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SCAFFOLDING TEACHER-TRAINEES' REFLECTIVE OBSERVATIONS ABOUT UTILIZING EMERGING TECHNOLOGIES IN TEACHING LUGANDA LANGUAGE

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Abstract

Although many young learners of the 21st century have grown up with, and generally prefer to learn using Emerging Technologies, and while pedagogically sound use of ETs has potential to transform students' learning, a few teachers of Luganda language graduate with learning experiences of integrating ETs in teaching. One of the most crucial stages of gaining experience is to make Reflective Observations (ROs) about an s object or subject of interest. This paper emerges from a Design Based Research in which 68 teacher-trainees at Makerere University were enrolled in a semester-long (17 weeks) blended learning course aimed at cultivating their experiences of integrating ETs in teaching to revitalize Luganda language (Kabugo, 2015). The larger study was informed by Kolb's (1984) Experiential Learning Theory (ELT) and Reeves' (2006) model of conducting research in authentic e-learning contexts. Towards end of the semester, trainees were tasked to make presentations demonstrating their acquired knowledge of utilizing ETs in teaching Luganda language. Trainees' presentations were video-recorded and vodcasted on YouTube. In effect, trainees were tasked to view vodcasts of their presentations and make written ROs about them. This paper deploys Discourse Analysis as an analytic lens to analyze trainees' ROs.

Keywords: Emerging Technologies (ETs), Teaching Luganda Language, Experiential Learning, Utilizing Vodcasts, Scaffolding Reflective Observations (ROs), and Discourse Analysis (DA).

1 INTRODUCTION

Luganda language is one of the indigenous languages spoken by people of Uganda. Out of the 45+ indigenous languages of Uganda, Luganda is the most widely spoken language with more than eight million speakers (Namyalo, 2013). Although Luganda is a fairly well documented language, and while it is being taught as a subject of study at some education institutions in Uganda, many young learners of this generation are detaching themselves from its study (LTA, 2014). Whereas there are different reasons as to why some young learners of this generation are detaching themselves from the study of Luganda language, this paper focuses on the discrepancy that exists between young students' learners preferences viz. the way Luganda language is actually being taught. While many young learners of this generation generally prefer to learn using Emerging Technologies (Prensky, 2001a), and while pedagogically sound use of ETs has potential to transform students' learning, ETs remain underutilized in the teaching of Luganda language (Kabugo, Muyinda, Masagazi, Mugagga, & Mulumba, 2015).

One of the reasons why ETs remain underutilized in the teaching of Luganda language is that many teachers of Luganda language graduate from their teacher-training institutions with little or no learning experiences at all to integrate ETs in their teaching (Kabugo, et.al, 2015). The need to cultivate teachers' experiences of utilizing ETs in the teaching of Luganda language is critical. Otherwise, many young learners of this generation will continue detaching themselves from the study of Luganda language thereby jeopardizing its continuity. When this phenomenon in not addressed, Luganda language will increasingly be endangered and risk becoming extinct (Kabugo, 2015). This paper emerges from a semester-long (17 weeks) Design Based Research (Herrington, Reeves, & Oliver, 2010) that was conducted at Makerere University to cultivate teacher-trainees experiences of integrating ETs in the teaching of Luganda language. The rest of this paper is organized as follows: theoretical underpinning, objective of the study, research question, research design, analytic framework, presentation and discussion of findings, and, conclusion and reflections.

experienced (Kolb, 1984). The quality of reflections produced, is usually dependent on the type of observations the learner makes. According to Gibb (1988), there are six key epistemic actions, which are evoked in a typical Reflective Observation task. These occur in a sequence and form a cycle as follows:



Figure 2: Gibb (1988)'s Six-Stage Model of Making Reflective Observations.

1. **Describing:** Describing is a visual-cognitive activity which involves presenting a detailed spoken or written account of a subject or an object. This activity requires that; an individual presents every relevant detail pertaining to a subject or object of interest including explaining it's the 5W's namely; the what, where, who, why, and how of its formation / being (Gibb, 1988).
2. **Feeling:** After description, another important step towards gaining experience with a subject or an object of interest is of explaining personal feelings, thoughts, and reactions.
3. **Evaluating:** At this stage, the participant gives positive and or negative judgments about his/her experience of the intervention. As so much can happen during the intervention, the participant can choose and explain one or two such things, that s/he considers to be more important, most relevant or most representative of his/her experience. One of the most crucial questions that could be asked at this phase of OR is: What went well / wrong during the intervention?
4. **Analyzing:** This phase of OR seeks to find answer to "Why? So what? and What if?" questions. The main aim of these questions is to invoke the participant to consider reasons for, and the consequences of, as well as the means by which to improve what went well or wrong during the intervention. Here, the participant also assesses and justifies his/her contribution in relation to other actors in the intervention.
5. **Concluding:** At this stage, the participant summarizes what s/he learnt from the intervention. S/he should be specific about what they learnt or realized about themselves by giving specific details. The participant considers what s/he should or could have done differently, and states the lessons s/he derived from the intervention.
6. **Action Planning:** The last stage of OR is action planning. At this stage, the participant should state and design specific actions and strategies to improve his/her own knowledge, ability, and experience in the future. Thus, one of the key questions, which the participant needs to answer at this stage, is: What do I need to do in order to be better prepared to face this experience in future?

