

Needs Analysis of English Language for Geoscience Undergraduates of Bamyán University, Afghanistan

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ABSTRACT

The purpose of this investigation was to identify the English language needs of the students currently studying at the Geoscience faculty of Bamyán University in Afghanistan. Total number of 306 under-graduates of Geoscience students from the second and third-year classes took part in this investigation. The main tool for data collection was a student questionnaire used to evaluate learners' perceptions and needs of the English language. The results of the study show that when students come to the University, the English language proficiencies are quite low. The finding of the research shows that 20 per cent of the students' level are beginner, 30 per cent of the students' level are in pre-intermediate, 30 per cent of them are intermediate level and 15 per cent of them are in the upper-intermediate level and 5 per cent of them are in advance level. And most of the students' study English for academic purpose and for their future profession. Likewise, the students believe that their English language proficiency has a vital effect on their academic performance in content subjects. Furthermore, the current English language program and classroom resources do not fulfil their needs as they prefer to have a class with lots of activities or more student-centred. Moreover, a majority of the students were not satisfied with the amount of time allocated for English classes. In addition, the majority of the students believe that if we don't know English well, we can't find a handsomely paid job. It is hoped that the findings of this study would be the basis for designing a suitable course that would meet students' needs.

Keywords: Needs analysis, English language needs, language proficiency

INTRODUCTION

For the last three and four decades due to the conflict, Afghanistan was an isolated country. However, recent political changes in Afghanistan resulted in the collapse of the Taliban regime. In 2001, Afghanistan became the focal point of the international community [1]. The government could establish relationships with foreign countries in various fields such as politics, economy, business, culture and education. And many international companies invested in different regions of Afghanistan. One of the prioritized fields which needed urgent action to be reviewed was education. As a result, thousands of Afghan students were sent abroad to study. The close contact of Afghans with international communities resulted in the emergence of English as a dominant language in all fields of Afghans lives. And of these fields, education is the most salient one. This is evident increased English teaching hours and making English compulsory at different levels of education

[2]. Hence, English language proficiency became as important as the employee, major-related field when it comes to employment opportunities, as local and international organizations prefer to hire employees with good proficiency in English. Furthermore, to keep abreast with the demands of job markets and the aims of higher education policy, geoscience faculty give importance to English as the language of science and technology.

The students of the geoscience faculty of Bamyan University study general English course for two academic years. The students learn English to prepare themselves for the job market. This study could be the first step towards involving the geoscience students in the processes of an English language curriculum design in war effected and under-developed country like Afghanistan. As matter of fact, it is also clear that the current English language program may not fulfil the needs of the students. Hence the main objective of this study is to identify the English language needs of current students in the geoscience faculty of Bamyan University.

DEFINITIONS OF NEEDS ANALYSIS (NA)

Needs analysis (NA) is an information-gathering process it is used in language planning since 1970. A needs analysis is administered to find out what the learners will need to deal with in the foreign language in the targeted situation and how learners could be proficient in the target language through the period of teaching [3]. Furthermore, Nunan stated that needs analysis addresses the processes of collecting information about learners and about communication tasks for use in syllabus design [4]. Ellis and Johnson stated that needs analysis is a way of getting comprehensive information of learners, needs or a cluster of learners needs [5]. Needs analysis considers the specific purposes that the learners will use the language, the types of language to be used, the beginning level, and the target level to be achieved. The information can be collected from different types of stakeholders, for example, teachers, learners and potential employers. Similarly, Bachman and Palmer claimed that needs assessment is concerned with the collection of certain information about the language needs of learners and the exploration of this information for language syllabus design purpose. Thus, it can be interpreted that needs analysis plays a significant role in the development of designing a language program. The program could either be English for Specific Purposes (ESP) or English for General Purposes (EGP).

A Review of Previous Studies

Research has been done on learners needs in different areas of academic settings in various University and institution around the world. Kim conducted a needs analysis to identify the English language needs for Geoscience students in Korea. The groups investigated were the students, the Geoscience professors, and the industrial workers. Her findings indicated that students need to understand the significance of general business English [7]. On the other hand, industry workers have a low level of satisfaction with their English language ability. Furthermore, the findings showed that the language course should allocate more time to writing skills. Additionally, geoscience professors have a very low level of satisfaction with the students' English ability. In conclusion, all three groups agreed that communication with customers is very important and the required proficiency level is higher than the present level.

