampling technique enables individual members of the target population have equal chances of being selected to participate in a study (Andebo, 2012). This technique was useful to me because it is a fair way of selecting sample size from a population without bias. Saturated sampling technique was used to select 22 lecturers who taught USL course. Saturated sampling technique is a non-probability technique useful for taking the whole population as a sample; especially when the population is too small (Franklin, 2012).

**Table 2: Sample Frame**

| <b>Category of Respondents</b> | <b>Total Population</b> | <b>Sample Size</b> | <b>Percentage (%)</b> |
|--------------------------------|-------------------------|--------------------|-----------------------|
| Students                       | 1,260                   | 504                | 40                    |
| Lecturers                      | 26                      | 22                 | 85                    |
| <b>Total</b>                   | <b>1,286</b>            | <b>526</b>         | <b>41</b>             |

### **3.5 Research Instruments**

Questionnaires, video based-observation checklist, interview guides and document analysis guide were the instruments used for data collection.

#### **3.5.1 Questionnaires**

Questionnaires are sets of structured questions used for obtaining statistic information from respondents (Melinda, Gerhard & Jeane, 2014). I developed a clearly structured questionnaire consisting; open-ended questions, closed-ended questions, and rating scales to capture statistical information from lecturers and students. There were two sets of questionnaires that helped in data collection from lecturers and students for quantitative analysis. The questionnaires were useful to collect relevant information about teaching strategies used by lecturers and students' attitudes towards learning USL course.

#### **3.5.2 Video Based-observation Checklist**

Video based-observation checklist was used to collect relevant data on lecturers' competencies in USL as well as students and lecturers' attitudes during USL teaching and learning sessions. The video based-observation checklist is a tool for qualitative data collection from multiple perspectives within any given community. It is administered through video recording and observation or by both observing and participating in locations believed to have relevance to research questions (Jorgensen, 2010). The researcher designed a set of observation checklist to

help him approach respondents in actual teaching and learning environment for USL courses. This helped the researcher to check against any data obtained through questionnaires. Four non-participatory observations were done. Data got through video based-observations corroborated information got through questionnaires, especially about lecturers' competencies and students' attitudes.

### **3.5.3 Interview Guide**

An interview guide was used to collect data from students so as to corroborate the information they provided through questionnaires and that attained through video-based observation. Interview guide is a structured document that directs discussions between researchers and respondents with the purpose of collecting relevant information required for a study (Melinda, Gerhard & Jeane, 2014). The guide was used to collect information about students' attitudes on learning USL course and why they felt so. It also helped to determine students' entry behavior to USL training.

### **3.5.4 Document Analysis Guide**

Document analysis guide was used to collect data on students' academic performance in USL course. This helped to evaluate scores attained by students who had prior training in USL and those without prior training in USL. Document analysis guides researchers to explore topics, practice skills, and build knowledge based on their interest of study (Meador, 2016). Mean scores of students' scores were correlated so as to determine their Pearson's correlation coefficients to guide reporting.

## **3.6 Validity and Reliability**

### **3.6.1 Validity of the Instruments**

Face validity is the extent to which a test is subjectively viewed as covering the concept it purports to measure. It is the transparency or relevance of a test as it appears to test participants of a study. Content validity is the extent to which a measure represents all facets of a given social construct (Holden, 2010). I developed and presented my study instruments to experts (my supervisors) in the department of Special Needs Education and Rehabilitation-Maseno University to support in verifying their face and content validities. The experts judged the instruments independently and made recommendations on their validities. I then amended highlighted areas that required improvement. My instruments were then approved before I began using them as required.

### **3.6.2 Reliability of the Instruments**

Reliabilities of my respective instruments were established through test-retest in pilot study consisting of 10% of the target population. I selected participants for the pilot study using simple random sampling technique so that each member of the target population had an equal and independent chance to be included. The pilot study helped me identify inconsistencies, inadequacies and weaknesses of each instrument and improved upon. All these were done with assistance of my two supervisors in the department of Special Needs Education and Rehabilitation-Maseno University. Questionnaires were given to lecturers and students and collected after three days. Students were concurrently interviewed using the interview schedules. Video based-observation checklist was also used to collect data during teaching and learning sessions for USL course. Document analysis guide was used to collect data on students' performance in USL. After two weeks the same test was administered again to the same respondents using the same instruments. Two sets of tests of each instrument were marked and



necessary correlations made. Reliability coefficient of the instruments ascertained using Pearson's r method indicated;  $r = 0.76$ ,  $r = 0.71$ ,  $r = 0.69$  and  $r = 0.73$  for questionnaires, video based-observation, interview schedule and document analysis guide respectively. These were significant for the instruments to be used for data collection.

### **3.7 Data Collection Procedures**

Research permit was obtained from the Ministry of Education, Science, Technology and Sports-Uganda through the School of Graduate Studies-Maseno University. Having attained the research permit, the researcher paid courtesy call to the Dean, faculty of Special Needs and Rehabilitation-Kyambogo University to identify respondents for the study. The researcher then met the respondents to establish rapport and arrange on convenient procedures and schedules of data collection. Later on the researcher embarked on data collection using the approved study instruments. After data collection, the researcher got engaged on data analysis. He sought necessary guidance from experts from the department of Special Needs Education and Rehabilitation-Maseno University.

### **3.8 Methods of Data Analysis**

Qualitative data generated through video based-observation checklist and interview schedules were organized, categorized and transcribed into emergent themes and sub-themes, and reported according to the research objectives (Objective Three). The following stated items on rating scale in the questionnaires were coded with each values on the scale: 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often and 5 = Always (For Objective One); 1 = Weaker, 2 = Weak, 3 = Moderate, 4 = Good and 5 = Better (For Objective Two); and 1 = Completely Disagree, 2 = Disagree, 3 = Somehow Disagree, 4 = Somehow Agree, 5 = Agree and 6 = Completely Agree (For Objective Three). Descriptive statistics was used to analyze quantitative data generated

through questionnaires and document analysis guide. These were computed using Statistical Package for Social Sciences (SPSS). Data attained were expressed in numerical and statistical form using frequency counts and percentages (Objective Two and Objective Three). Pearson's (*r*) correlation technique was also used. These were done in accordance with the research objectives. Pearson's (*r*) correlation technique was used to analyze data on the relationship between mean scores of students' entry behavior and their performance in USL (Objective Four).

**CHAPTER FOUR**  
**RESULTS AND DISCUSSIONS**

**4.1 Introduction**

This chapter presents and discusses results in accordance to the study objectives.

**4.2 Teaching Strategies for Ugandan Sign Language**

Strategies used in teaching USL was categorized into three levels, that is; language of instruction, teaching strategies, and methods used. Data on language of instruction used by lecturers in teaching USL was collected using questionnaires and video based-observation schedule.

**4.2.1 Language of Instruction used by Lecturers in teaching Ugandan Sign Language**

**Table 3: Language of instruction used in teaching Ugandan Sign Language (n = 22)**

| S/No. | Factor                   | Used<br><i>f</i> (%) | Not used<br><i>f</i> (%) |
|-------|--------------------------|----------------------|--------------------------|
| 1.    | Ugandan Sign Language    | 2 (9.1)              | 20 (90.9)                |
| 2.    | Signed Supported English | 3 (13.6)             | 19 (86.4)                |
| 3.    | Signed Exact English     | 1 (4.5)              | 21 (95.5)                |
| 4.    | English                  | 10 (45.5)            | 12 (54.5)                |
| 5.    | Kiswahili                | 0 (0.0)              | 22 (100.0)               |
| 6.    | Luganda                  | 0 (0.0)              | 22 (100.0)               |
| 7.    | Ateso                    | 0 (0.0)              | 22 (100.0)               |
| 8.    | Luo                      | 0 (0.0)              | 22 (100.0)               |
| 9.    | Runyankole               | 0 (0.0)              | 22 (100.0)               |
| 10.   | Lugisu                   | 0 (0.0)              | 22 (100.0)               |

Results in Table 3 indicate that lecturers English language 10 (45.5%) mainly used to teach USL, followed by Signed Supported English 3 (13.6%), then Ugandan Sign Language 2 (9.1%) and Signed Exact English 1 (4.5%). Other languages: Kiswahili (0.00%), Luganda (1.00%), Ateso

(0.00%), Luo (0.00%), Runyankole (0.00%) and Lugisu (0.00%) were not used to teach USL. This implies that no specific language was used to teach USL.

