

**MASTERS OF SCIENCE IN TECHNICAL EDUCATION  
(ELECTRICAL AND ELECTRONIC AND ENGINEERING)**



**THE IMPLICATION OF LANGUAGE BACKGROUND OF  
STUDENTS' ACADEMIC PERFORMANCE: CASE STUDY  
OF ISLAMIC UNIVERSITY OF TECHNOLOGY**



**By**

**EBRIMA SANYANG  
STUDENTS NO: 181031204  
MScTE (EEE)**

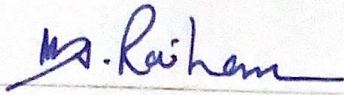
**DEPARTMENT OF TECHNICAL AND VOCATIONAL EDUCATION  
(TVE)  
ISLAMIC UNIVERSITY OF TECHNOLOGY (IUT)  
DHAKA- BANGLADESH**

**February 2021**

## RECOMMENDATION OF THE BOARD OF EXAMINERS

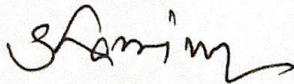
The thesis titles "The implication of language background of students' academic performance: Case study of Islamic University of Technology" submitted by Ebrima Sanyang, students no: 181031204 of Academic Year 2019-2020 has been found satisfactory and accepted as fulfillment of the requirement for the degree of Master of Science in Technical Education (EEE).

### Board of Examiner



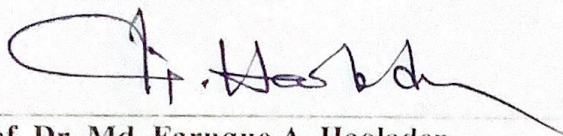
Prof Dr. Md. Abu Raihan,  
Supervisor  
Head TVE Department

Chairman  
Ex-Officio

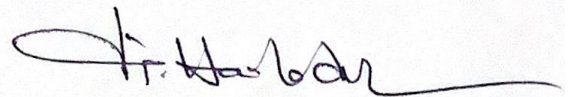


Mr. Md. Rashedul Huq Shamim,  
Associate Professor &  
Co-Supervisor  
TVE Department

Member



Prof. Dr. Md. Faruque A. Haolader  
TVE Department



Member

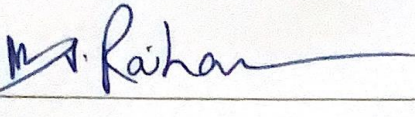
Prof. Dr. Mohammad Ali Zinnah.  
External Examiner  
Dhaka University



Member

## DECLARATION

This is to certify that the work presented in this thesis is an original work carried out by **Ebrima Sanyang**, under the supervision of Prof. Dr. Md. Abu Raihan, Head of TVE department and Co-supervised by Associate Professor, Mr. Md. Rashedul Huq Shamim, a member of the TVE department Islamic University of Technology, Gazipur Bangladesh. It is hereby declared that this thesis/report or part of it has not been submitted elsewhere for the award of any Degree or Diploma.



**Professor Dr. Abu Raihan**

Supervisor

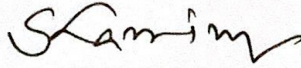
Department of Technical and Vocational Education (TVE)  
Islamic University of Technology (IUT) Gazipur, Bangladesh



**Ebrima Sanyang**

Student No. 181031204

Academic Year: 2019-2020



**Associate Professor Mr. Md. Rashedul Huq Shamim**

Co-supervisor

Department of Technical and Vocational Education (TVE)  
Islamic University of Technology (IUT) Gazipur, Bangladesh

## **DEDICATION**

*Dedicated to my family members.*

# Table of Contents

List of Tables .....	vi
<b>ACKNOWLEDGMENT</b> .....	vi
<b>ABSTRACT</b> .....	viii
<b>CHAPTER ONE</b> .....	1
INTRODUCTION .....	1
<b>1.0 Introduction</b> .....	1
<b>1.1 Background</b> .....	1
<b>1.2 Problem Statement</b> .....	2
<b>1.3 Research Objectives</b> .....	3
<b>1.4 Research Question</b> .....	3
<b>CHAPTER TWO</b> .....	4
Literature review .....	4
<b>2.0. Introduction</b> .....	4
<b>CHAPTER THREE</b> .....	10
Methodology .....	10
<b>3.1. Research design</b> .....	10
<b>CHAPTER FOUR</b> .....	12
<b>4.0 Data analysis and data interpretation</b> .....	12
<b>4.1 Demographic data related to the study</b> .....	14
<b>4.2 Impact of writing skill on performance</b> .....	15
<b>CHAPTER FIVE</b> .....	34
Appendix: Questionnaire .....	44