Similarly, Midoul carried out a needs analysis to investigate the English language needs of Moroccan engineering students and their perceptions towards the usefulness of the current English language teaching materials and the students' perceptions of their needs. The findings of the study showed that students have positive attitudes towards learning the English language, and the students rated speaking and writing skills

as productive skills that they want to develop most [8]. Furthermore, the students claimed that the current teaching materials do not match their needs.

A study to assess the English language needs of engineering students to determine the possibility of designing a textbook based on the obtained perceptions from the investigation was conducted by Salehi. He carried out a questionnaire survey on 260 students at the Sharif University of Technology. The findings showed that students need to improve their writing and speaking skills. And he suggested that priority should be given to the two mentioned skills in the curriculum [9]. Likewise, Rahman investigated the needs for reading skills of undergraduate students of Computer Science at Putra University, Malaysia. He conducted the investigation based on three situational aspects to identify language needs: Target Situational Analysis, Present Situational Analysis and Learning Situational Analysis. The findings of the study showed that most of the undergraduate students of Computer Science discipline had problems in reading skills, mostly in skimming for the meaning of the material written in English, scanning to elicit specific information of subject matters written in English and interpreting the meaning of the subject matters written in English. He recommended an English language course, English for Computer Science that fits the target needs of undergraduate students to improve their skills in the English language for their specialized field at the university [10].

All the studies mentioned proved the importance of identifying learners needs. From the conducted studies, the necessity and usefulness of needs analysis before designing any courses can be inferred. Nonetheless, Hutchinson and Waters suggested that learners' needs must be evaluated continually, because these needs could possibly change due to the process of time, depending on contextual and human affective variables [11].

METHODOLOGY

A students' questionnaire was used as needs analysis instrument.

Participants

The participants who took part in this investigation, for the purpose of conducting a needs assessment, were 306 second and third year of Geoscience undergraduate students of Bamyar University. The students belonged to the departments of environmental Engineering, Geodesy Engineering, and Geology & Mine engineering.

Instrumentation

The instrument used in the study was a survey questionnaire. The questionnaire was divided into two parts, all of them are adopted from Qasemi's format in his work "An Investigation of English Language Needs of Engineering Undergraduates" [12]. The first part deals with the participant's demography including age, sex, academic year and level of English proficiency. The second part was divided into four sub-sections. The first part was concerned with the Perceptions of the students regarding the importance of English in their professional field and future career. The second part deals with students' perceptions regarding the current English language program, the third parts deal with students learning preferences in language skills and the fourth part deals with the students' perceptions about the classroom collaboration, teachers' role preferences and time allocation. To ensure the intelligibility of questionnaire items, the Persian version of the questionnaire was administered to the students.

Data Collection

The data were collected during the spring academic semester. A briefing was given before the students answered the questionnaire as the students have not had any previous experience to answer questionnaires.

DATA ANALYSIS

Descriptive statistics were only used and analysis was showed by frequency and percentage.

Proficiency Level of the Students

The table below shows that 92 (30 %) of the participants were at the beginner level and 61 (20 %) participants are at the pre-intermediate level. In addition, 92 (30%) participants are at the intermediate level. And also, 45 (15 %) of the participants are at the upper-intermediate level. In summary 16 (5 %) students are at an advance level. The reason behind students' lower English proficiency is that majority of the students in Bamyán University come from a rural area where there is not any private English centre and even those rural areas do not have English teacher at school.

Table 1: English Proficiency Level of the Participants

The level of English proficiency of the students when they come to university.	frequency	valid percent
Beginner	92	30 %
Pre- intermediate	61	20 %
Intermediate	92	30 %
Upper- intermediate	45	15 %
Advance	16	5 %
total	306	100 %

Why are you studying the English Language?

For this section, the participants were supposed to answer six sub-questions. The finding shows that 165 (54.09%) students are studying English to get a handsomely paid job. The result of the study discloses that 60 (19.67%) students study English to pursue their master and PhD degree abroad. Moreover, 35 (11.47 %) students of geoscience faculty study English because it's part of the curriculum and 30 (9.83 %) of the students are studying due to having a successful profession. Finally, 10 (3.27 %) of the participants are studying English to speak with foreign people and 5 (1.63 %) of the students' study English to speak with friends and family.