Drawing from Gibb's (1988) six-stage model of making ROs (figure 2), this paper infers that ROs have potential to transform students' learning. Although this inference has been exemplified at a theoretical level, it remains to be enacted and demonstrated at practical level.

4 GOALS / OBJECTIVES OF THE STUDY

- One of the major goals of the larger study was to scaffold and analyze teacher-trainees Reflective Observations about utilizing emerging technologies in teaching of Luganda language.

5 RESEARCH QUESTIONS

- What Reflective Observations did teacher-trainees at Makerere University make about their use of Emerging Technologies in teaching Luganda language?

6 RESEARCH DESIGN

This was a semester-long (17 weeks) qualitative study which followed Design Based Research (DBR) principles. The subsections that follow explain the essence of DBR and illuminate how DBR principles were followed in the larger study.

6.1 Design Based Research (DBR) Approach

DBR has its origins in educators' pragmatic desire to transform pedagogical practices not only in a practical sense, but also from an informed theoretical perspective. Herrington, Reeves & Oliver (2010) put it succinctly:

“[DBR is] grounded in the practical reality of the teacher, from identification of significant educational problems, to the iterative nature of the proposed pedagogical solutions” (Herrington, Reeves, & Oliver, 2010:5).

Inferring from Johannesson and Perjons (2012), there are four pillars of DBR namely; context, researchers and participants, artifacts, and problems/opportunities. Figure 3 below illustrates the relationship between these pillars.

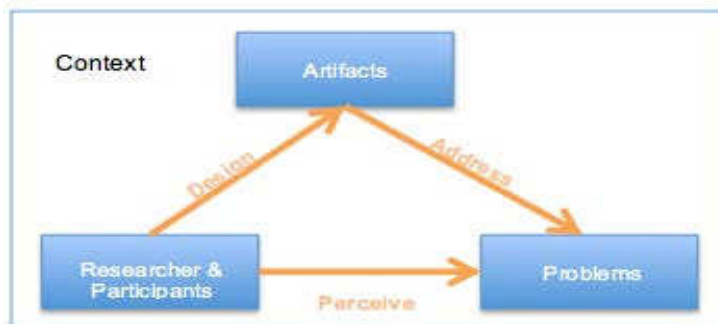


Fig. 3: Pillars of DBR (Adapted from Johannesson & Perjons, 2012).

Figure 3 illustrates the relationship between the three pillars of DBR. The figure shows that DBR is a practical research activity undertaken by researchers & participants in collaboration and whose main goal is to design innovative artefacts (solutions) for addressing an existing / perceived specific problems in a particular context. Although there are different models for conducting DBRs (Herrington, Reeves, & Oliver, 2010; Muyinda, 2010), this study followed Reeves (2006)'s four-phase model that is suited for authentic e-learning contexts.

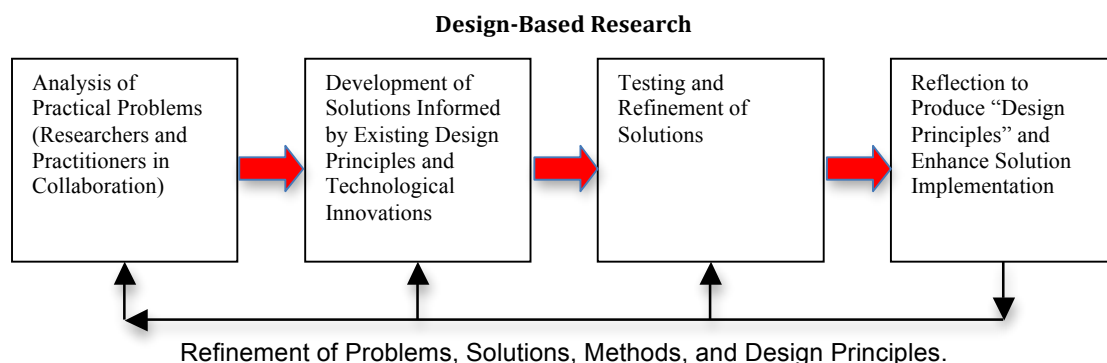


Fig. 4: Reeves' (2006) Four-Phase Model for Conducting DBR in Authentic E-learning Contexts.