To triangulate findings on language of instructions used by lecturers in teaching USL, an observation was made in four different lecture lessons on USL courses. These data was analysed thematically and presented in Table 4.

**Table 4: Language used in teaching Ugandan Sign Language as observed**

| <b>Item</b>                      |                         | <b>LsObs I</b>    | <b>LsObs II</b>              | <b>LsObs III</b>        | <b>LsObs IV</b>      |
|----------------------------------|-------------------------|-------------------|------------------------------|-------------------------|----------------------|
| Language(s) of Instruction used: | i. Dominant language    | English (Spoken)  | English (Spoken and Written) | USL (Practically used)  | SEE                  |
|                                  | ii. Supportive language | USL (Fairly used) | USL (Minimally used)         | SEE (Signed and Spoken) | USL (minimally used) |
| Used USL only:                   |                         | Did not use       | Used                         | Did not use             | Did not use          |

**Key:** LsObs = Lesson Observation

Findings in Table 4 also revealed that spoken and written English was dominantly used in teaching USL, followed by Signed Exact English (SEE) and USL. USL and SEE were also used by lecturers as supportive languages in teaching USL. This implies that USL was not directly used to teach USL.

Livingstone (2011) noted that to teach or learn a language, that same language should be used for instruction and/or interaction for better achievement. This is in line with Westland's (2014) report which stipulates that appropriate strategies in improving skills in learning ASL engaged students in using ASL. My finding disagrees with Livingstone (2011) and Westland's (2014) reports since it found out that English was dominantly used to teach USL 10 (45.5%). Lecturers

also used other languages; SSE 3 (13.6%), USL 2 (9.1%) and SEE 1 (4.5%) to teach USL courses. Use of English or other language rather than USL to teach USL is not proper and can lead to poor performance in USL for students learning it. English grammar or other language's grammar is much different from USL grammar. Use of English, SEE and SSE to teach USL can mislead students to learn, master and use USL effectively. Students' poor performance in USL should be attributed to the use of English which was dominantly used in teaching USL.

#### **4.2.2 Teaching Strategies for Ugandan Sign Language**

Statistical data on teaching strategies used by lecturers in teaching USL is presented in frequency

Table 5 on the proceeding page.

**Table 5: Teaching Strategies used by Lecturers to Teach Ugandan Sign Language  
(n = 22)**

| Factor |  | N            | R            | S            | O            | A            |
|--------|--|--------------|--------------|--------------|--------------|--------------|
|        |  | <i>f</i> (%) | <i>f</i> (%) | <i>f</i> (%) | <i>f</i> (%) | <i>f</i> (%) |
| 1.     | Restrict unnecessary movements in class during USL lessons                                       | 16<br>(72.7) | 4<br>(18.2)  | 1 (4.5)      | 1 (4.5)      | 0 (0.0)      |
| 2.     | Sign as students watch and imitate   | 15<br>(68.2) | 3<br>(13.6)  | 4<br>(18.2)  | 0 (0.0)      | 0 (0.0)      |
| 3.     | Give students chance to explore and discover more signs on their own                             | 14<br>(63.6) | 5<br>(22.7)  | 2 (9.1)      | 1 (4.5)      | 0 (0.0)      |
| 4.     | Group students and give them USL activities to practice and perform                              | 14<br>(63.6) | 4<br>(18.2)  | 3<br>(13.6)  | 1 (4.5)      | 0 (0.0)      |
| 5.     | Ensure every student participate in USL activities and assignments                               | 13<br>(59.1) | 9<br>(40.9)  | 0 (0.0)      | 0 (0.0)      | 0 (0.0)      |
| 6.     | Use resource persons (Deaf Person/USL Interpreter) to teach practical aspects of USL             | 12<br>(54.5) | 1 (4.5)      | 7<br>(31.8)  | 1 (4.5)      | 1 (4.5)      |
| 7.     | Give task to be signed by students and guide them  | 11<br>(50.0) | 3<br>(13.6)  | 3<br>(13.6)  | 1 (4.5)      | 4<br>(18.2)  |
| 8.     | Encourage peer-support among students/more skillful students in USL guide less skillful students | 11<br>(50.0) | 5<br>(22.7)  | 1<br>(4.5)   | 2 (9.1)      | 3<br>(13.6)  |
| 9.     | Enrich class with USL resources to encourage incidental learning                                 | 10<br>(45.5) | 4<br>(18.2)  | 4<br>(18.2)  | 3<br>(13.6)  | 1 (4.5)      |
| 10.    | Actively use USL with students when teaching   | 9<br>(40.9)  | 6<br>(27.3)  | 4<br>(18.2)  | 2 (9.1)      | 1 (4.5)      |

**KEY: N = Never      R = Rarely      S = Sometimes      O = Often      A = Always**

Results in Table 5 indicate that lecturers never: restricted unnecessary movements in class during USL lessons 16 (72.7%), signed as students watched and imitated 15 (68.2%), gave students chance to explore and discover more signs on their own 14 (63.6%), grouped students and give them USL

activities to practice and perform 14 (63.6%), ensured every student to participate in USL activities and assignments 13 (59.1%), used resource persons (Deaf Person/USL Interpreter) to teach practical aspects of USL 12 (54.5%), give task to be signed by students and guide them 11 (50.0%), encouraged peer-support among students/more skillful students in USL guide less skillful students 11 (50.0%), enriched their class with USL resources to encourage incidental learning 10 (45.5%) and actively used USL with students when teaching 9 (40.9%).

This implied that lecturers did not use of appropriate teaching strategy that involved active participation of students to learn USL course. Westland (2014) noted that appropriate strategies in improving skills in learning ASL engaged students actively to learn ASL, this was not observed by lecturers at KyU. Odumpe (2013) also said that, when learning a language, a learner should have an extensive exposure to the target language and many opportunities to practice or produce the language by communicating for social or practical purposes. Findings of this study are contrary to the appropriate sign language teaching strategies that Westland (2014) and Odumpe (2013) have noted. This implies that lecturers at KyU used poor teaching strategies in teaching USL which resulted to poor academic performance of students in USL courses. Lecturers at KyU should ensure that they use teaching strategies that enable every student to participate appropriately and actively during USL lessons, activities and assignments. They should strive to restrict unnecessary movements of students during USL lessons to enable them concentrate and learn USL courses so as to improve on their performance. Use of appropriate teaching strategies to teach USL at KyU would make the students understand better and perform well in USL examinations.

### 4.2.3 Methods used for Teaching Ugandan Sign Language

Findings presented in Table 6 indicate methods used by lecturers in teaching USL to BACE and BCBR students at KyU.

