A Study on Computer & English literacy of 1ˢᵗ year undergraduates of UOC FOS

Group 01

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Introduction

○ Computer literacy can be defined as the ability to use computers & other technologies in a knowledgeable & efficient way rather than using them just for day-to-day purposes.

○ The knowledge and skills to use computer-based technologies from elementary level to advanced concepts like computer programming are related to computer literacy.

○ Having the ability to read, write, speak and listen in English can be defined as being literate in English.

Introduction ctd…

○ In our study computer literacy is partitioned into two categories. Such as Basic Computer literacy and Basic programming knowledge.

○ Three main areas that considering here are,

1. English literacy

2. Basic Computer knowledge

3. Basic programming knowledge

Significance of the study

○ Computer and English skills plays a major role in University activities as well as for the jobs.

○ Computer programming also becomes a basic requirement in many industries.

○ In school education system does not provide proper background for those skills.

○ Hence, it is important to observe the level of literacy of computer and English literacy of the undergraduates.

Objectives

- To determine how programming knowledge are associated with gender.
- To figure out how programming knowledge are associated with Stream.
- To investigate if the students from western province have a higher English and computer literacy compared to other provinces.
- To check whether if the parents'/guardians' education has an influence on English literacy.
- To identify the most effective way out of self-study and by following a course to improve computer literacy.

Variables

Variable name	Variable Description
Registration Number	The registration number of the student
Gender	The gender of the student (Male, Female)
Province	The province student from (Western, Southern, North…)
Uni_Stream	The stream student follows in the university (Physical, ISMF, Bio, MB)
Z score	Z score value
Parents' or guardian's education	The highest education level of a parent or guardian (O/Levels or Below, A/Levels, Diploma, Degree or Higher)
Computer	Whether the student has a computer or not (Yes, No)
Computer_Usage	How long the student has been using a computer (Less than year, 1-3 years, more than 3 years)
O/L_ICT	Whether the student has followed ICT for O/levels or not (Yes, No)

Variables

ICTGrade	The grade obtained for O/level ICT (A, B, C, S, W)
ComputerCourse	Whether the student has followed any computer course or not (Yes, No)
ComRate	Computer literacy rate (Very good, Good, Average, Weak, very weak)
MSWord	MS Word skill level (Very good, Good, Average, Weak, very weak)
MSPowerPoint	MS PowerPoint skill level (Very good, Good, Average, Weak, very weak)
MSExcel	MS Excel skill level (Very good, Good, Average, Weak, very weak)
ProCourse	Whether the student has followed any programming course or not (Yes, No)
ProLanguage	What programming language the student has followed (Python/ Java / JS /None/ Other)

Variables

ProgrammingRate	Programming literacy rate (Very good, Good, Average, Weak, very weak)
EngCourse	Whether the student has followed an English course or not (Yes, No)
O/LGrade	The grade student has obtained for O/L English (A, B, C, S, W)
A/LGrade	The grade student has obtained for A/L English (A, B, C, S, W)
EngLit	Whether the student has followed English literature for O/L or not (Yes, No)
EngLitGrade	The grade student has obtained for O/L English literature (A, B, C, S, W)
Understanding	The rate of understanding level of lectures, lecture notes, references etc. (Very good, Good, Average, Weak, very weak)
EngRate	English literacy rate (Very good, Good, Average, Weak, very weak)

Methodology

- Computer & English literacy of 1st year undergraduates of UOC FOS was selected as the study, after discussing with group members.
- Objectives were created and clearly identified after discussing with group members.
- Questionnaire was designed using google forms.
- Questionnaire will be presented to the lecturers to get feedback.
- Pilot survey will be done for a small sample.
- Survey will be distributed among the individuals using Whatsapp.
- Responses will be observed and unusual data points, missing values and outliers will be identified.
- The data will be pre-processed using data cleaning techniques before the analysis, if required.
- The analysis part will be done using SPSS and R softwares.
- The report will be prepared.

Methodology ctd…

Target Population: 1st year undergraduates of UOC FOS

Sampling Frame: A list of phones (WhatsApp) numbers of 1st year undergraduates

Mode of data collection: Questionnaire via google form

Time schedule

11/21-11/27	11/28-12/04	12/05-12/11	12/12-12/18	12/19-12/26	12/26-01/02	
■						Research topic
	■					Project proposal
		■				Project proposal presentation
						Data collection
			■			Data analysis
						Report writing

Questionnaire

○ Mainly consists with 4 sections.

   - Basic informations of the respondent

   - Basic Computer Literacy

   - Computer programming literacy

   - English literacy

○ https://forms.gle/aC3bvyyttwASCTgu5

References

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Q & A Session

Thank you!