6.1.1 Analysis of Practical Problem by Researchers and Practitioners in Collaboration

Identification and analysis of a significant educational problem is the foremost step in educational DBR (Herrington, Reeves, & Oliver, 2010). This stage begins with the making of an observation or assumption that an existing teaching or learning practice is problematic, and that such a problem can be addressed by designing innovative solutions informed by existing pedagogical principles and appropriate technologies (Herrington, Reeves, & Oliver, 2010). As a requirement in DBR, practitioners (participants) should be involved right from this first phase of the study so that the full extent of the problem is known by all, rather than the problem being interpreted and addressed solely by the researchers (Herrington, et. al, 2010). The subsections below present a brief on who the researcher and participants of this the larger study were.

6.1.2 Researcher

The researcher of the larger study is a teacher-educator at Makerere University. His areas of interest include; Use of Emerging Technologies in Education, Luganda Language Education, and Revitalization of Endangered Languages.

6.1.3 Participants

The participants of this study were third year Luganda Language and Education (LLE) teacher-trainees (2012-2013 cohorts) at Makerere University.

6.1.4 Procedure

Before commencement of the study, a call was made inviting the above trainees to participate in a semester-long (17 weeks) blended learning course aimed at cultivating their experiences of utilizing ETs in teaching Luganda language to young learners of this generation. Out of the target group of 78 trainees, 68 responded to the call. All the trainees who responded to the call were accepted to participate in the study.

6.1.5 Identification of Educational Challenge

Although many young learners of the 21st century have grown up with, and generally prefer to learn using Emerging Technologies, and while pedagogically sound use of ETs has potential to transform students' learning, a few teachers of Luganda language graduate with learning experiences of integrating ETs in teaching. This study set to address this educational concern. While the larger study had a wider view (see figure 1 for the quadripartite view), this paper particularly reports on the Reflective Observations that the teacher-trainees made about their use of Emerging Technologies in teaching Luganda language.

6.1.6 Designing Solution Informed by Sound Pedagogical Principles and by Opportunities Afforded by Existing Technologies

In considering how to scaffold teacher-trainees' Reflective Observations about their use of ETs in teaching Luganda language, this study anchored on Gibb's (1988) six-stage model (see figure 2). Although making ROs has potential to transform students' learning (Kolb, 1984), it is difficult to scaffold. In an attempt to resolve such difficulty, this study drew on the opportunities afforded by vodcasts.

Vodcasts refer to video files posted onto Internet for download via digital media players such as smart phones, laptops, and iPads (Cambridge Advanced Learner's Dictionary, 2015). A number of vodcasting tools such as Audioboo, Sound Cloud and YouTube are increasingly becoming ubiquitous. Vodcasting tools have multiple technological affordances (Bower, 2008) such as allowing their users to record, create, upload, import, broadcast, edit, publish, view, share, (un) like, and comment on different videos recordings. Figure 5 below is a screenshot of a vodcasting tool (YouTube), showing some of its technological affordances.

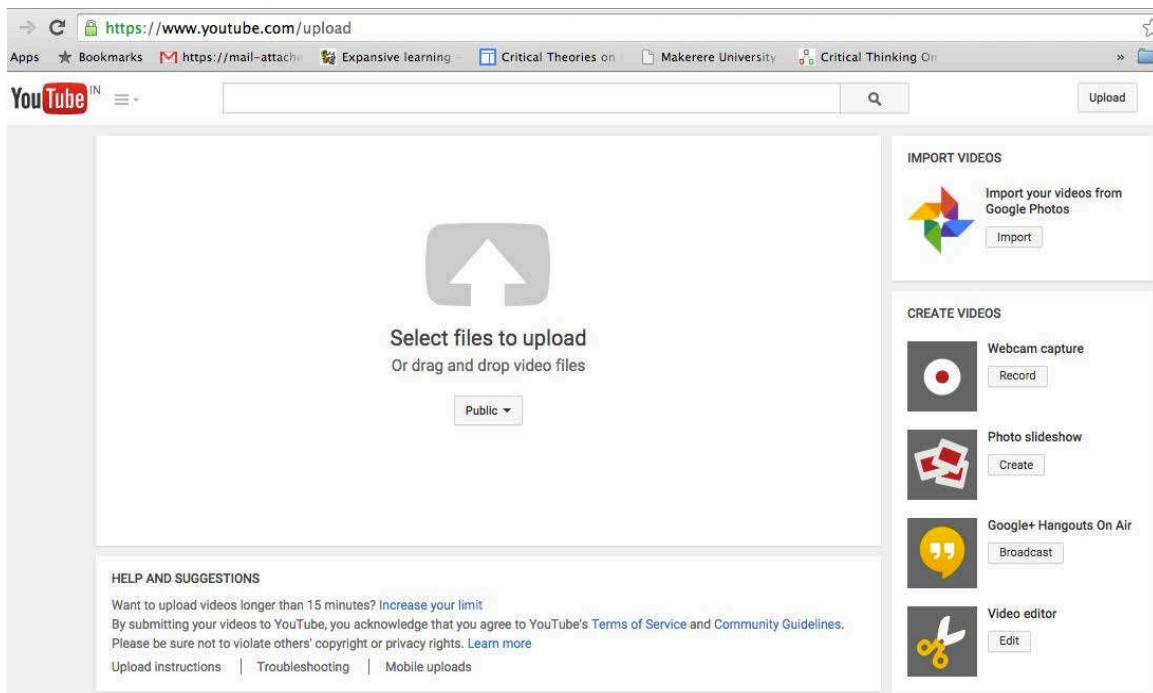


Fig 5: A Screenshot of a Vodcasting Tool (YouTube) Showing its Utilities.