Table 2: Purpose of Studying English

Why do you need to study English?	Frequency	Percentage
To get a handsome paid job	165	54.098%
pursue further academic study	60	19.67%
It is part of the curriculum	35	11.47
Success for future profession	30	9.83
Speak to foreigners	10	3.27%
Speak to friends and family	5	1.63%

The present use of English Language Needs

In Table 3, a total number of 288 students answered the questions under this section of the questionnaires. The outcome of the analysis shows the present use of the English language. The findings show that 243 (84.375%) of the students are studying English to update resource for their research and studies meanwhile 51 (17.70 %) of the participants are using the English Language for communication and socializing purpose. Finally, 4 (1.38%) of the students are using English at home.

Table 3: Present Use of English

Where do you use English?	Frequency	Percentage
When looking for update academic and valid source while my study and research.	243	84.375
For communication and socializing	51	17.70
At home	4	1.38

The Future use of English Language

the result for future use of the English language discloses that 127 (42.61%) of the students will use English for further study (masters, PhD degree) and more than half of the students 150 (51.72 %) will use English for career and job opportunity. Furthermore, 10 (3.44%) will use English for socializing purposes. In conclusion, a minor number of the students which is 3 (1.038%) use the English language at home (refer to Table 4)

Table 4: Future Use of English

In future, I shall be using English for	Frequency	Percentage
Higher education	127	42.61%
Job/career	150	51.72%
Socializing	10	3.44%
At home	3	1.03%

The Positive Effects of English Language Proficiency

As Table 5 describes in details that out of 305 participants, 160 (52.45%) of the students strongly agreed and 113 (37.04%) agreed that if the students have a good level of English proficiency it has a positive effect on their academic performance. Anyhow, only 20 students are undecided about the effects of English language proficiency on their academic performance and just 13 students (4.26%) disagreed about the issue.

Table 5: The Positive Effects of English Language Proficiency

If a student's level of English proficiency is high, it can have a good effect of his/her academic performance.	Frequency	Percentage
Strongly disagree	0	0
Disagree	13	4.26%
Undecided	20	6.55%
Agree	113	37.04%
Strongly agree	160	52.45%

The Effects of English Language Proficiency on Students Content Subjects

As Table 6 shows in details that 15 (4.91%) of the students strongly disagree that English language doesn't have any relation with their lesson's understanding because all the source are translated to their native language. In addition, 33 (10.81%) of the students disagree that English language proficiency doesn't have any effect on their performance in engineering content subjects. Based on this table 40 (11.14%) of the students are undecided regarding the question posed. Around 104 (34.09%) students are agreed that when the students' level of English proficiency is low, they will face difficulty in studying the content subjects. In conclusion, 113 (37.04) students strongly agreed that English Language proficiency has a positive role in understanding content subjects in the engineering field.

Table 6: The Effects of English Language Proficiency on Students Content Subjects

Students face difficulties in studying content subjects due to their low English language proficiency	Frequency	percentage
Strongly disagree	15	4.91%
Disagree	33	10.81%
Undecided	40	11.14%
Agree	104	34.09%
Strongly agree	113	37.04%

Removal of English Program from the University Curriculum

Table 7 gives details of the frequency and percentage of the students who strongly disagreed or disagreed, undecided, and agree regarding the removal of the English program form the University Curriculum. The majority of the students 150 (49.18%) strongly disagree and 80 (26.22 %) of the students disagree with the removal of the English language from the University Curriculum. Meanwhile; 45 (14.75%) of students are

undecided and 20 (6.55%) of the participants agreed with the removal of the English Program from the University Curriculum. On the contrary, a minority of students 10 (3.27%) strongly agreed to the removal of English from the university curriculum. In conclusion, the majority of the students want the English language in the University Curriculum.

Table 7: Removal of English Program from the University Curriculum

English should be deleted from the curriculum because it is not needed for future job	frequency	percentage
Strongly disagree	150	49.18%
Disagree	80	26.22%
Undecided	45	14.75%
Agree	20	6.55%
Strongly agree	10	3.27%

Students' Perceptions Regarding the Current English Language Syllabus, Approaches and Classroom Resources

The results in table 8 shows that majority of the participants were not satisfied with the usefulness of the current syllabus and teaching approaches in terms of fulfilling their needs for English language. More than half of the respondents, 220 (72.13%) of students strongly disagree and 50 (16.39%) the students disagree with current syllabus and teaching approaches of the teachers. The reason which they mentioned that the book which the teacher introduce are out of date and the methods the teachers are following are traditional. By the time, 20 (6.55%) students are undecided regarding to the current teaching approach and syllabus. In conclusion, minority of the students are satisfied with the current teaching and approach and syllabus.