**Table 6: Methods used by Lecturers in Teaching Ugandan Sign Language  
(n = 22)**

| <b>Factor</b> |                  | <b>N</b>     | <b>R</b>     | <b>S</b>     | <b>O</b>     | <b>A</b>     |
|---------------|------------------|--------------|--------------|--------------|--------------|--------------|
|               |                  | <i>f (%)</i> | <i>f (%)</i> | <i>f (%)</i> | <i>f (%)</i> | <i>f (%)</i> |
| 1.            | Lecture          | 3 (13.6)     | 2 (9.1)      | 0 (0.0)      | 7 (31.8)     | 10 (45.5)    |
| 2.            | Demonstration    | 16 (72.7)    | 5 (22.7)     | 1 (4.5)      | 0 (0.0)      | 0 (0.0)      |
| 3.            | Group discussion | 9 (40.9)     | 8 (36.4)     | 4 (18.2)     | 1 (4.5)      | 0 (0.0)      |
| 4.            | Debate           | 8 (36.4)     | 6 (27.3)     | 4 (18.2)     | 3 (13.6)     | 1 (4.5)      |
| 5.            | Dramatization    | 6 (27.3)     | 4 (18.2)     | 8 (36.4)     | 2 (9.1)      | 2 (9.1)      |
| 6.            | Peer-tutoring    | 6 (27.3)     | 7 (31.8)     | 7 (31.8)     | 1 (4.5)      | 1 (4.5)      |
| 7.            | Field trip       | 6 (27.3)     | 6 (27.3)     | 5 (22.7)     | 4 (18.2)     | 1 (4.5)      |
| 8.            | Role play        | 5 (22.7)     | 8 (36.4)     | 8 (36.4)     | 1 (4.5)      | 0 (0.0)      |
| 9.            | Exploration      | 4 (18.2)     | 6 (27.3)     | 8 (36.4)     | 3 (13.6)     | 1 (4.5)      |
| 10.           | Tutorial         | 3 (13.6)     | 8 (36.4)     | 5 (22.7)     | 1 (4.5)      | 3 (13.6)     |

**KEY: N = Never R = Rarely S = Sometimes O = Often A = Always**

Findings in Table 6 indicate that majority of lecturers 10 (45.5%) always used lecture method to teach USL courses. The lecturers never used: demonstration 16 (72.7%), group discussion 9 (40.9%), debate 8 (36.4%), dramatization 6 (27.3%), peer tutoring 6 (27.3%), field trip 6 (27.3%), role play 5 (22.7%), exploration 4 (18.2%) and tutorial 3 (13.6%). They sometimes



used: dramatization 8 (36.4%), role play 8 (36.4%), exploration 8 (36.4%), peer tutoring 7 (31.8%), field trip 5 (22.7%) and tutorial 5 (22.7%).

These results imply that teaching methods used in teaching USL courses were not supportive enough to enhance students' performance. Lecture method for instance makes students be passive learners of USL course yet USL is a practical course that requires active participation of students. Jerine (2013) noted that dramatization method when used in teaching signed languages should actively engage students through interactive activities that help them gain deeper insights into lessons and build on concepts and themes. Dramatization can be used to test students' knowledge of signed vocabularies and phrases. Brookfield and Phenton (2013) noted that good teaching method for sign language should actively involve students to interact and relate with sign language users for effective performance and good score in examinations. My finding noted that lecture method 10 (45.5%) was the most used method to teach USL. Lecture method does not create opportunity for students to be actively involved in their learning. Odumpe (2013) noted that when teaching a language, a learner should be immersed in the language and given extensive exposure to the target language and many opportunities to imitate and practice or produce the language by communicating for social or practical purposes; therefore, the use of lecture method in such circumstances cannot give students opportunity to actively participate in using USL by themselves. This can negatively impact on the students' performance. The finding also revealed that tutorial 3 (13.6%) was another method used by lecturers to teach USL courses; this had a least percentage as compared to the use of lecture in teaching USL. Tutorial can be more practical method for teaching USL courses. It would be essential for lecturers at KyU to employ the use of more practical and students centered methods, such as; role play, assimilation, dramatization, demonstration, group discussion and peer-tutoring in teaching USL. This can help

to improve upon students' performance in USL and also enhance their practical skills in attaining and mastering USL vocabularies.

### **4.3 Results on Lecturers' Competence Levels in Ugandan Sign Language**

Data on lecturers' competence levels in USL was collected using questionnaires and video based-observation guide. It was coded, analyzed using frequency counts and percentages then presented and discussed.

Findings presented in Table 7 on the next page shows lecturers' competence levels in USL.

**Table 7: Lecturers Competence Level in Ugandan Sign Language (n = 22)**

| S/No | Factor  | Wr<br><i>f</i> (%) | Wk<br><i>f</i> (%) | Md<br><i>f</i> (%) | Gd<br><i>f</i> (%) | Bt<br><i>f</i> (%) |
|------|---|--------------------|--------------------|--------------------|--------------------|--------------------|
| 1.   | Ability to appropriately use USL parameters/elements to correctly articulate specific signs                           | 4<br>(18.2)        | 4<br>(18.2)        | 11<br>(50.0)       | 2 (9.1)            | 1<br>(4.5)         |
| 2.   | Ability to recognize and use different variations in USL (Signs from different regions of Uganda)                     | 4<br>(18.2)        | 5<br>(22.7)        | 8<br>(36.4)        | 3<br>(13.6)        | 2<br>(9.1)         |
| 3.   | Ability to effectively use USL vocabularies and phrases for discussion  | 3<br>(13.6)        | 3<br>(13.6)        | 5<br>(22.7)        | 8<br>(36.4)        | 3<br>(13.6)        |
| 4.   | Ability to view and understand multi-visual elements in a variety of media (Projector/television screen)              | 3<br>(13.6)        | 4<br>(18.2)        | 9<br>(40.9)        | 5<br>(22.7)        | 1<br>(4.5)         |
| 5.   | Ability to initiate and maintain conversation using USL   | 3<br>(13.6)        | 5<br>(22.7)        | 10<br>(45.5)       | 3<br>(13.6)        | 1<br>(4.5)         |
| 6.   | Ability to locate signs appropriately on the signing space and at distant locations                                   | 3<br>(13.6)        | 5<br>(22.7)        | 10<br>(45.5)       | 2 (9.1)            | 2<br>(9.1)         |
| 7.   | Ability to effectively move specific body parts to articulate relevant signs  | 3<br>(13.6)        | 3<br>(13.6)        | 12<br>(54.5)       | 2 (9.1)            | 2<br>(9.1)         |
| 8.   | Ability to comprehend and express fingerspelling (manual alphabet) and fingerspell words                              | 3<br>(13.6)        | 4<br>(18.2)        | 13<br>(59.1)       | 2 (9.1)            | 0<br>(0.0)         |
| 9.   | Ability to imitate and respond to social and cultural activities in the community (ceremonies, parties, prayers, ...) | 1 (4.5)            | 4<br>(18.2)        | 11<br>(50.0)       | 3<br>(13.6)        | 3<br>(13.6)        |
| 10.  | Ability to sign stories and events using USL  | 0 (0.0)            | 6<br>(27.3)        | 8<br>(36.4)        | 5<br>(22.7)        | 3<br>(13.6)        |

**KEY: Wr = Weaker Wk = Weak Md = Moderate Gd = Good Bt = Better**

Findings in USL in Table 7 reveal that lecturers at KyU had weaker abilities to: appropriately use USL parameters/elements to correctly articulate specific signs 4 (18.2%), recognize and use

different variations in USL (signs from different regions of Uganda) 4 (18.2%), effectively use USL vocabularies and phrases for discussion 3 (13.6%), view and understand multi-visual elements in a variety of media (projector/television screen) 3 (13.6%), initiate and maintain conversation using USL 3 (13.6%), locate signs appropriately on the signing space and at distant locations 3 (13.6%), effectively move specific body parts to articulate relevant signs 3 (13.6%), comprehend and express fingerspelling (manual alphabet) and fingerspell words 3 (13.6%) and to imitate and respond to social and cultural activities in community (ceremonies, parties, prayers, ...) 1 (4.5%). Some lecturers; however, had better abilities to: effectively use USL vocabularies and phrases for discussion 3 (13.6%), imitate and respond to social and cultural activities in the community 3 (13.6%) and to sign stories and events using USL 3 (13.6%).