The subsections that follow illuminate how the technological affordances of vodcasts were exploited in the larger study to scaffold teacher-trainees' Reflective Observations (ROs) about utilizing ETs in teaching of Luganda language.

6.1.7 Postulation of a Suitable Learning Task

In the first two weeks of the intervention, trainees were given an opportunity to play and familiarize themselves with more than 50 different educational technologies. This activity took place in the School of Education computer laboratory. The intent of this pre-research activity was to provide trainees with time and space to play with different ETs so that they can become buoyant users of these technologies before they could begin utilizing the same for pedagogical purposes. The SOE computer lab is stocked with more than 100 internet-connected desktop computers. During the intervention, trainees were guided to utilize these internet-connected computers to concretely experience, actively experiment, and abstractly conceptualize ETs in the teaching of Luganda language. Towards end of the intervention, each trainee was tasked to make short presentations demonstrating his/her acquired knowledge of integrating ETs in teaching. Trainees' presentations were video-recorded and vodcasted on YouTube. In effect, trainees were tasked to view vodcasts of their presentations and make written reflective observations about them.

6.1.8 Statement of the Requirements of the Learning Task

Following Gibb's (1988) six-stage model of making ROs, trainees were required to explain what, where, who, why, and how they utilized particular ETs to teach selected concepts in Luganda language. In addition, they were required to explain their personal feelings, thoughts, and reactions, as well as give positive and or negative judgments about their concrete experiences, active experimentation as well as abstract conceptualizations of ETs. Although so much happened during their training, trainees were required to choose and explain one or two such things, which they considered more important, or most representative of their experience and explain what went well and what went wrong during the intervention. Trainees were also required to consider reasons for, the consequences of, as well as the means by which to improve what had gone well or wrong during the intervention. Trainees were required to consider what they could have done differently, and state the lessons they derived from their experience. Trainees also needed to make action plans by stating and designing specific strategies for improving their knowledge of utilizing ETs in the teaching of Luganda language in future. Lastly, after posting their individual ROs, trainees were required to view, (un) like and comment each other's vodcasts as well as the ROs that had been posted by peers.

6.2 Matching Technological Affordances with the Requirements of the Learning Task

Many researchers are looking for ways of understanding what types or categories of learning tasks can be supported by different ETs. Park (2011) referred to the matching of the potentials of technology and learning tasks as “pedagogical affordances”. According to Dabbagh (2011) the process of consciously identifying the unique attributes, features and properties of different technologies in light of requirements of the learning tasks can be termed as “cognitive affordances analysis”. Referring to the same process, Bower (2008) used the term “affordance analysis”. By help of a matrix method, this study matched the technological affordances of a vodcasting tool (YouTube) with the requirements of the learning task (see subsection 6.1.8) that was given to the participants. Table 1 below indicates the affordance analysis.

Table 1: Matching Technological Affordances of a Vodcasting Tool (YouTube) with the Requirements for Making Reflective Observations.

Affordances of Vodcasting Tools: A Case of YouTube	Record-ability	Watch-ability	Pause-ability	Write-ability	Broadcast-ability	Edit-ability	Resize-ability	Move-ability	Playback-ability	Search-ability	Create-ability	Subscribe-ability	Browse-ability	Upload-ability	Like-ability	Link-ability	Highlight-ability	Embed-ability	Permission-ability	Share-ability
Requirements of the Learning Task: - Making Observational Reflections (ORs) about own experiences of integrating ETs in the teaching of Luganda language	✓	✓	✓	✓		✓			✓	✓	✓	✓	✓	✓	✓	✓			✓	✓

Although vodcasting tools have a number of technological affordances, and while many students are increasingly utilizing these tools mainly for entertainment purposes (Ng’ambi, 2008), most pedagogical opportunities afforded by these tools have not fully been exploited. In this study, the technological affordances of YouTube were exploited to scaffold teacher-trainees’ reflective observations about integrating ETs in the teaching of Luganda language. Figure 6 below is a screenshot of one of the compelling video-recordings of trainees’ presentations, which were vodcast on a YouTube channel opened up for the purposes of the larger study.



Fig. 6: Screenshot of One of the Video-Recordings of Trainees’ Presentations Vodcast on a YouTube Channel Opened Up for the Purposes of the Larger Study

7 DATA COLLECTION

This paper utilizes the written Reflective Observations which the trainees made about vodcasts of their own presentations as primary data. These data were posted and retained on a YouTube channel.