Table 8: The Current Syllabus and Teaching Approaches

The current syllabus and teaching approaches fulfil my needs for the English language	frequency	percentage
Strongly disagree	220	72.13%
Disagree	50	16.39%
Undecided	20	6.55%
Agree	11	3.60%
Strongly agree	5	1.63%

The Current Classroom Resources

The outcome of the survey in Table 9 illustrates in details that the resources are not sufficient. Around 240 (78.68 %) students strongly disagree and 38 (12.45%) of students disagree with classroom resources. The reason for their dissatisfaction is the lack of electricity, internet, and textbooks in the classroom. In addition, the students said “we are studying in large class, in one English class, we are 100 students”. So, the number of students in the English classroom should not exceed more than 30 students while teaching 80 students are

difficult for both teacher and students. Table 9 shows that 8 (2.59 %) students are undecided. However, 15 (4.91 %) participants agree and 4 (1.31%) students strongly disagree with current classroom resources.

Table 9: The Current Classroom Resources

The current classroom resources (i.e. white-board, marker, textbooks etc.) are sufficient.)	frequency	percentage
Strongly disagree	240	78.68%
Disagree	38	12.45%
Undecided	8	2.59%
Agree	15	4.91%
Strongly agree	4	1.31%

Sufficiency of Time Allocated to English language teaching at Geoscience faculty

Table 10 shows the results of the survey. Based on the results, a number of students which is 171 (56.06%) strongly disagreed and 75(24.59%) disagreed about the sufficiency of the allocated time for English classes. They believe that the timing for English is very less and said “we have English two credit in a week”. In terms of language, credit should be more than six credit per week. On the contrary, some students 40(13.11%) students are undecided, and 10 (3.27 %) agreed and 9 (2.25 %) strongly agreed about the efficiency of allocated time for teaching English language classes.

Table 10: Sufficiency of Time Allocation to English Language teaching

The time allocated for the English language classes at the engineering faculties is sufficient	frequency	percentage
Strongly disagree	171	56.06%
Disagree	75	24.59%
Undecided	40	13.11%
Agree	10	3.27%
Strongly agree	9	2.95%

CONCLUSIONS AND RECOMMENDATIONS

The study investigated the perceptions of the students about the importance of English language proficiency level in their related field, usefulness of the current English language program, the classroom resources and types of English language class, and sufficiency of the given time. The findings revealed that the level of English language proficiency of the students was not so good. However, the students had positive perceptions towards learning English and they study English for their academic purpose and success for future career. Thereby, priority should be given to all four main language skills to make the students fit for their future career. Pertaining to the students’ observations about the effects and usefulness of the English language proficiency on their content subjects, the study found that a majority of the students recognized the effects of English proficiency on their major field and their future careers. Regarding the current English language

program and classroom resources, the findings revealed that the current English language program do not fulfil their needs and the classroom resources are not satisfactory as well. It is suggested that the responsible authorities should consider the needs of the students in designing a curriculum in which the needs and level of English proficiency of the students are taken into account. Classrooms with modern educational language technology resources including computers, the internet, sound system, and self-learning software, among others, should also be provided. Furthermore, it is found that the most of the students preferred to have a class with lots of activities, i.e. pair/group works and projects. The findings also revealed that the students feel that the time allocated for the English classes is not sufficient.

Based on the findings of the investigation, the following recommendations are suggested:

- Students, English language proficiency and background of their knowledge should be taken into account when course materials are designed
- Classroom resources should be upgraded.
- Prerequisite English course should be held for those students whose English levels are low.
- Placeman test should be taken when making English classroom.
- In an English classroom, the number of students should not exceed more than 30.
- Learner-centred type of class should be administered in order to provide , more opportunities for the learners.
- The time allocated for English classes should be increased. The current study has investigated the English language needs of geoscience undergraduate students of Bamyan University. It is hoped that the findings of the study would benefit the English language instructors and authorities of the university in revising and designing English language curriculum for Geoscience students.

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