

EliTek Tanzania

International School

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Introduction

EliTek is an English language dictionary service that delivers definitions of vocabularies through SMS. EliTek has a server made from an old CPU used to store definitions of the vocabularies based on the Miriam-Webster dictionary. Currently, the system holds more than 171000 definitions of English vocabularies.

The name "EliTek" was derived from Swahili words "Elimu Teknolojia" which could be translated to "Education Technology". EliTek is a project created by students and that addresses the need for quality education (SDG 4) for Africans — making the whole learning processes easier.

EliTek's vision is to become the African search engine that will cater to the needs for Africans, value both the African culture and child safety in the use of technology platforms. EliTek envisions to advance the African education system by empowering millions of fellow African youth who do not have access to quality and affordable educational content.

Method

Experiment I

In order to effectively solve and tackle the problem, we conducted two experiments at two different schools in Arusha. Olmoti Secondary School and Magereza Primary School.

Aim: The aim of the experiment was to determine whether students in both primary and secondary schools understand the basic English terminologies used in schools during the English lesson and all other lessons respectively.

Procedure

We conducted surveys to students from Magereza and Olmoti Primary and Secondary School respectively. These schools are our neighboring community, and of course "Charity begins at home". We usually come across students from the mentioned schools every day as they walk to and from school. The experiment was conducted in the form of a survey. Students were asked questions orally and answered orally in Swahili or English language

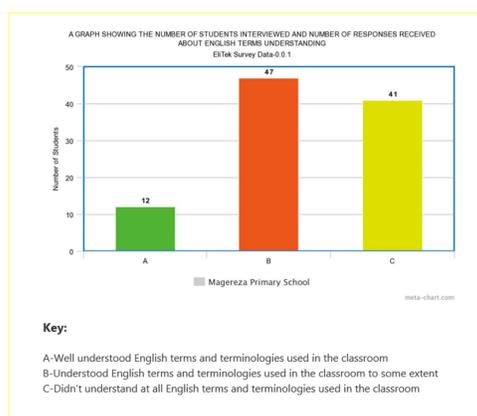
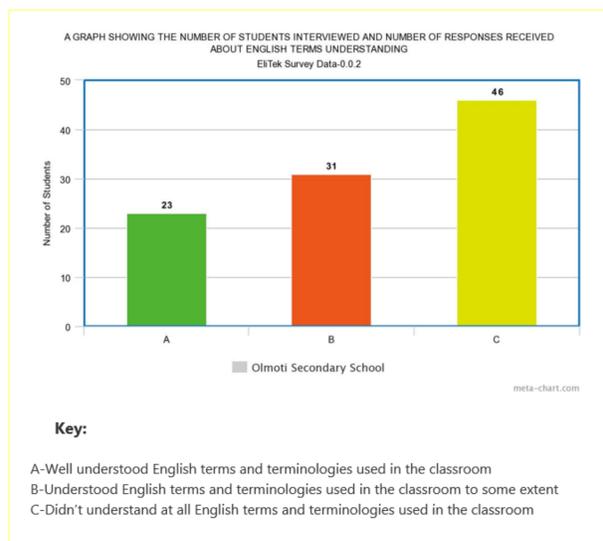
Two experiments were conducted in two government schools to 200 students to investigate whether students understand basic teaching terminologies used in class or not. The following were the responses received from students

Results

Most of the students explained what they had learned in science. This includes the general basic concepts that they were taught in class. However, when we asked them about the meanings of basic terms or words their teachers used in class like "fox, took, notes, write, understand, squat" etc, the majority of the students did not know what the words meant.

Moreover, the number of students who responded in class that they had understood dropped to a very low number when asked about what they had learned in class after the end of the subject.

Below, are the two graphs showing the level of understanding of students as it was shown in class, and the level of understanding of students (reality) as it was shown outside the classroom. The experiments were conducted also in a survey questionnaire form where 70 students got



Conclusions

We recognize the early works of developing an SMS search engine by Google for users of lower-end devices, but which later closed the service because of unspecified reasons. We believe that fishes can't be fished from the sky, and so one needs to go to the river, lake or where the fishes dwell. We are actually extending the thought and implementing it to the people who need it the most.

Despite EliTek's current ability, the system could be improved further by innovating a way of streaming videos through SMS. A system that could decompile the bytes sent and transfer them via SMS and then recompile back the bytes to form a video. This could help EliTek add SMS based video streaming services, and hopefully, anyone could stream anywhere.

Acknowledgments

The support, assistance and criticism that we have received when preparing this project made the whole thing possible. Without the encouragement of our family, friends and teachers we would have never have had the energy to complete this.