## List of Tables

Table 3. 1 The details of the demography of respondents .....	<b>Error! Bookmark not defined.</b>
Table 3. 2 The table showing the ranges of Reliability scores for internal consistence .....	11
Table 4. 1: Demography of respondents by department cross tabulated by year of study .....	15
Table 4. 2 Response about witting skills.....	<b>Error! Bookmark not defined.</b>
Table 4. 3 The Correlations between performance and writing constructs .....	17
Table 4. 4 Response about speaking skill .....	19
Table 4. 5 Correlations between speaking skill constructs.....	20
Table 4. 6 Response about Perceived understanding constructs academic performance of students .....	21
Table 4. 7 Correlations between Perceived understanding skills constructs.....	25
Table 4. 8 Showing response about reading skill.....	26
Table 4. 9 Correlations between reading skills constructs.....	27
Table 4. 10 Response about assessment skills.....	28
Table 4. 11 Correlations between assessment skills constructs .....	29

## ACKNOWLEDGMENT

First and foremost, I must feel grateful to Allah the almighty for given me the capability to conduct this study up to this level. Secondly, I wish to express my profound gratitude to my supervisor Professor **Dr. Md. Abu Raihan**, Head of the Department of Technical and Vocational Education (TVE), and my co-supervisor Associate Professor **Md. Rashedul Huq Shamim**, Islamic University of Technology (IUT) for their deep knowledge in the field of research influenced me to carry out this study up to this point. Their endless patience, scholarly guidance, continuous encouragement constant supervision, constructive criticism, valuable advice, and responding to my request under all circumstances have made it possible to complete this study.

Finally, I like to appreciate and thank my family members especially my children Fatomater Sanyang, Rokiato Sanyang, Mohamed Sanyang, Omar Sanyang, and my collages for their patience and continuous encouragement for the completion of this thesis.

## ABSTRACT

Learning is an academic setting accomplished through a language. A language of instruction is used to deliver explanations about concept that is taught, discussion among students and teachers, solve academic tasks such as exercises and assignment. In IUT, students are drawn from different OIC countries whose language background is either the host countries language e.g. Bangla or other OIC member state languages e.g. French, Arabic or English and the like. This study investigates the implications of students' language background towards their academic performance in IUT with specific objectives of assessing the impact of student's level of English Language proficiency against their academic performance, and determining the relationship between the constructs of level of English Language proficiency and academic performance. The quantitative research design that used close-ended questionnaires to collect data about implication of language background on students' performance. In the study a five point Likert scale was employed to explore an instruction and describe concepts of a language that encourage better academic performance among students at IUT using a sample size of 300 students of whom 250 responded. It was discovered that the implication of writing on students' performance was small and depended on insight it was viewed in. Secondly, reading played an important part in building students' confidence, increases participation and self-expression. Third, it was noted that perceived understanding had slight negative impact on student performance and, finally reading as part of background language had a significant Positive role in performance of students. From the above a general conclusion is that languages played an important part of learning therefore directed how well students can achieve in there engineering education. Conclusively, it is not language alone that encourage positive performance in engineering education. Other factors such as background of student in terms of origin, students' interest in course etc. also influenced students' academic performance. Further study in future could explore other factors that determine students' performance and issues of language to improve engineering knowledge and skills. Key Words: Language proficiency, Students academic performance, & instruction.



# CHAPTER ONE

## INTRODUCTION

### 1.0 Introduction

#### 1.1. Background

The development of a nation depends on her education. The quality of her education partly depends on the medium of instruction, teaching resources, environment, and the qualification of teachers, etc. Speaking has an impact on learning and achievement, speaking constructive language ability is considered to be an essential factor to allow learners to articulate what they have learnt (Rodrigues & Vethamani, 2015). Persons need communication when they want to say something and transmit information. Speakers use communication when they are going to inform audience about something. Speakers apply language according to their own style. Therefore speakers should be both listeners and speakers at the same time for the effective communication (Lai-Mei Leong, 2017). Most learners equate the ability to speak through a language as understanding as well as to use the language how to learn engineering subjects. Speaking is a productive language skill regarded as an important element in learning (Qamar, 2016). Aktaruzzaman et al. (2011) stated that learning as a three-way communication process requires a well-understood language of instruction between the teacher and students. Both the teachers and the students should have some extent an appreciable level of proficiency in the language of instruction with which they communicate in the teaching-learning process.

Various researchers have investigated and found that even when other languages are used to teach the curriculum content, English remains a part of the subject being taught (ALGHADRI, 2019; Ehsan et al., 2019). “In the academic domain, language barriers can impact on assignment writing, understanding lectures, oral and written examinations, and the ability to ask questions in class” (Smith & Khawaja, 2011, P.702). The level of language proficiency in which students are taught, sit for examination, present coursework, and other assessments are referred to as language background.