8 VALIDITY AND RELIABILITY

In order to ensure validity and reliability of this study's findings, the following were enforced. First, as participants made their ROs in Luganda language, such were translated into English. In order to ensure reliability of translated ROs, inter-translator reliability was conducted. Inter-translator reliability refers to the extent to which two or more translations of the same source text are similar (Gibson, 2012). In this study, two translators were employed and their translations merged to come with a single stable (refined) version. Secondly, peer debriefing of the study's findings (Creswell, 2007) was done to collect views of the knowledgeable others about the goodness of this study's findings. Preliminary findings of this study were presented to academic staff at two different lunch-hour seminars in the College of Education and External Studies at Makerere University. At these seminars, participants gave constructive feedback, which was used to clarify and strengthen this study's findings. Lastly the primary data, on which the findings of this study' are based, were retained. For the purposes of conformability, these could be accessed as closed educational artifacts at the following URL:

<https://www.youtube.com/channel/UCV1FJPiRdsMjv4ZsYrG9eug>

9 DATA ANALYSIS

This study utilized Fairclough (1992)'s three-dimensional framework for analyzing discourses as its analytic tool. Discourses refer to dialogues or conversations (Fairclough, 1992). Discourse theory holds that dialogues or conversations, including their dimensions, shape and are recursively shaped by their constructors (Fairclough & Wodak, 1997). According to Fairclough (1992), every discourse has three dimensions namely: a) the micro dimension, which is the spoken or written text (artifact), b) the meso dimension, which deals with the processes of interaction i.e. the process of production and consumption of text (artifact), and c) the macro dimension, which deals with the context i.e. larger socio-cultural, political and economic environment in which dimensions a & b occur. Fairclough (1992) contends that discourses, including their dimensions, are analyzable at three levels namely: i) description, ii) interpretation and iii) explanation. At the first level, the analyst focuses on a discourse dimension and describes its genre, type, category or quality. At the second level, the analyst interprets i.e. makes meanings and inferences from the genres, types, categories or qualities of a discourse dimension. At the third level, the analyst explains i.e. makes connections and draws implications of a discourse dimension for social practice. Fairclough (1992)'s framework for analyzing discourses and discourse instances can be illustrated as follows:

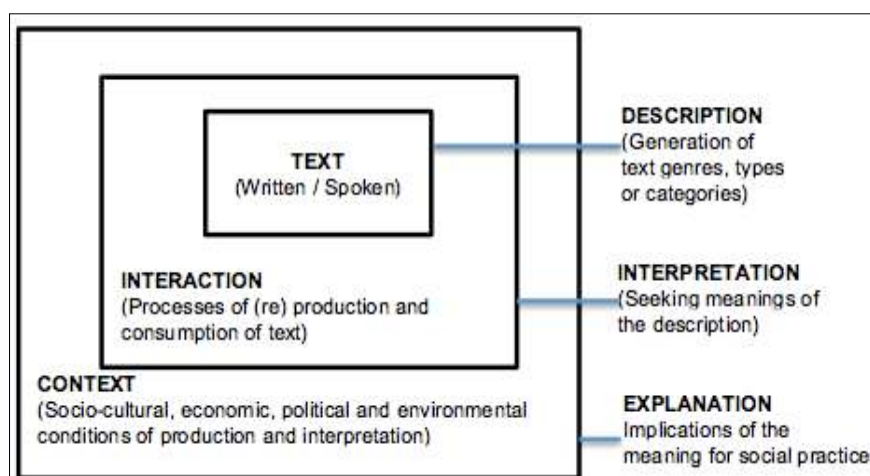


Fig. 7: Fairclough (1992)'s Three-Dimensional Framework for Analyzing Discourses.

This paper employs the above framework to analyze (describe, interpret and explain) the Reflective Observations, which trainees made about their use of emerging technologies in teaching Luganda

language. There was however, a subjective judgment in conducting this activity (cf. Roode, Speight, Pollock, & Webber, 2004). Mindful of such subjectivity, this paper presents its findings in a tabular format. As Roode et al. (2004) advise, such a format can help readers of this paper to construct a comparative or “independent” analysis by referring back to the source texts that precede each analytic table, the translation of the source text (row 1), and the respective descriptions, interpretations and explanations (columns; 1, 2 and 3) given.

10 PRESENTATION, ANALYSIS AND DISCUSSION OF FINDINGS

For the purposes of brevity, four compelling Reflective Observations are analyzed in this section:

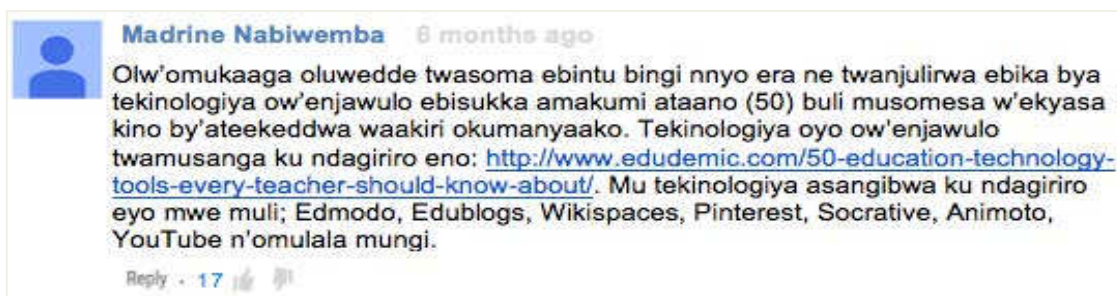


Fig. 8: Screenshot of RO #1.

