

Impact of Prior Knowledge in English to Follow Degree in English Medium - Special Reference to Computer Science Students

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Abstract:- The aim of this research paper is to investigate how the English knowledge of undergraduates impact when pursuing a degree in English medium specially for computer science students. To conduct this experiment, first utilize the data samples from Trincomalee eastern university of Sri Lanka with the computer science department. Through the experiment, it was identified that there is a measurable impact on semester success for the undergraduates when academic studies are educated by the English language. This influence highly impacted the first-year students but still existed in some students by the second and third year. However, the important thing is prior knowledge in English, highly impacts to pursue a merit pass and benefitable scholarships. But it should be noted, studying an English medium degree in computer science is fascinating to pursue international achievements and English medium instructions are highly impactful to pass the first degree of the university students.

Keywords:- Impact, semester success, English instruction, eastern university.

I. INTRODUCTION

Considering the last two decades of Sri Lanka university study, English medium study has significantly increased. Computer science graduates are open jobs available both locally and internationally. Most of the state universities and almost non-state universities of Sri Lanka use English as the base language to provide guiding learning instruction for university students. Many countries around the world use English as their primary language to study undergraduate and postgraduate programs. Not only those graduates are opening jobs, they are employing English as the major language of their company excluding some countries such as Japan, China, Korea, etc. The university is the base point for students to open their way internationally, especially computer science students who must work in an English based environment. Because IT related organizations are completely dependent on the English language. Especially European universities that are offering a wide range of the courses and degrees in the different countries significantly use English language.

Like other Sri Lanka universities, the main goal of becoming global or international universities is one of the main reasons to necessarily use English in academic studies. In our countries there are both positive and negative impacts when using English medium instruction

for graduating students. Computer science students normally spent their time with computer-based software.

Their entire culture is more familiar with computer-based applications. One of the major advantages for computer science students is being able to increase the quality of their using materials such as articles, web references, journals, etc. Most of the computer science materials are available in English language. The academic lectures contents are also based on the foreign English based language. Without proper observation about subject related facts students are more difficult to obtain better marks for their examinations. The university in our country, students come from different cultures, and among them most of the students use only Sinhala or English as their mother language. So, most of the users have significant language understanding problems in English.

Although usage of English language in university education is significantly widespread, the concerns about students being able to face difficulties when achieving academic achievement and goals. During this experiment, the conclusion is that there is a negative influence when achieving academic goals when using English as a medium to provide theories and instructions to poor English knowledge students.

II. LITERATURE REVIEW

Success in academic achievement depends on many factors. The Intelligence of the student is the most important factor when achieving academic goals. Some countries' students' achievement depends on their knowledge of their language to study. Specially for computer science students more important to prior English knowledge to achieve academic success. There are many past experiments results available.

Murray in 2012 represented experiment results as Language skill is another more important factor when influencing academic success. He reported weak language skills with Australia students facing problems when achieving academic success.

In 2007, Zangani & Malaki reported the relationship between studied language proficiency and academic success interacting with each other.

Cekiso et al in 2015, not found any statistical relationship between language proficiency and academic success.

In 2014, Ballantine and Rivera looked at the performance of applicants for the International Baccalaureate Diploma Program (IBDP) who took exams in languages other than their home tongue. They discovered that students who took the tests in a non-native language (the majority of whom had non-native language school courses) performed better than others. However, their strategy prevents them from distinguishing between other factors that influence test performance.

Mahinda Karawera who is the former director of education at the curriculum development center, MOE in Sri Lanka says English-medium learning for the students can be meant to preserve the status of the elites.

III. DATA AND METHODOLOGY

In order to find impact of prior English knowledge to success of the computer science students, create forum to get students comments about their English knowledge level, family background, success of the following computer science degree achievement, etc. group of the study was specially selected team that is 200 students of the computer science department in Trincomalee campus, eastern university. Computer science department of this university students are in multiple cultures of the students and different native languages.

Data collection was done only using computer science students because this experiment focuses only on English knowledge impact for computer science students. These results will be equal for other faculties because they apply the same procedures in other faculties.

Using forum application collect students more important information such as student name, degree, O/L and A/L results for the English, whether there understanding theories by English medium, native language, most preferable language, satisfaction about their English knowledge, etc. there was two dependent variables as understanding theories by English and satisfaction about their English knowledge. Others were independent variables. But dependent variables do not directly give the impact of prior knowledge about English to the success of academic achievements. During observation, not graded results yet for the first-year students, there most of the students are bright and all motivated to achieve higher academic success.

For 'Field20: Theory subjects', 'Field18': **Not yet** has noticeably higher 'Field22'.



Fig. 1: analyzing data

There were many students who didn't have prior knowledge about the English language, but had good technological skills. Above figure1 shows students' response relative to lecture comprehension.