Lai-Mei Leong (2017) asserted that students' adjustment challenges are primarily and positively linked to their English language proficiency and culture. When there is a gap in the language skills of students, especially the language used in instruction, understanding the content taught is affected. When students understand less of the content, it is likely that they shall present less quality work in examinations, and presentations. Students' language background forms the root of academic performance. Listening forms, the four facets of language that is considered an enabler to learning, this is in addition to speaking, reading and writing (Komba & Bosco, 2015). Good listening skill allows learners to perceive correct pronunciation of instructors' words, lecturers and fellows during their engineering classes, projects and experiments (Shali, 2017). Lai-Mei Leon (2017) investigated the effects of Cooperative Learning Strategy on Fostering the EFL learners' speaking fluency and the results from their study revealed that learners' language difficulties were related to the productive skills of writing and speaking. If content presented for assessment is affected by lack of language skills, their performance is likely to be affected. However, increased writing is an ingredient of better academic performance, hence increased writing increases academic achievement (İncirci & Şükrü Parmaksız, 2016). It has been proven that writing is the best tool for learning any material because it activates thinking. It enables students to discover hidden themes in the curriculum in a variety of content areas (Bangert-Drowns et al., 2004).

The Islamic University of Technology was established after passing a resolution of creating Islamic universities in the OIC member countries. This was empowered by the original vision of OIC in the early 1970s which was to promote education among OIC member states and Bangladesh is one of them (ALGHADRI, 2019). Students at the Islamic University of Technology (IUT) in Bangladesh come from fifty-seven (57) member states of the Organization of Islamic Cooperation (OIC). There are some member countries whose spoken language and or medium of instruction differs from the University's language of instruction which is English. This research seeks to study the implications of international student's language deficiency on academic performance at the Islamic University of Technology (IUT).

## **1.2 Problem Statement**

A language of instruction is used to deliver the information or messages about concepts that is taught, discuss among students and teachers, solve academic tasks such as exercises and assignment etc. In IUT, students are admitted from different OIC countries whose language

background is either the host countries language e.g. Bangla, or French, Arabic, and English. Most students attain their previous education through the languages mentioned above. On arrival, the students are meant to study engineering through English as an official language of instruction.

One of the suspected factors could be the fact that students lack of language skills in English that enable them to perceive what is taught in class. To ascertain if background language skills has an impact on performance of student at IUT formulates the essence of this study.

### **1.3 Research Objectives**

General objective of this study is to assess the implications of students' language background towards their academic performance in IUT.

#### ***1.3.1. Specific objectives:***

- i. To assess the impact of students' level of English Language proficiency against their academic performance.
- ii. To determine the relationship between the constructs of the level of English Language proficiency and academic performance.

### **1.4 Research Question.**

- i. What is the impact of students' level of English Language proficiency against their academic performance?
- ii. What are some of the challenges students face in their academics due to language deficiency?
- iii. How does student language background affect student's performance?
- iv. Is there any relationship between the constructs of the level of English Language proficiency and academic performance?

### **1.5 Significances of Study.**

- i. The study will help the institution to revise its English language curriculum for first-year students.
- ii. The study will aid the institution to understand the students' weaknesses in relation to the English language and able to handle them.

# CHAPTER TWO

## Literature review

### 2.0. Introduction

Learning is an academic setting accomplished through a language. A language of instruction is used to deliver explanations about concept that is taught. Education takes place as a method of learning in educational establishments such as schools and higher learning institutions (Aithal, 2017). Training helps to create intellectual capital in a society, and is an important factor assessing the growth of the academic performance of students. The success of the students (academic achievement) plays an important role in producing the highest quality graduates who will become the country's great leader and manpower and hence responsible for fiscal and social growth in the countries. Student success at universities should be of interest not only to administrators and educators, but also to labor market corporations. One of the key factors taken into account by the employer in hiring employees, especially new graduates, is academic achievement (Ali et al., 2009). Language have an important impact on the student academic performance.

Science, Technology, Engineering, and Mathematics (STEM) is a pathway for developing human resource that benefit civic economic and intellectual activities of a nation as elaborated by David in Pan-Organizational Summit on the U.S. Science and Engineering Workforce STEM education is the pathway for developing human resource that benefits civic economic and intellectual actives of a nation as elaborated be David in Pan-Organizational Summit on the U.S. Science and Engineering Workforce (Marye Anne Fox, 2003). Particularly engineering graduate learn now to develop particular products by integrating science and engineering principles. Each of these principles bring analytical abilities and knowledge to diverse fields such as health, finance, law, etc. In order to grasp the abilities brought by STEM it is important to develop work force that is able to transfer the technologies to societies in a language they understand. The curriculums should be developed with the thought that students need to understand what is taught at skills, profession, academic, and talent level. In addition to encouraging students at high school to take science and mathematics for years, there programs to prepare students in languages skills that enable them understand well at universities. In this section of the study we explore literature in relation to constructs of languages that enable student performance well in engineering studies at (IUT).