Table 2: Translation and Analysis of RO #1.

<p><i>Last Saturday, we learnt so many things and we were introduced to more than 50 different technologies, which every teacher in this century should at least know about. We found these different technologies at the following URL: http://www.edudemic.com/50-education-technology-tools-every-teacher-should-know-about/ Some of the technologies listed at this URL include: Edmodo, Edublogs, Wikispaces, Pinterest, Socrative, Animoto, Tube, and so many others.</i></p>		
Description	Interpretation	Explanation / Implication
<p>Trainee reports when, and what ETs she was introduced to.</p>	<p>This way of presenting detailed account of things / events is called descriptive writing / reporting (Hatton & Smith, 1995).</p>	<p>The main goal of descriptive reporting is to provide evidence of basic knowledge of, and engagement with an object or subject of interest (Mezrow, 1991; Hatton & Smith, 1995). RO #1 provides evidence of trainees' acquisition of basic knowledge of ETs.</p>

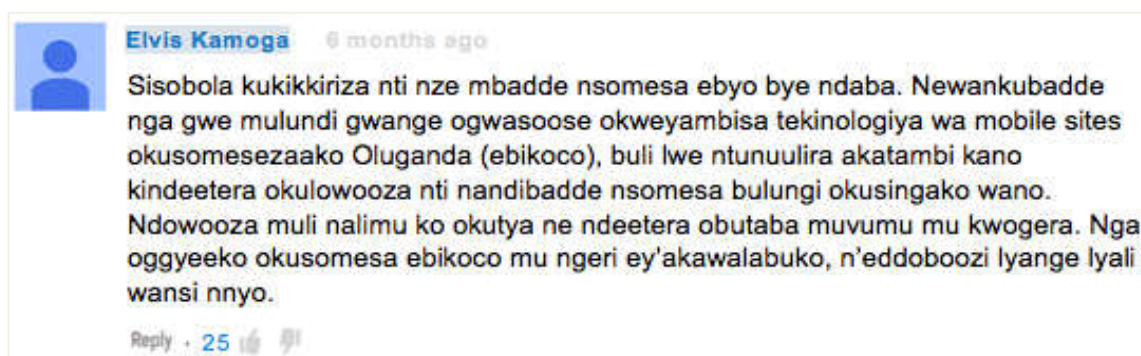


Fig. 9: Screenshot of RO #2.

Table 3: Translation and Analysis of RO #2.

<p><i>I cannot believe that it's me who has been teaching what I am seeing [in the video]. Although this has been my first time to utilize mobile sites for teaching Luganda (riddles), every time that I look at my own instructional video, it makes me to think that I should have taught better. I think I had some fear inside me, which took away my courage as I was talking. Apart from teaching riddles rather hastily, my voice was also very low.</i></p>		
Description	Interpretation	Explanation / Implication
<p>Trainee is uncontented with his current knowledge of utilizing ETs in teaching. Although it was his first time trying out an emerging technology for teaching, he believes he should have done better. He is determined to explore and find out better ways of teaching a Luganda concept (riddles) using ETs.</p>	<p>Trainee is discoursing to himself. This kind of RO is called Dialogic Reflection (Hatton & Smith, 1995)</p>	<p>The use of vodcasts to mediate RO helped trainee widen his perspectives on use of ETs in teaching. Every time the trainee looked at his own instructional video, he got new insights! This observation supports Ng'ambi's (2008) argument that "reflection allows learning activities to continuously evolve and transform hence creating a dynamic learning process or an expansive learning process" Ng'ambi's (2008:1)</p>