These results show that most lecturers at KyU had lower competence levels in USL, therefore they would not teach USL courses effectively. This would lead to poor academic performance by students in USL courses. Aina, Ogundele and Olanipekun (2013) noted that lack of English competencies by teachers lowered academic performance of students in English. This should be related to my findings as indicated above although Nara, Eunjin and Wanjohi (2015) indicated that achievement in students' academic scores may not necessarily be determined by lecturers' competencies in any language of instruction used. Findings of my study pointed out those lecturers had weaker competencies in USL. When a lecturer's competence is weak in a language she/he is teaching, definitely, the students she/he is teaching the language cannot be able to perform effectively in the language as it may be required. There is therefore need that lecturers should work collaboratively with the few 3 (13.6%) with better competencies in USL so as to attain better solutions to enhance students' academic performance in USL courses. Hence, lecturers who are more competent in USL can be able to support those who are less competent,

thus students enabled to attain necessary skills and expertise in using USL for academic and initiating or mediating communication with people who are deaf in and out of KyU.

#### **4.4 Students' Attitudes towards Learning Ugandan Sign Language Course**

Data on students' attitudes towards learning USL course was collected using interview guide. The data was organized, categorized and transcribed into emergent themes and sub-themes, and reported as presented below.

##### **When asked about their feelings on learning USL as a course unit, students responded that:**

USL is complicated, hard, and difficult to be learnt. Many students said that USL course should be taught only to people who are deaf and those who work with them, but not to university students. The students felt very bad, scared and disturbed to learn USL. One student said, "I feel bored when I am learning USL". A few students said they did not care even though they performed poorly in USL course units.

These indicate that students enrolled for BACE and BCBR at KyU were less interested to learn USL which was offered to them as a course. Hence, it might be one of the factors that led to their poor performance in USL course. Giar (2013) reported that positive attitudes portrayed by learners of ASL improved upon the process of teaching them where teachers got motivated to teach ASL. Such attitudes portrayed by KyU students might have also demotivated their lecturers to effectively teach them; therefore, leading to their poor performance in USL courses.

##### **Asked why they felt as reported, KyU students gave these response:**

Respondent 1, "USL is a new, rare and special discipline/language for me to learn and attain from. I do not have much feeling to learn it although ..."

Respondent 2, "USL is complicated and so hard/difficult to learn. Especially the articulation of signs and hand movements are very difficult for me to cope with".

Respondent 3, “USL is not common. It is unique from other local languages, and many people out there do not have any skill of communicating in USL. So why should I learn such a language. I see no benefit from learning it. It is not a privilege to me”.

Respondent 4, “I do not love USL course, neither do I enjoy it since it cannot be of help in my future and I also I fear deaf people”.

Respondent 5, “I want to work with and help children who are hearing impaired, but haaa USL ...”

These responses still affirms that KyU students do not see much value in learning USL. McConnell (2014) noted that children involved in learning AUSLAN had positive attitudes which helped them enjoy and remember the signed vocabularies they learnt. With the revealed findings above students at KyU seemed not to have been enjoying learn USL lessons and this automatically has to influence their academic performance in the course. If the students had positive attitudes towards learning USL, they would be able to enjoy and remember whatever they learn in USL and thereafter perform better. There is need for lecturers at KyU to design varied strategies to motivate their students to have a positively changed attitude towards learning USL. This may be done through; demonstrating caring and kindness behaviors to students during USL lessons, sharing responsibility with the students, sensitively accepting the students’ diversity, fostering individualized instructions to the students, and encouraging them to explore more on USL and be creative in their learning.



#### **4.5 Relationship between Students' entry Behavior and Performance in Ugandan Sign Language**

Data on relationship between students' entry behavior and performance in USL were collected using; questionnaire, interview schedules and document analysis guide. Data collected using questionnaires were coded, analyzed using frequency counts and percentages. It was presented in Table 8 and discussed. Data collected using interview schedule were coded, thematised, reported and discussed. These were presented in Table 9. Data collected through document analysis were coded and analysed through SPSS. These were reported using Pearson's (*r*) correlation coefficient and discussed. The data were presented in Table 10 and Table 11.

Results on students' entry behavior on USL training obtained through questionnaires are as presented in Table 8.

**Table 8: Students' Entry-Behavior on Ugandan Sign Language Training (n = 504)**

| S/No | Factor   | NTM<br><i>f</i> (%) | STM<br><i>f</i> (%) | MTM<br><i>f</i> (%) | VTM<br><i>f</i> (%) | CTM<br><i>f</i> (%) |
|------|--|---------------------|---------------------|---------------------|---------------------|---------------------|
| 1.   | Had high expectation to learn USL              | 328<br>(65.1)       | 106<br>(21.0)       | 20<br>(4.0)         | 35<br>(6.9)         | 15<br>(3.0)         |
| 2.   | Had never got any basic training at all in USL | 10<br>(2.0)         | 55<br>(10.9)        | 10<br>(2.0)         | 171<br>(33.9)       | 258<br>(51.2)       |
| 3.   | Had never known anything at all about USL      | 30<br>(6.0)         | 45<br>(8.9)         | 111<br>(22.0)       | 151<br>(29.9)       | 167<br>(33.1)       |
| 4.   | Had less expectation in learning USL           | 20<br>(4.0)         | 92<br>(18.3)        | 60<br>(11.9)        | 55<br>(10.9)        | 277<br>(55.0)       |
| 5.   | Had high expectations in learning USL          | 282<br>(56.0)       | 45<br>(8.9)         | 66<br>(13.1)        | 101<br>(20.0)       | 10<br>(2.0)         |
| 6.   | Had earlier on got some basic training in USL  | 267<br>(53.0)       | 131<br>(26.0)       | 20<br>(4.0)         | 66<br>(13.0)        | 20<br>(4.0)         |
| 7.   | Had more interest to learn USL                 | 307<br>(60.9)       | 92<br>(18.3)        | 24<br>(4.8)         | 55<br>(10.9)        | 26<br>(5.2)         |
| 8.   | Had some basic communication skills in USL     | 176<br>(34.9)       | 111<br>(22.0)       | 96<br>(19.0)        | 71<br>(14.1)        | 50<br>(9.9)         |
| 9.   | Had no communication skills at all in USL      | 41<br>(8.1)         | 76<br>(15.1)        | 50<br>(9.9)         | 161<br>(32.0)       | 176<br>(34.9)       |
| 10.  | Had no motivation at all to learn USL          | 30<br>(6.0)         | 91<br>(18.1)        | 55<br>(10.9)        | 146<br>(29.0)       | 182<br>(36.1)       |

**KEY: NTM = Not at all True of Me    STM = Slightly True of Me    MTM = Moderately True of Me    VTM = Very True of Me    CTM = Completely True of Me**

Findings in Table 8 reveal that: majority of students 328 (65.1%) did not have high expectation to learn USL and minority 15 (3.0%) had high expectation to learn USL, most students 258 (51.2%) had never gotten any basic training at all in USL yet minority 10 (2.0%) had gotten, most students 167 (33.1%) had never known anything at all about USL while minority 30 (6.0%) knew anything about it, most students 277 (55.0%) had less expectation in learning USL while

few 20 (4.0%) did not have less expectation in learning USL, majority of students did not have high expectations in learning USL 282 (56.0%) yet a few 10 (2.0%) had, majority 267 (53.0%) of students had not earlier on gotten some basic training in USL yet a few 20 (4.0%) had earlier on gotten some basic training in USL, most students 307 (60.9%) did not have more interest to learn USL yet a few 26 (5.2%) had more interest, most students 176 (34.9%) did not have some basic communication skills in USL yet a few 50 (9.9%) had, most students 176 (34.9%) had no communication skills at all in USL yet a few 41 (8.1%) had, and most students 182 (36.1%) had no motivation at all to learn USL but a few 30 (6.0%) had some motivation to learn USL.