The implication of language on academic performance, language proficiency has significant and positive relationship with academic achievement of graduates in cataloguing and classification

course of engineering (Jimoh & Kenneth, 2016). They are able to express this knowledge and their ideas through oral discussions writing and test taking. The implication of language is not limited to helping students develop writing skills such as essays, formal letters etc. giving students' a good understanding of their engineering courses, and success in speaking skill but helps students acquire and use content knowledge area not taught in school (Civan & Coşkun, 2016).

## **2.1. How writing Impacts on learning and achievement**

Writing is the main component of critical thought. This makes writing practice a productive way of learning and achieving better performance in engineering education (Graham et al., 2005). İncirci & Şükrü Parmaksiz, (2016) carried out a study on the effect of writing to learn on the academic achievement and attitude to lesson in English classes. They employed a mixed method of research design and mainly focused on the 11<sup>th</sup> grade students of a high school. The results from the study show that students demonstrated positive attitude towards writing to learn in an English class. Furthermore, increased writing is witnessed as an ingredient of better academic performance, hence increased writing increases academic achievement. Bangert-Drowns et al. (2004) analyzed the Effects of School-Based Writing-to-Learn Interventions on Academic Achievement. The study utilized a meta-analysis in understanding different scholars said about the effect of writing. Results from the study revealed that writing to learn had positive effects on school achievement. Moreover, this enables students to discover hidden themes in the curriculum different content areas of learning. This proves that writing is the best tool for learning any material since it activates thinking and increases students' cognitive capabilities. Base on that, students can construct their own meaning of the different content of the curriculum and put it in its simplest form for easy understanding since writing provides a powerful mechanism for learning across complex subjects' matter. İncirci & Şükrü Parmaksiz, (2016) noted that educators have encouraged writing as a driving force to learning and understanding different learning materials. This is supported by study performed by Waring, (2007) on the impact of writing on students achievement. Her study found out that increased writing increases students' academic achievement. Therefore, that increases students' understanding of study materials taught in classes, performance, notes organization, and avoidance of spelling and vocabulary errors.

In this section, we established the effect of writing as the basis of instruction and engineering curricula. The effects established articulated how fit students might perform during their time in school based on their writing capabilities.

## **2.2. How reading impacts on learning and achievement**

Reading is important aspect of learning in engineering education since it connects different components of knowledge. Throughout student time in engineering studies at the university they have to practice acquisition and conversion of ideas through reading their courses content, memorizing designs and prototypes in order to pass quizzes and exams. Reading also is a vital skill that allows search for new knowledge. In addition, reading helps student to develop other language skills including communication with other people. Moreover, it allows professionals to discover new ways of learning, develop imagination. Lastly, it makes students to be well understood. RAND Study Group, (2002, p.11) defined reading as “the process of simultaneously extracting and constructing meaning through interaction and involvement with written language”. This means that reading increases students comprehension and construction of meaning knowledge hence boosting their academic achievements.

Dickinson et al. (2010) investigated on speaking out for language and mainly focusing on why language is central to reading development. The authors noted that various studies showed that when students read more, they get more exposure to more words which in turn improves their academic achievement. Additionally, Islam (2016) supported the previous authors’ statement and echoed that increased reading per day does not only affect students’ achievements but also upsurges their ability to understand different learning materials. Nouchi et al. (2016) carried out a study on reading aloud and solving simple arithmetic calculation intervention (learning therapy) improves Inhibition, verbal episodic memory, focus attention, and processing speed in healthy elderly people with the evidence from a randomized controlled trial. The study highlighted the importance of reading even when the student is among the struggling students' ones as long as he/she dedicates time to read with high understanding, his/her academic performance will improve with time. However, the academic level gets higher, reading difficulty increases significantly for students therefore the need for support from instructors is highly recommended to maintain students’ academic performance or even perform much better than the previous academic levels.

Callahan (2006) analyzed the intersection of accountability and language, questioning if reading intervention replaces English language development. The author's study showed that reading improves language development and literacy. Besides, lifelong reading has a significant impact on students' future life prospects, confidence, and behavior. According to Barak et al. (2015) reading makes the biggest component of the curriculum, and performance is not affected in language but also STEM courses. Dickinson et al. (2010) emphasized that lack of reading skills has a direct impact on learning, economy, and the health of an individual. Furthermore, students with poor reading abilities are susceptible to poor performance in class, lack of discipline, poor attendance and can easily drop out of school.