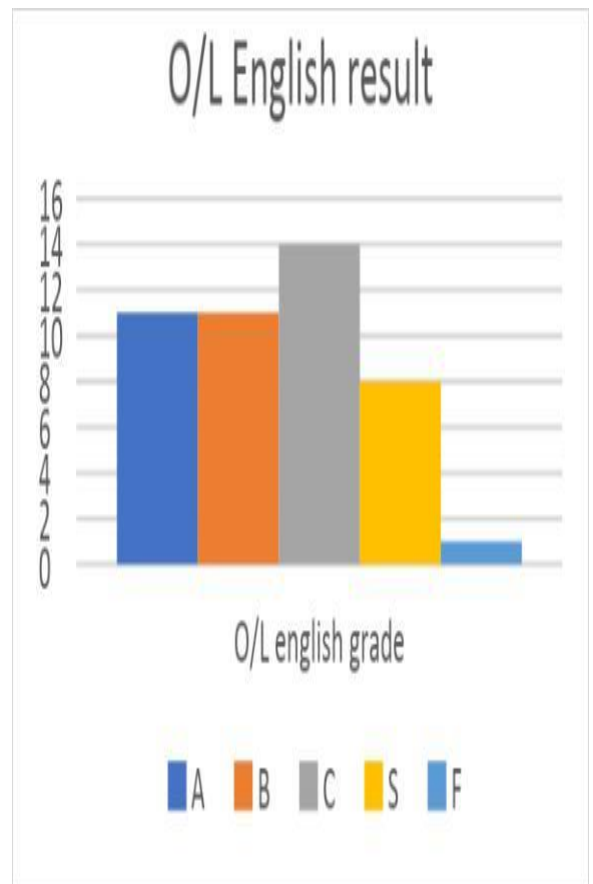


Fig. 2: O/L English results

Additionally analyze these collected students' responses according to lecture understand ability with prior English knowledge. Furthermore, analyze these data using an analyzing tool and classify that only one student fail English in O/L (figure 2), but problem was there was several students cannot clearly understand lecture content of the English (figure 3).

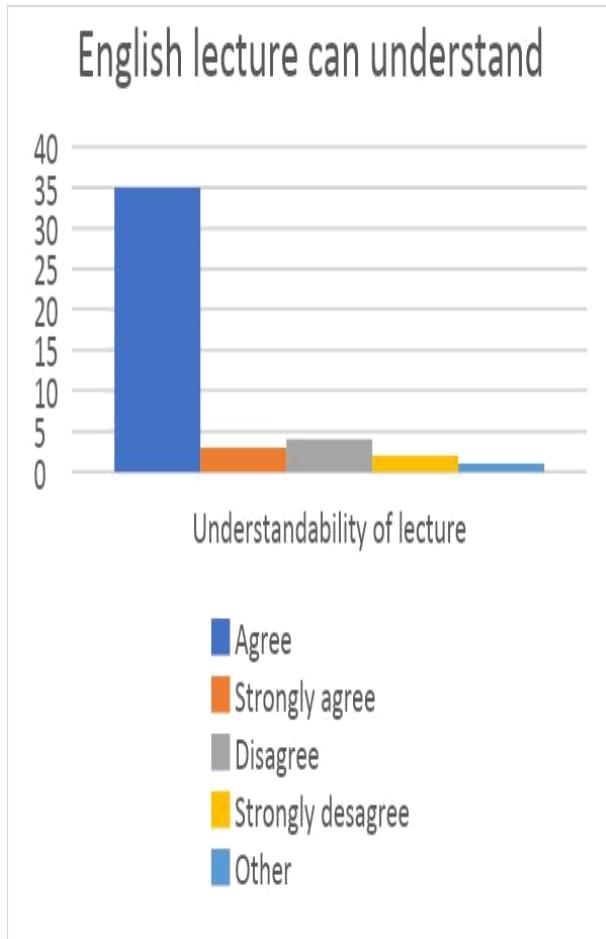


Fig. 3: Lecture understandability

IV. RESULTS AND DISCUSSION

When researching the impact level responses categorized into several categories. from the computer science faculty students 99% students was passed English language in O/L level exam, but there were some students cannot clearly understand the lecture contents in English. There are 175 students who can understand lecture contents clearly without error and 15 students can understand very well. Among of the Sinhala, Tamil, and Muslim students, five students were very low level to understand English lecture content. Twenty students were given the 10 marks out of 10 satisfactory about their English understandability, twenty five students gave the lowest value for their satisfiability. Others were provided middle level value.

If students achieve the highest GPA result for their first year, students fulfill necessary skills. The achievement of the first-year result affects the ability to handle prior English knowledge in proficiency. Thus, based on the aforementioned simple facts, it appears that the only explanation for students' low performance in English degree programs is non-native language instruction.

All students enrolled in university English degree programs have access to the same academic and other resources at the institution; the same professors teach all students, and the curricula are the same. The cost of tuition is likewise the same. The sole variation between the English programs is the level of prior English expertise.

During the experiment analysis, obtaining better results is for the first-year computer science students for their higher marks prior knowledge of English depend on to obtain better results. But there were more skillful students. When analyzing last year's student performance it depends on both language proficiency and more skills to obtain higher academic success for computer science students.

V. CONCLUSION

Role of the experiment research report was to find the impact prior English knowledge of computer science students. For the analysis process collect 200 students' response data samples from computer science department students Trincomalee Campus, Eastern university. Here the results for the third-year students highly impact English knowledge to obtain higher marks for the examinations, but when going to second or last-year students are able to understand and write skills in English language. So final year exams achievement depends on both language proficiency and skills about the technology. But with less mark's results students are available with higher level skills than others. It has been said that teaching in a non-native language presents a slew of challenges for students. Students who are not proficient in the medium of instruction language, which is not their mother tongue, struggle to understand course contents.

Conversely, course materials written in English are often superior in quality and quantity than course materials written in the students' home tongue. It's impossible to say which of these factors dominates the other a priori.

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