These results implied that most students who were pursuing USL courses at KyU did not have sufficient background knowledge in USL course. This is an indicator of poor academic performance in USL courses at KyU. This can be explained using Dunn and Mark's results that (2012) early exposure and use of USL by students provide good foundation for positive classroom adaptations leading to better attainment of academic achievements. Therefore for improved performance in USL, KyU need to enroll students who have basic knowledge in USL or provide bridging course for students enrolled for USL course that do not have prior background knowledge.

Findings on students' entry behavior on USL training obtained through interview schedule are as presented in Table 9.

**Table 9: Prior Basic Training Attained by Students in Ugandan Sign Language and their Relevance (n = 504)**

| <b>Level of training</b> | <b>f (%)</b> | <b>Institution of training</b> | <b>Relevance of the training to students</b>   |
|--------------------------|--------------|--------------------------------|--|
| Diploma                  | 50 (10%)     | Educational                    | Helps me to understand and follow USL instructions at the current bachelor degree level  |
| Certificate              | 66 (13%)     | None<br>Governmental           | Helps me to easily acquire and understand other detailed signed vocabularies taught to us  |
| Course Unit              | 55 (11%)     | Educational                    | Has given me a basis to improve upon my signing abilities and skills   |
| Informal                 | 30 (6%)      | Family                         | Has been very useful to me in helping me build on the basic signs and vocabularies I had learnt<br><br>Has helped me to sign some other new words I encounter in USL, and also communicate using USL |
| No training              | 302 (60%)    | Nil                            | Nil  |

*f* = Frequency      % = Percent

Findings in Table 9 indicate that majority of students 302 (60%) had never gotten any basic training in USL before enrolling for BACE and BCBR programmes at KyU which offered them USL training courses. Some of these students who earlier got some basic training in USL attained it at certificate 66 (13%) and diploma 50 (10%) levels. While a few them 55 (11%) learnt USL as course units in their previous trainings, and other students 30 (6%) were trained informally at family levels with relatives and friends.

This finding implied that most students enrolled for BACE and BCBR programmes of KyU 302 (60%) did not have sufficient background training in USL before learning it in the USL courses at KyU. This is yet another indicator of students' poor performance in USL courses at KyU. This is related to Maina's (2009) observation that deaf students' entry behavior at secondary schools in Kenya impacted negatively on their academic performance.

Results on students' entry behavior on USL training obtained through document analysis guide are as presented in Table 10 and Table 11.

Table 10 shows the correlated results of mean scores attained by students who had prior training in USL and those who did not have any prior training in USL. These were students enrolled for BCBR study programme.

**Table 10: Correlation of Mean Scores in CBR-114 attained by Students who Had Prior Training and those who Did Not Have Prior Training in USL (n = 353)**

|        |                     | StdPR    | StdWT    |
|--------|---------------------|----------|----------|
| StdPR: | Pearson correlation | 1        | -1.000** |
|        | Sig. (2-tailed)     |          | 0.01     |
|        | N                   | 2        | 2        |
| StdWT: | Pearson correlation | -1.000** | 1        |
|        | Sig. (2-tailed)     | 0.01     |          |
|        | N                   | 2        | 2        |

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**KEY: StdPR** = Students with prior training      **StdWT** = Students without prior training

Results revealed that students who did CBR 114 course, that is, Uganda Sign Language who did not have prior basic training in USL were 207 (58.6%). And there were 146 (41.4%) students who had prior training in USL. Results of correlated mean scores attained in CBR 114 by the students who prior attained basic trainings in USL and those who did not attain prior training in USL in Table 10 indicate that there was strong linear relationship,  $r = -1.000^{**}$ . This implied that students who attained prior basic training in USL performed better while students who did not attain prior basic training in USL performed poorly in the CBR 114 – Sign Language course.

Table 11 shows the correlated results of mean scores attained by students who had prior training in USL and those who did not have any prior training in USL. These were students enrolled for BACE study programme.

**Table 11: Correlation of Mean Scores in ACE-214 attained by Students who Had Prior Training and those who Did Not Have Prior Training in USL (N = 151)**

|        |                     | StdPR    | StdWT    |
|--------|---------------------|----------|----------|
| StdPR: | Pearson correlation | 1        | -1.000** |
|        | Sig. (2-tailed)     |          | 0.01     |
|        | N                   | 2        | 2        |
| StdWT: | Pearson correlation | -1.000** | 1        |
|        | Sig. (2-tailed)     | 0.01     |          |
|        | N                   | 2        | 2        |

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**KEY: StdPR** = Students with prior training      **StdWT** = Students without prior training

It was found out that students who did ACE 214, that is, Uganda Sign Language who did not have prior basic training in USL were 96 (63.58%) and those who had prior training in USL were 55 (36.42%). Results of correlated mean scores attained in CBR 114 by the students who prior attained basic trainings in USL and those who did not attain prior training in USL in Table 11 indicate that there was strong linear relationship,  $r = -1.000^{**}$ . This implied that students who attained prior basic training in USL performed better while students who did not attain prior basic training in USL performed poorly in the ACE 214 course unit.

The correlated results in Table 10 and Table 11 reveal that students who attained prior basic training in USL performed better in CBR 114 and ACE 214 than students who did not attain prior basic training in USL ( $r = -1.000^{**}$ ). This implied that the students' poor performance in USL courses at KyU was attributed to their insufficient background knowledge in USL as presented in Table 8 and Table 9. It would; therefore, be required that before enrolling students

for USL courses at KyU, a bridging training programme in USL be set for them as this may help them attain basic and background skills and knowledge in USL before actual learning and/or training in the actual USL courses. By doing this, the students' academic performance in USL can be enhanced. Campbell and Libeth (2013) supports this idea as they revealed that students who join schools with good background experiences and skills can perform well academically than those who did not have such background experiences. Maina's (2009) report on deaf students in Kenya who joined secondary schools with KCPE with less than average marks performing poorly in mathematics than other students who had good marks is also in support to my idea.



## **CHAPTER FIVE**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter; covers a summary of findings, presents conclusions, gives recommendations and suggestion for further study.

#### **5.2 Summary of Findings**

##### **5.2.1 Strategies used in teaching Ugandan Sign Language**

Findings on how teaching strategies used by lecturers influence students' academic performance in USL at KyU revealed that: Lecturers used English language 10 (45.5%) and Signed Supported English 3 (13.6%) mainly to teach USL courses. They also used USL 2 (9.1%) and Signed Exact English 1 (4.5%) as well. A video based-observation was made so as to triangulate this finding. It revealed that spoken and written English was dominantly used in teaching USL, followed by Signed Exact English (SEE) and USL. USL and SEE were used as supportive languages in teaching USL courses. This implied that no specific language was used to teach USL. USL was not directly used to teach USL courses which were wrong. Odumpe (2013) noted that, when learning a language, a learner should have an extensive exposure to the target language and given many opportunities to practice or produce the language by communicating for social or practical purposes. This was not done by lecturers at KyU; therefore, making majority of students to perform poorly in USL courses. The lecturers never restricted unnecessary movements of students in class during USL lessons 16 (72.7%). They signed as students watched and imitated 15 (68.2%). This led to passivity in learning USL; therefore leading to poor participation and academic performance of students. Appropriate teaching strategies that involved active participation of

students to learn USL course were not used by lecturers at KyU. This led to poor academic performance of students in USL courses. Westland (2014) noted that appropriate strategies to improve skills in learning sign languages engage students actively. This was not observed by lecturers at KyU in teaching USL. Majority of lecturers 10 (45.5%) always used lecture method to teach USL courses. They never used demonstration 16 (72.7%) and group discussions 9 (40.9%) among other methods. But sometimes used dramatization 8 (36.4%) and role play 8 (36.4%). This implied that teaching methods used in teaching USL courses were not supportive enough to enhance students' performance. Lecture method for instance makes students be passive learners of USL course yet USL is a practical course that requires active participation of students. Phenton (2013) noted that good teaching method for sign language should actively involve students to interact and relate with sign language users for effective performance and good score in examinations. Lecture method does not create opportunity for students to be actively involved in their learning and can cause poor participation of students leading to poor academic performance as well in USL course.