This section illustrated how learning to read makes a critical component of students' lifelong development and achievements since it improves the level of focus and concentration, critical thinking and analytical skills, memory improvements, and expands vocabulary.

### **2.3. How listening impacts on learning and achievement**

Bostrom (2011) defined listening as "the acquisition, processing, and retention of information in the interpersonal context." This makes it a key to language improvement. Syamsinar (2016) highlighted that the role of listening in learning is to enable learners to distinguish between different situations in an academic setting. Studies had shown that listening increases the ability to comprehend subject matter. Based on that, listening impacts the comprehension of students in language skills and academic performance. Brito (2015) did a study on the effects of listening comprehension on English language learners' writing while taking notes. Results revealed that 70 percent of the students indicated fluctuating range of accents as a hindrance to their learning. However, the author continued and noted that listening abilities are essential elements in studying engineering since instructions for most of the tasks are verbatim calling for well-developed listening skills. This amplifies the perceived understanding of circumstances around the different courses they take in the program. This gives learners the ability to identify and understand what others suggest as part of the solution of the task being solved. Therefore, listening is a major part of perceived understanding that shapes the learning methods and has a significant effect on academic performance according to the classical method (Hsu et al., 2013). Besides, Shali (2017) echoed that good listening skills allow learners to perceive the correct pronunciation of instructors, lecturers, and fellow students during their engineering classes, projects, and experiments.

Listening has different forms of habits namely Discriminative, Comprehension, Critical, Biased, Evaluative, Appreciative, Sympathetic, Empathetic, Therapeutic, Dialogic, and Relationship. These habits are among the effects that affect students' academic performance. Therefore, the researcher concludes that students who have Listening guidance make essential changes to their academic success in score.

#### **2.4. How speaking impacts on learning and achievement**

Impact of speaking skill on performance, Speaking is another important communication skill required for successful academic performance of engineering professionals. Speaking is ignored during engineering training, but it forms a foundation for engineers to present their innovation to their clients, show progress of work to supervisors, and market their designs. Speaking is a critical element of engineering studies learnt through presentation in class, project demonstrations, Viva voce and exhibitions. Through speaking students participate, ask questions, and express their views. Speaking is developed through enabling students present their work in form of assignments and projects. This kind of practice enable spontaneous realization of their intelligence and a way of learning to learn. Speaking skill is important to student academic careers and can help them in personal life. The constructs of speaking include confidence in speaking, participation, inquiry and ability of self-expression. These construct are developed from previous language classes. In following we present the effect of speaking on academic performance.

Florez (1999) defined speaking as “the interactive process of constructing meaning that involves producing and receiving and processing information.” Qamar (2016) stated that speaking is a productive language skill regarded as important in learning. That being said, speaking as a productive skill impacts students learning in their education process. Further, Rodrigues & Vethamani (2015) expressed that speaking has an impact on learning and achievement, hence speaking constructive language ability is considered to be an essential factor to allow learners to articulate what they have learned. Aburezeq (2020) investigated the impact of the flipped classroom on the developing Arabic Speaking Skills and noted that speaking proficiency levels are positively affected through the traditional speaking sessions in a way that the engineering courses capabilities are elevated, intelligibility and fluency of oral responses are developed, and finally learners' ability to find appropriate responses to situations indicates improvement. Therefore, speaking language gives emotional support to students at first, thereby translating



everything word for word to check they understanding the task before attempting to speak. The various researchers have investigated and found that even when other language are used to teach curriculum, English remains a part of the curriculum being taught (ALGHADRI, 2019; Ehsan et al., 2019). This gives most learners to equate the ability of understanding the language and look at speaking as a process of learning thereby giving them the courage to learn engineering subjects. Likewise, literature showed that English has become the lingua franca for the academic interaction of learners and academics in almost all institutions of learning around the world. However, oral speaking skills are often seen as face-threatening and nerve-wracking for overlooked student learners. To reduce nervousness, speech exercises are promoted in learning environments. Subsequently acquiring engineering skills have come with many challenges leading to a large volume of studies and articles focusing on providing effective instructional methods that can help students enhance their speaking skills (Graham et al., 2005). Collier (1992) carried out a study on the synthesis of studies examining long-term language minority student data on academic achievement. According to the author, various research studies show that there was a high correlation between the cooperative perceived understanding strategies, and engineering skill ability achieved hence the better achievement in engineering skills. Besides, the effect of incorporating cooperative learning strategies improves students' ability to acquiring engineering skills.