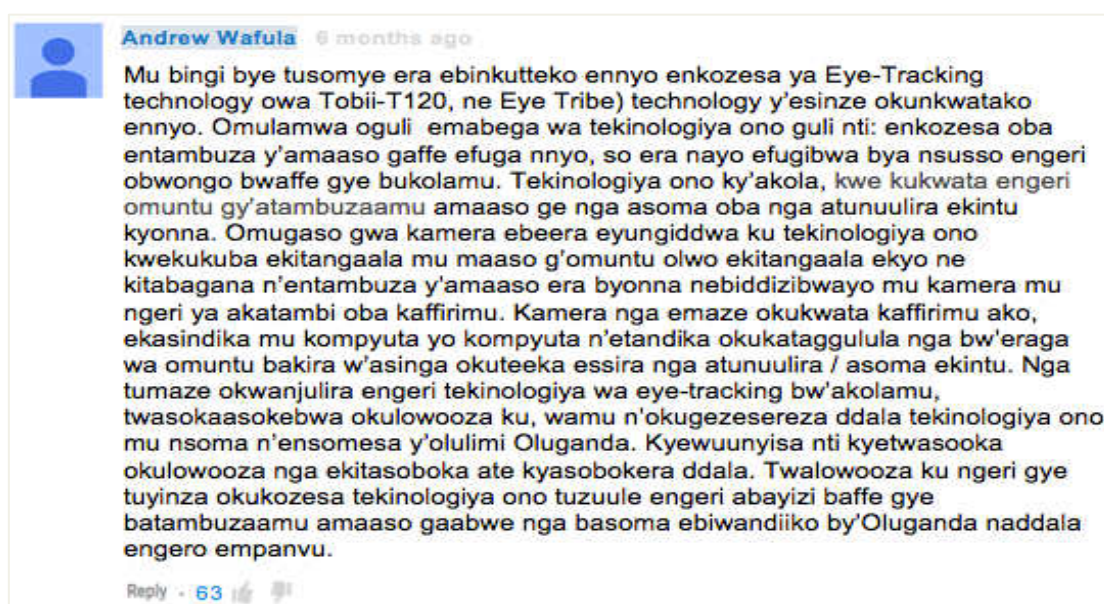


Fig. 10: Screenshot of RO #3.

Table 4: Translation and Analysis of RO #3.

<p><i>Of the many things that we have learnt and have touched me, is the use of Eye-Tracking technology specifically Tobii-T120 and Eye Tribe. The basic idea behind eye-tracking technologies is that: our eye movements shape and are recursively shaped by brain / cognitive functioning. What eye-tracking technology does is to capture and record how an individual moves his/her eyes when reading or viewing anything. The function of the camera that is attached to this technology is to project right in the user's eyes such that the light interacts with the eye movements to be infrared back and recorded by the camera as an interactive video. This interactive video is sent to the computer for decoding and analysis of fixations and saccades. After introducing us to how this technology works, we were tasked to think about and actively implement / utilize this technology in the teaching of Luganda language. It is surprising that what we initially thought was impossible turned out to be very possible. We thought about how we can utilize this technology to analyze our students' movements when reading Luganda literary texts.</i></p>

Description	Interpretation	Explanation / Implication
Trainee presents a detailed description of how Eye-tracking technology works and how they planned to utilize this technology to analyze their students' eye movements when reading Luganda literary texts.	This way of presenting detailed account of things / events is called descriptive writing / reporting (Hatton & Smith, 1995).	Although descriptive writing is a relatively lower-level cognitive skill compared to dialogic and critical reflection (Hatton & Smith, 1995), it is a crucial indicator that an individual has grasped the essence of a subject or an object of interest. The process of describing helps an individual to trace and reproduce theoretically the logic of the development / being of an object/subject of interest. This RO indicates that the trainee grasped the essence of utilizing eye-tracking technologies in the teaching of Luganda language.