### **5.2.2 Lecturers Competence Level in Ugandan Sign Language**

Findings on how lecturers' competence levels in USL influence students' academic performance in USL courses revealed: Most lecturers 4 (18.2%) at KyU had weaker abilities to appropriately use USL parameters/elements to correctly articulate specific signs. Others 4 (18.2%) were also weak to recognize and use different variations in USL (signs from different regions of Uganda). Some lecturers 3 (13.6%) were also weak to effectively use USL vocabularies and phrases for discussion yet others 3 (13.6%) had weaknesses to understand multi-visual elements in a variety of media (projector/television screen). However a few lecturers 3 (13.6%) had better abilities to effectively use USL vocabularies and phrases for discussion, imitate and also respond to social

and cultural activities in the community 3. These results showed that most lecturers at KyU had lower competence levels in USL; therefore, they would not effectively teach USL courses. This led to poor academic performance by students in USL courses. Aina, Ogundele and Olanipekun (2013) noted that lack of sufficient competencies to teach a language can lower academic performance of students. There was need that lecturers who teach USL courses work collaboratively with each other so as to enhance students' academic performance in USL courses.

### **5.2.3 Attitudes on Learning Ugandan Sign Language**

Findings on how students' attitudes towards learning USL courses influenced their academic performance in the courses revealed that: most students said USL course was complicated, hard, and difficult to learn. And that USL courses should be taught only to people who were deaf and those who worked with them, but not to university students. Some students felt very bad, scared and disturbed to learn USL courses. A student said she felt bored when learning USL courses. Yet some students felt that USL courses were new, rare and special disciplines to learn and attain from but they felt not to learn it. These findings indicated that students enrolled for BACE and BCBR at KyU who were undertaking USL courses were less interested to learn the courses. This led to their poor performance in USL courses. As reported by Giar (2013), positive attitudes portrayed by learners of a language can motivate both teachers and learners to enhance performance. This was not a case in KyU.

#### 5.2.4 Entry-behavior on Ugandan Sign Language Training

Findings on how the relationship between students' entry behavior and students' performance in USL courses revealed that: majority of students 328 (65.1%) did not have high expectation to learn USL courses and minority 15 (3.0%) had high expectation to learn USL. Most students 258 (51.2%) had never gotten any basic training at all in USL courses yet minority 10 (2.0%) had gotten. Most students 167 (33.1%) had never known anything at all about USL while minority 30 (6.0%) knew anything about it. 302 (60%) of students had never gotten any basic training in USL before enrolling for BACE and BCBR programmes which offered USL courses. A few of these students had attained certificate 66 (13%) and diploma 50 (10%) levels in USL but others 55 (11%) learnt USL as course units in their previous trainings. Yet another 30 (6%) of students were trained informally at family levels with relatives and friends. Results revealed that 207 (58.6%) students for CBR 114 - Uganda Sign Language course did not have prior basic training in USL and 146 (41.4%) students had prior training in USL. Results of correlated mean scores attained in CBR 114 by the students who prior attained basic trainings in USL and those who did not attain prior training in USL course indicated that there was strong linear relationship,  $r = -1.000^{**}$ . Implying that; students who attained prior basic training in USL courses performed better while students who did not attain prior basic training in USL performed poorly in CBR 114 – Sign Language course unit at KyU. Results also showed that 96 (63.58%) of students who did ACE 214 - Uganda Sign Language course did not have prior basic training in USL and 55 (36.42%) of them had prior training in USL courses. Correlated results for these students indicated that there was strong linear relationship,  $r = -1.000^{**}$ . Implying that; students who attained prior basic training in USL performed better while students who did not attain prior basic training in USL performed poorly in ACE 214 course unit. The findings showed that most

students who did not have sufficient background knowledge in USL courses performed poorly in USL courses at KyU than those who had. Since there were few students who had prior background knowledge and skills in USL course, results in USL courses at KyU were noted to be poorer than in other course units offered for the same programmes. Dunn and Mark's (2012) had noted that early exposure and use of USL by students provide good foundation for positive classroom adaptations leading to better attainment of academic achievements. Therefore for improved performance in USL, KyU needed to enroll students who have basic knowledge in USL or provide bridging course for students enrolled for USL course that do not have prior background knowledge.

### **5.3 Conclusion**

#### **5.3.1 Strategies used in Teaching Ugandan Sign Language**

Lecturers majorly used English language and Signed Supported English to teach USL courses. Spoken and written English was dominantly used in teaching, followed by Signed Exact English (SEE) and USL. USL and SEE were used as supportive languages in teaching. This implied that there was no specific language was used to teach USL courses; therefore leading to poor performance of students. Although lecturers also used USL in some cases to teach USL courses, use of a different language to teach another language is bad and can mislead students and bring about poor performance. Most lecturers never restricted unnecessary movements of students in class during USL lessons and they signed as students watched and imitated. This led to passivity in learning USL courses, hence, poor participation and poor academic performance of students. Majority of lecturers always used lecture method to teach USL courses and never used demonstrations and group discussions. Hence, teaching methods used in teaching USL courses were not supportive enough to enhance students' performance.

### **5.3.2 Lecturers Competence Level in Ugandan Sign Language**

Most lecturers had weaker abilities to appropriately use USL. They were weak to recognize and use different variations in USL (signs from different regions of Uganda). Some of them were weak to effectively use USL vocabularies and phrases and had weaknesses to understand multi-visual elements in a variety of media (projector/television screen). The findings implied that majority of lecturers at had lower competence levels in USL; therefore, they would not effectively teach USL courses. This led to poor academic performance by students in USL courses.

### **5.3.3 Attitudes on Learning Ugandan Sign Language**

Most students felt that USL courses were complicated, hard, and difficult to learn. They felt it should be taught only to people who were deaf and those who worked with them, but not to university students. They felt very bad, scared and disturbed to learn USL courses. These indicated that students who were undertaking USL courses were less interested to learn the courses, hence leading to their poor performance in USL courses.

### **5.3.4 Entry-behavior on Ugandan Sign Language Training**

Majority of students did not have high expectation to learn USL courses and minority of them had high expectations. Most students had never gotten any basic training at all in USL courses but minority had and most students had never known anything at all about USL. Correlated results for students who did CBR 114-Sign Language who prior attained basic trainings in USL and those who did not attain prior training in USL course indicated strong linear relationship,  $r = -1.000^{**}$ . Implying; students who attained prior basic training in USL courses performed better

while students who did not attain prior basic training in USL performed poorly. Correlated results for students who did ACE 214 - Uganda Sign Language course who did not have prior basic training in USL and those who had prior training in USL courses indicated that there was strong linear relationship,  $r = -1.000^{**}$ . Implying; students who attained prior basic training in USL performed better while students who did not attain prior basic training in USL performed poorly in ACE 214. The findings showed that most students who did not have sufficient background knowledge in USL courses performed poorly in USL courses at KyU than those who had.