After analyzing different pieces of literature illustrating the effect of writing, reading, listening, and speaking on the effect of students' academic achievement and performance. We found that much has not been investigated in the context of engineering education at higher learning institutions, therefore this calls for a study that is to fill the knowledge gap created. Based on that this study is to investigate the implication of language background of student's academic performance, a case of Islamic University of Technology

## **CHAPTER THREE**

### **Methodology**

#### **3.1. Research design**

This study employed quantitative research design that used close-ended questionnaires to collect data about implication of language background on students' performance. In our study we used five point Likert scale to explore an instruction and describe concepts of a language that encourage better academic performance, among English students at IUT. We find questionnaire more appropriate in this study because of the large samples involved as it was elaborated by (Mathers et al., 2007). In addition, they are recommended to involve collecting data about factors academic performance of individual students in an academic setting.

#### **3.2. Research participants**

This research was conducted at IUT. A random sample of 300 students were selected from a population of 2800 students to whom questionnaires distributed using both online google forms and printed forms at 95 Confidence level and 5% margin of error. Of the 300 distributed questionnaire, 250 (83.3%) of students' sample responded. We consider our return threshold good representation of the population under study.

#### **3.3 Research Tool**

In our study, we used a 6 section questionnaire to collect data. The first section represented the demographic data of respondents while the second section of the instrument was composed of closed-ended questions each of five points Likert scale for each construct. Section two of the questionnaire represents constructs related to writing as skills and how it impacted the performance of students in the class. The third section represented constructs the speaking skills whereas the fourth section represents the constructs of perceived understanding as a component of listening skills. Section five represented constructs of reading skills and that enable students to advance their knowledge. Finally, section six represented constructs that measure assessment of how well students perceived a language skill as it impacted their academic performance. Through the questionnaire, an exploratory and correlation of study was examined to find the implication of language on student performance. The research tool used in this study was adopted and modified from (Albakri, 2017).

#### **Reliability testing using Cronbach alpha ( $\alpha$ )**

Table 3.1 The table shows the ranges of Reliability scores for internal consistency

Reliability table	
$\alpha \geq 0.9$	Excellent tool
$0.9 > \alpha \geq 0.8$	Good
$0.8 > \alpha \geq 0.7$	Acceptable
$0.7 > \alpha \geq 0.6$	questionable
$0.6 > \alpha \geq 0.5$	Poor
$0.5 > \alpha \geq 0.4$	An acceptable

Table above showed Reliability scores. From the table Reliability greater than  $\alpha \geq 0.9$  is Excellent. Reliability between  $0.9 > \alpha \geq 0.8$  is good, Reliability between  $0.8 > \alpha \geq 0.7$  is Acceptable. Reliability between  $0.7 > \alpha \geq 0.6$  is questionable. Reliability between  $0.6 > \alpha \geq 0.5$  is Poor- Reliability between  $0.5 > \alpha \geq 0.4$  is an acceptable. From our analysis of reliability for the tool used in this study, our tool scores  $\alpha = 0.843$  which was good internal consistency. The attained Cronbach alpha was similar with the reliability attained by (Albakri, 2017).

### 3.4 Data collection procedure

Data was collected through electronic self-administered questionnaire and hard copy was distributed to the respondents who were not in reach of the electronic questionnaire. The survey questionnaire was used since it was more appropriate in collecting responses from a large group of participants. The appropriateness of using survey questionnaires was described by (Mathers et al., 2007). The data was exported in SPSS version 23 analysis.

### 3.5 Data analysis

Data analysis was done using frequency analysis to evaluate the percentage of respondents who either agreed or disagreed with the labeled construct. We consider agreed responses as all responses that included strongly agreed and agreed. Whereas disagreed responses included all responses of strongly disagreed and disagreed. The above mentioned classes of responses were used to evaluate the implication of language skills on academic performance of respondents. A correlation analysis on academic performance labeled current CGPA and each construct for each skill was performed. The discussion and conclusion of this are based on the results of this procedure. Statistical Package for Social Sciences version 23 (SPSS v23) was utilized in data analysis.

## **CHAPTER FOUR**

### **Data analysis and data interpretation**

#### **4.0 Introduction**

Engineers were involved in designing and building structures and machines. During their study and professional career, they work in specific areas of science, mathematics and applications. To apply their engineering skill in the work field, it requires some language of skill which can communicate and develop bonding among the members to generate new ideas. These language skills can be broadly classified in writing, reading, speaking, and listening. Listening can broadly be inferred to using perceived understanding.