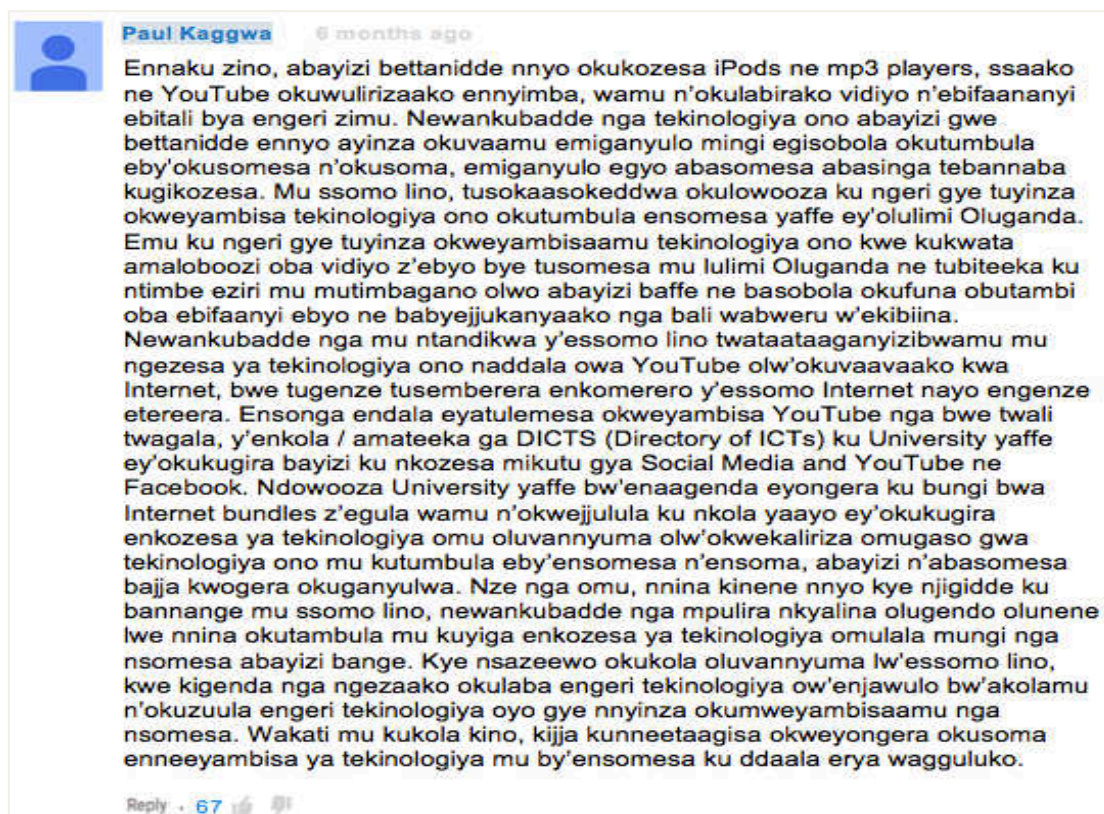


Fig. 13: Screenshot of RO #4.

Table 5: Translation and Analysis of RO #4.

Now days, students are increasingly using iPods and mp3 players, plus YouTube to listen to music, and view videos and pictures of different genres. Although these technologies have potential to transform teaching and learning, many teachers have not yet utilized such potentials. In this course, we have been challenged to think of ways in which we can make use of these technologies to transform our teaching of Luganda language. One way in which we can utilize these technologies is to record audios or videos of what we teach and post the same on to the web pages so that our students can have access to the audio-video form their lessons and remind themselves outside the classroom. Although at the beginning of this course we were challenged in the testing of this technology – especially YouTube, due to Internet fluctuations, towards the end of this course, the Internet has been stabilizing. The other challenge that burred us from using YouTube as we would have wanted, are the regulations / policies of the Directorate for ICTS (DICTS) of our university which limit the use of YouTube and Facebook. I think as our university increases on the Internet bundles it purchases, and revises its regulations and policies on use of certain technologies after reflecting on the potential of such technologies to transform teaching and learning, lecturers and students will continue to benefit. As an individual, I have learnt a lot from my friends in this course, although I believe I still have a very long journey to walk as I learnt how to utilize so many other technologies in the teaching of my students. What I have decided to do after this course is to find out how other technologies work and how I can utilize them in my teaching. In order to do so, I will need to enroll for studies in the use of technologies for teaching learning at a higher level.

Description	Interpretation	Explanation / Implication
<p>Trainee reports on the students' practice of using podcasting and vodcasting tools for entertainment. He questions this existing practice and proposes an alternative potential transformative practice. He is aware of the limitations of implementing an alternative practices. Proposes a change in institutional regulations and policies about use of technology for the purposes of transforming students' learning.</p>	<p>This kind of RO in which a participant questions existing practices and suggests new approaches to transform such practice, mindful of the broader institutional, sociocultural, economic and political challenges, is referred to as critical reflection (Hatton & Smith, 1995).</p>	<p>Critical reflection can help educators to justify reasons for decisions about use of technologies in teaching, by taking into account their broader institutional contexts and disciplinary practices. Critical use of ETs by educators has potential to leverage the design of activities which can transform existing teaching and learning practices (Ng'ambi, 2014).</p>

11 CONCLUSION AND REFLECTIONS

This paper has emerged from a larger Design Based Research in which 68 teacher-trainees at Makerere University were enrolled in a semester-long (17 weeks) blended learning course aimed at cultivating their experiences of integrating ETs in teaching Luganda language. Towards end of the semester, trainees were tasked to make presentations demonstrating their acquired knowledge. Trainees' presentations were video-recorded and vodcasted on YouTube. In effect, trainees were tasked to view vodcasts of their presentations and make written Reflective Observations about them. This paper has described, interpreted and explained selected ROs. Four major genres of ROs emerged from trainees' postings. These are: descriptive writing, descriptive reflection, dialogical reflection, and critical reflection. Participating in the making of these ROs helped trainees grasp the essence of, and widen their perspectives and knowledge of utilizing ETs in teaching Luganda language. Trainees were able to trace and reproduce theoretically the logic of utilizing different ETs in teaching Luganda language. Some trainees were also able to justify reasons for their decisions about the use of certain ETs in teaching taking into account their broader institutional contexts and disciplinary practices. This paper suggests that continuous engagement in this activity has potential to leverage the design of training activities which can transform teacher-trainees experiences of utilizing ETs in teaching Luganda language. Lastly, trainees' engagement in this research activity has potential to revitalize the teaching of Luganda language in so many ways. In this study, conduction of this activity led to production, and consumption of several educational resources including different instructional videos. These instructional videos were published online and could be accessed as closed Luganda language educational resources at the following URL:

<https://www.youtube.com/channel/UCV1FJPiRdsMJv4ZsYrG9eug>.

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