#### **5.4 Recommendations**

It is recommended that:

- i. Lecturers should use only USL as a medium of instruction to teach USL as this may improve upon students' perfection in perceiving and articulating the language.
- ii. Lecturers at KyU should use teaching strategies that enable every student to participate appropriately and actively during USL lessons, activities and assignments.
- iii. Lecturers should use more practical and students centered methods, such as; role play, assimilation, dramatization, among others so as to improve upon students' practical skills in attaining and mastering USL vocabularies and syntax.
- iv. Lecturers work as a team to teach USL to the students, so that, lecturers who are more competent in USL can be able to support those who are less competent..
- v. Lecturers should be encouraged to attend further Sign Language training programmes offered in other institutions rather than KyU itself.

- vi. Lecturers at KyU may need to design varied strategies to motivate the students to have passion and positively changed attitude towards learning USL
- vii. Before enrolling students for USL courses at KyU, a dissemination campaign on the importance of USL should be offered to students.
- viii. A bridging training programme in USL should also be set for the students before they are enrolled for USL courses as this may help to improve upon their performance in USL later.

### **5.5 Suggestion for Further Study**

I suggest that further study be done on impact of USL learning to people who are deaf and other community members at large both at school and out of school settings.



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## APPENDIX I: QUESTIONNAIRE FOR LECTURERS

*The purpose of this study is to establish Determinants of Students' Academic Performance in Ugandan Sign Language at Kyambogo University, Uganda. Kindly fill in the spaces provided with appropriate information or tick where applicable. The information provided will be treated with utmost confidentiality and only used for the purpose of this study.*

### Background information (Please tick as appropriate)

- i. Gender: Male  Female
- ii. Please indicate your age group:

| Age range          | Tick as appropriate |
|--------------------|---------------------|
| 25-30 years        |                     |
| 31-35 years        |                     |
| 36-40 years        |                     |
| 41-45 years        |                     |
| 46-50 years        |                     |
| 51-55 years        |                     |
| 56 years and above |                     |

- iii. Duration of service as a lecturer for Ugandan Sign Language at Kyambogo University

| Year range  | Tick as appropriate |
|-------------|---------------------|
| 1-5 years   |                     |
| 6-10 years  |                     |
| 11-15 years |                     |

### A: TEACHING AND LEARNING STRATEGIES

Which language(s) of instruction do you use in teaching Ugandan Sign Language course units?  
(Tick (√) as appropriate)

|    | Language of Instruction  | I Use | I Don't Use |
|----|--------------------------|-------|-------------|
| 1  | Ugandan Sign Language    |       |             |
| 2  | Signed Exact English     |       |             |
| 3  | Signed Supported English |       |             |
| 4  | English                  |       |             |
| 5  | Kiswahili                |       |             |
| 6  | Luganda                  |       |             |
| 7  | Ateso                    |       |             |
| 8  | Luo                      |       |             |
| 9  | Runyankole               |       |             |
| 10 | Lugisu                   |       |             |

Briefly state why you use the said language(s) for teaching the USL course units:



.....  
 What is the frequency of your use of the following strategies for teaching Ugandan Sign Language?

(Tick (✓) as appropriate):

|    | Strategies   | <i>N.B: Please tick <u>only one</u> level for each approach</i> |   |   |   |   |
|----|--|---|---|---|---|---|
|    |  | 1   | 2 | 3 | 4 | 5 |
| 1  | Signing as students watch and imitate the signs  |   |   |   |   |   |
| 2  | Giving tasks to be signed and guiding students appropriately   |   |   |   |   |   |
| 3  | Actively using USL together with students  |   |   |   |   |   |
| 4  | Giving chance to students to explore and discover more signs on their own  |   |   |   |   |   |
| 5. | Grouping students and giving them USL activities/tasks to practice and perform/present as a group  |   |   |   |   |   |
| 6. | Enriching my classroom with diverse USL resources (e.g. videos, dictionaries, resource persons/USL users) to encourage incidental learning of USL by my students |   |   |   |   |   |
| 7. | Using resource persons (E.g. Deaf people) to teach the practical aspects of USL  |   |   |   |   |   |
| 8  | Allowing students who are more skillful in USL to guide their peers (Encouraging Peer Support among students)  |   |   |   |   |   |
| 9  | Ensuring that every student participate in the USL activities and assignments given to them  |   |   |   |   |   |
| 10 | Restricting unnecessary movements in class during USL lessons  |   |   |   |   |   |

**KEY: 1 = Never 2 = Rarely 3 = Sometimes 4 = Often 5 = Always**

How often do you use each of the following methods for teaching Ugandan Sign Language course units? (Tick (✓) where applicable)

|   | Methods          | <i>Please, tick <u>only one</u> level for each method you use</i> |   |   |   |   |
|---|------------------|---|---|---|---|---|
|   |                  | 1   | 2 | 3 | 4 | 5 |
| 1 | Group discussion |   |   |   |   |   |
| 2 | Exploration      |   |   |   |   |   |
| 3 | Dramatization    |   |   |   |   |   |
| 4 | Lecture          |   |   |   |   |   |
| 5 | Peer teaching    |   |   |   |   |   |
| 6 | Tutorials        |   |   |   |   |   |
| 7 | Role play        |   |   |   |   |   |
| 8 | Demonstration    |   |   |   |   |   |

|    |            |  |  |  |  |  |
|----|------------|--|--|--|--|--|
| 9  | Field trip |  |  |  |  |  |
| 10 | Debate     |  |  |  |  |  |

**KEY: 1 = Never      2 = Rarely      3 = Sometimes      4 = Often      5 = Always**

### **B: LANGUAGE COMPETENCIES**

Rate your language competencies in the following language aspects that enable you teach Ugandan Sign Language course unit:

**(Tick (√) as appropriate)**

|     | <b>Competency</b>   | <i>Please, tick <u>only one</u> level for each competency</i> |          |          |          |          |
|-----|---|---|----------|----------|----------|----------|
|     |   | <b>1</b>  | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
| 1.  | Ability to sign stories and events using USL  |   |          |          |          |          |
| 2.  | Ability to effectively use USL vocabularies and phrases for discussions   |   |          |          |          |          |
| 3.  | Ability to use USL to imitate & respond to social and cultural activities in the community e.g. ceremonies, parties, and prayers  |   |          |          |          |          |
| 4.  | Ability to recognize & use different variations in USL e.g. Signs from different regions of Uganda  |   |          |          |          |          |
| 5.  | Ability to view & understand multi-visual elements of USL in a variety of media like projector/television screens   |   |          |          |          |          |
| 6.  | Ability to initiate and maintain conversations using USL  |   |          |          |          |          |
| 7.  | Ability to locate signs appropriately on the Signing Space and at distant locations   |   |          |          |          |          |
| 8.  | Ability to appropriately use the USL parameters/elements (location, movement, palm orientation, facial expression, handshape) to correctly articulate specific signs in USL |   |          |          |          |          |
| 9.  | Ability to effectively move specific body parts to articulate relevant signs  |   |          |          |          |          |
| 10. | Ability to comprehend and express fingerspelling (manual alphabet/numbers) and spelling of words  |   |          |          |          |          |

**KEY: 1 = Weaker      2 = Weak      3 = Moderate      4 = Good      5 = Better**

**END**

## APPENDIX II: QUESTIONNAIRE FOR STUDENTS

*The purpose of this study is to establish Determinants of Students' Academic Performance in Ugandan Sign Language at Kyambogo University, Uganda. Kindly fill in the spaces provided with appropriate information or tick where applicable. The information provided will be treated with utmost confidentiality and only used for the purpose of this study.*

*Please specify your gender by ticking appropriately: Male ..... Female .....*

### A: ATTITUDE

Please, select by ticking the column that best agrees with your attitude towards learning Ugandan Sign Language (USL) course unit.