In our study, we used quantitative research design that used close-ended questionnaires to collect data about implication of language background on students' performance, data collected from the mimeo graphic and questionnaires were tabulated in the form of frequencies and percentages. Separate tables were drawn for different sections, data related to student's language background and academic performance questionnaire represents constructs related to writing, represented constructs the speaking skills, as skills, constructs of perceived understanding as a component of listing skills, represented constructs of reading skills, represented constructs that measure assessment of how well students perceived a language skill as it impacted their academic performance. In our study we used five point Likert scale to explore an instruction and describe concepts of a language that encourage better academic performance, among English students at IUT.

- **Data collection techniques and tools.**

This research made use of quantitative research design that used close-ended questionnaires to collect data around implication of language background on students' performance. stratified random sampling techniques was being used to select the sample from the population in Islamic University of Technology.

- **Data interpretation procedure in a nutshell.** This research was done at Islamic University of Technology. A random sample of 300 students were selected from a population and questionnaires was distributed both online google forms and printed forms.

- **The major categories of data obtained**

- The first section of the instrument was made up of open-ended questions with a five-point Likert scale for each construct, while the second section was made up of closed-ended questions with a five-point Likert scale for each construct.
- The second portion of the questionnaire covers structures related to writing as an ability and how they affected students' success in class.
- The third section represented constructs the speaking skills.
- The fourth section as an aspect of listening skills, reflects the structures of presumed comprehension.
- Section five represented constructs of reading skills and that enable students to advance their knowledge.
- Finally, section six represented constructs that measure assessment of how well students perceived a language skill as it impacted their academic performance.

- **The categories of major findings on writing**

In this study, we found that writing is the main component of critical thought. This makes writing practice a productive way of learning and achieving better performance in engineering education (Graham et al., 2005). Results from the study revealed that writing to learn had positive effects on school achievement. İncirci & Şükrü Parmaksız, (2016). In this section, we established the effect of writing as the basis of instruction and engineering curricula. The effects established articulated how students might perform better during their time in school based on their writing capabilities.

- **The categories of major findings on Reading**

Reading is important aspect of learning in engineering education since it connects different components of knowledge. Additionally, Islam,(2016) supported the previous authors' statement and echoed that increased reading per day does not only affect students' achievements but also upsurges their ability to understand different learning materials. This section illustrated how

learning to read makes a critical component of students' lifelong development and achievements since it improves the level of focus and concentration, critical thinking and analytical skills, memory improvements, and expands vocabulary.

- **The categories of major findings on listening**

In this study we found in the author of Bostrom, (2011) defined listening as “the acquisition, processing, and retention of information in the interpersonal context.” As a consequence, listening has an effect on students' language skills and academic success. listening gives learners, the ability to identify and understand what others suggest as part of the solution of the task being solved. Therefore, listening is a major part of perceived understanding that shapes the learning methods and has a significant effect on academic performance according to the classical method (Hsu et al., 2013).

- **The categories of major findings on speaking**

After reviewing numerous pieces of literature that show the influence of writing, reading, listening, and speaking on students' academic achievement and performance. We found that much has not been investigated in the context of manufacturing education at higher learning institutions, consequently this calls for a study that is to fill the knowledge gap created. Founded on that this study is to investigate the implication of language background of student's academic performance, a case of Islamic University of Technology

#### **+4.1 Demographic data related to the study**

Table 4.1 showed demography of respondents by department cross tabulated by year of study about distribution of questionnaire in six (6) department categorized by year, in the First Year 61 students' respondents of which 20 were from TVE, 20 from EEE, 12 from CSE, 2 from CEE, 5 from MPE, and 2 from BTM. In the Second year 86 student respondents of whom 15 are from TVE, 30 from EEE, 25 from CSE, 5 from CEE, 10 from MPE, and 1 from BTM. In the Third year 56 students' respondents of whom 8 were from TVE, 21 from EEE, 16 from CSE, 0 from CEE,

11 from MPE, and 0 from BTM. Lastly, in the Fourth year 47students respondents of which was 12 were from TVE, 13 from EEE, 16 from CSE, 0 from CEE, 6 from MPE, and 0 from BTM.

**Table 4. 1: Showing demography of respondents by department cross tabulated by year of study**

	DEPARTMENT						Total
	TVE	EEE	CSE	CEE	MPE	BTM	
First Year	20	20	12	2	5	2	61
Second Year	15	30	25	5	10	1	86
Third Year	8	21	16	0	11	0	56
Fourth Year	12	13	16	0	6	0	47
<b>Total</b>	<b>55</b>	<b>84</b>	<b>69</b>	<b>5</b>	<b>32</b>	<b>1</b>	<b>250</b>

## 4.2 Impact of writing skill on performance

During the study period in different Engineering programs at the university, the prospective graduates practice critical thinking or ideas, application and translation of ideas through writing their notes, assignments, presentation, projects and examination are conducted through a set of tests and then translated into performance units such as marks and grades at the end of every academic session. At the university, emphasis is not given much to the development of their writing skill in comparison to professional/Engineering skills. This means/implies that the students draw/apply their background knowledge of languages to present their assessment/to assess. To evaluate impact of student background skill and their academic performance, important constructs are developed. The constructs are presented in table 4.2 these include taking notes, perceived rank

of writing, strength vocabulary and grammar etc. that is drawn from their previous background language skill.