**Select as appropriate (√)**

|     | <b>STATEMENT</b>   | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b> |
|-----|--|----------|----------|----------|----------|----------|----------|
| 1.  | I don't care even though I perform poorly in USL course unit |          |          |          |          |          |          |
| 2.  | I have much interest in learning USL                         |          |          |          |          |          |          |
| 3.  | I don't have any interest at all in learning USL             |          |          |          |          |          |          |
| 4.  | It pains me if I perform poorly in USL                       |          |          |          |          |          |          |
| 5.  | It is difficult to learn USL                                 |          |          |          |          |          |          |
| 6.  | Learning USL has no implication in my career                 |          |          |          |          |          |          |
| 7.  | Learning USL is exciting and interesting to me               |          |          |          |          |          |          |
| 8.  | USL is as important as other course units to me              |          |          |          |          |          |          |
| 9.  | USL can enrich my future career                              |          |          |          |          |          |          |
| 10. | I feel USL should not be taught to University students       |          |          |          |          |          |          |

**KEY: 1 = Completely Disagree    2 = Disagree    3 = Somehow Disagree  
4 = Somehow Agree    5 = Agree    6 = Completely Agree**



**APPENDIX III: VIDEO BASED-OBSERVATION CHECKLIST**

**Observation Checklist for Lesson observation**

Date: \_\_\_\_\_ Length of lesson: \_\_\_\_\_

Course Unit: \_\_\_\_\_ Number of candidates: \_\_\_\_\_

1. Which language of instruction was used in teaching? (English/Ugandan Sign Language/Other language-*to be specified*) \_\_\_\_\_

2. What was the teaching strategy used? (Lecturer dominated signing as students watched and imitated the signs/Students given tasks to sign and lecturer guided/Both lecturer and students engaged in signing tasks/Students given chance to explore and discover more signs on their own/Students grouped and given tasks to practice and perform or present in groups/Teaching and learning environment enriched with USL resources).  
\_\_\_\_\_

3. Which teaching method(s) was used in teaching? (Discussion/Question and answer/Group work/Dramatization/Lecture method/Role play/Peer teaching/ Problem solving/Other method-*to be specified*) \_\_\_\_\_

4. What was lecturer's level of language competency in USL? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

5. What were students' attitudes towards learning USL?  
\_\_\_\_\_  
\_\_\_\_\_

6. Other general notes/comments deemed necessary:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## APPENDIX IV: INTERVIEW GUIDE FOR STUDENTS

*The purpose of this study is to establish Determinants of Students' Poor Academic Performance in Ugandan Sign Language at Kyambogo University, Uganda. Kindly answer the questions to be posed with appropriate information/answers. The information provided will be treated with utmost confidentiality and only used for the purpose of this study.*

### **Background information**

- i. Student's gender:** Male ..... Female .....
- ii. Student's age group**

| <b>Age group</b>   | <b>Tick as appropriate</b> |
|--------------------|----------------------------|
| 20-25 years        |                            |
| 26-30 years        |                            |
| 31-35 years        |                            |
| 36-40 years        |                            |
| 41-45 years        |                            |
| 46 years and above |                            |

**Qn 1. i.** What is your feeling on learning USL as a course unit?

**ii.** Why do you feel so?

**iii.** How useful can USL be to you when you graduate?

**Qn 2. i.** Did you undergo any basic training before in USL? (Yes/No)

**ii.** If yes, what was the level of the training?

**iii.** How is that training useful to you now in learning USL course unit at Kyambogo University?  
(Please, briefly explain)

***Thank you for your participation***

## APPENDIX V: DOCUMENT ANALYSIS GUIDE

### GUIDE FOR ANALYSIS OF EXAMINATION RESULTS ATTAINED IN UGANDAN SIGN LANGUAGE COURSE UNITS

**Course unit:** ..... **Academic year:** .....

**Student's number:** .....

1. Category of student:
  - i. Had basic training in USL ...
  - ii. Did not have basic training in USL ...
2. Type of document analyzed:
  - i. Spread sheets ...
  - ii. Mark sheets ...
  - iii. Lecturer's record of examination results ...
3. Unique physical characteristics of the document:
  - i. Details of candidates' grades ...
  - ii. Handwritten ...
  - iii. Typed ...
  - iv. Signed by the author ...
  - v. Signed by the supervisor ...
  - vi. Date the document was signed ...
4. a) Author/creator of the document: .....
- b) Title/position of the author: .....
5. For whose use was the document written: .....
6. Marks scored by the student ..... out of .....

## APPENDIX VI: SCHEDULE OF ACTIVITIES

### SCHEDULE OF ACTIVITIES FOR THE STUDY

| <b>S/No.</b> | <b>Activity</b>   | <b>Time-frame</b>     |
|--------------|---|-----------------------|
| 1.           | Proposal writing  | January-February 2014 |
| 2.           | Presenting and discussing proposal with supervisors                                   | March-November 2014   |
| 3.           | Presentation and defense of proposal at Department of SNE&R-Maseno University         | May-December 2014     |
| 4.           | Presentation and defense of proposal at Faculty/School of Education-Maseno University | January-February 2015 |
| 5.           | Presentation and defense of proposal at Graduate School-Maseno University             | February- March 2015  |
| 6.           | Getting reliability of Study Instruments  | March-April 2015      |
| 7.           | Data collection   | May 2015              |
| 8.           | Data analysis   | June 2015             |
| 9.           | Report writing  | June-July 2015        |
| 10.          | Report/Thesis submission  | August 2015           |
| 11.          | Report/Thesis defense   | August-September 2015 |



**APPENDIX VII: INTRODUCTORY LETTER**



**MASENO UNIVERSITY  
SCHOOL OF GRADUATE STUDIES**

*Office of the Dean*

Our Ref: PG/MED/00137/2011

Private Bag, MASENO, KENYA  
Tel:(057)351 22/351008/351011  
FAX: 254-057-351153/351221  
Email: [sgs@maseno.ac.ke](mailto:sgs@maseno.ac.ke)

Date: 08<sup>th</sup> February, 2016

**TO WHOM IT MAY CONCERN**

**RE: PROPOSAL APPROVAL FOR ORECH EMMY HENDRAIN —  
PG/MED/00137/2011**

The above named is registered in the Master of Education in Special Needs Programme of the School of Education, Maseno University. This is to confirm that his research proposal titled "Determinants of Students Academic Performance in Ugandan Sign Language at Kyambogo University, Uganda" has been approved for conduct of research subject to obtaining all other permissions/clearances that may be required beforehand.

  
Prof. P.O. Owuor

**DEAN, SCHOOL OF GRADUATE STUDIES**





**APPENDIX IX: CORRELATED RESULTS OF MEAN-SCORES ATTAINED IN USL  
COURSE UNITS – ACE 214 AND CBR 114**

Students with prior knowledge (n=200)      Students without prior knowledge (n=304)

| S/No. | VARIABLE | CATEGORY                            |                      |                                     |                      | Pearson's<br>Correlation<br>Coefficient<br>( <i>r</i> ) |
|-------|----------|-------------------------------------|----------------------|-------------------------------------|----------------------|---|
|       |          | STUDENTS WITH<br>PRIOR<br>KNOWLEDGE |                      | STUDENTS WITHOUT<br>PRIOR KNOWLEDGE |                      |   |
|       |          | CW-<br>MEAN<br>SCORE                | EX-<br>MEAN<br>SCORE | CW-<br>MEAN<br>SCORE                | EX-<br>MEAN<br>SCORE |   |
| 1.    | ACE-214  | 86.45                               | 79.57                | 44.42                               | 48.21                | -1.00   |
| 2.    | CBR-114  | 83.33                               | 79.81                | 41.32                               | 43.54                | -1.00   |

**KEY:** CW = Course work

EX = Examination