**Table 4. 2 Students response to writing skill**

Takes notes in English		Writing is an important skill in my specialization		Technical vocabulary is weak		Make grammar mistakes.		Writing skills have improved		Write in Arabic/French/Bangla and then translate it into English		Does not know a lot of vocabulary		Make spelling mistakes	
Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
14	5.6	8	3.2	67	26.8	33	13.2	25	10.0	118	47.2	59	23.6	45	18.0
31	12.4	28	11.2	59	23.6	64	25.6	36	14.4	51	20.4	74	29.6	76	30.4
37	14.8	47	18.8	52	20.8	47	18.8	61	24.4	31	12.4	46	18.4	51	20.4
71	28.4	82	32.8	42	16.8	67	26.8	78	31.2	33	13.2	43	17.2	51	20.4
97	38.8	85	34.0	30	12.0	39	15.6	50	20.0	17	6.8	28	11.2	27	10.8
<b>Total</b>	<b>250</b>	<b>250</b>	<b>100.0</b>	<b>250</b>	<b>100.0</b>	<b>250</b>	<b>100.0</b>	<b>250</b>	<b>100.0</b>	<b>250</b>	<b>100.0</b>	<b>250</b>	<b>100.0</b>	<b>250</b>	<b>100.0</b>



## 4.2: Impact of writing skill on performance of students

Table 4.1: The responses of students about their ability to write well in English as language of instruction. From the responses 67% of the respondent agreed that they take notes in English where as 18% disagreed. Secondly, 67% agreed that writing was an important skill in their specialization, whereas 14% disagreed. On the issue of technical vocabulary, 29 % agreed that they were weak conversely 50% feel strong about their technical vocabulary. Likewise, 50% of respondents agree on the fact that they make grammar mistakes while writing English 39% disagreed. About 30% of the respondents agreed that they commit spelling mistake, while about 50% disagreed. Generally, even if almost 30% of students know slight English vocabulary about 50% of respondents agreed that their writing skills had improved over time. The suction about the responses of students the impact of writing skill on students' academic performance a large number of students agreed that writing skill have impact on academic performance, while the minority of students disagreed that there is no influence of writing skill on students' academic performance.

**Table 4. 3: Correlations between performance and writing constructs**

	P1	1	2	3	4	5	6	7	8
P1. Current CGPA	1	.157*	0.077	-.228**	-.136*	0.017	-.262**	.225**	.209**
1. Takes notes in English		1	.151*	-.312**	-.220**	.204**	-.399**	.436**	.335**
2. Writing is an important skill in my specialization			1	0.045	0.01	.144*	-0.035	-0.087	-0.066
3. Technical vocabulary is weak				1	.372**	-0.018	.505**	.526**	.510**
4. Make grammar mistakes.					1	0.009	.461**	.419**	.380**
5. Writing skills have improved						1	-0.058	-0.076	0.027
6. Make spelling mistakes							1	.598**	.468**
7. Does not know a lot of vocabulary								1	.460**
8. Write in Arabic/ French/Bangla and then translate it into English									1
* . Correlation is significant at the 0.05 level (2-tailed).									
** . Correlation is significant at the 0.01 level (2-tailed).									

### *Correlation constructs of writing skill and academic performance of students*

The Table 4.3 showing correlation between eight constructs that form writing skill as a component of language and the performance of students measured by CGPA. The constructs include 1. Taking notes, 2 Important of writing skill, 3. Weakness in technical vocabulary, 4. Mistakes in grammar, 5. Improvement in writing skills. 6. Spelling mistakes, 7. Amount of vocabulary known by students, 8. Translation from and to other languages. The results of Pearson Correlations for the sampled 250 students for each construct are as follow: The Correlation between P1. Current CGPA and 1. Taking notes indicate positive significant correlation  $r(250) = 0.157, p < 0.05$ , similarly the correlation between P1 and 2. Important of writing skill indicate no significant association of  $r(250) = 0.077, p < 0.05$ . In addition, the correlation between P1 and 3. Weakness in technical vocabulary indicate a significant negative association of  $r(250) = 0.228, p < 0.01$ , also , the correlation between P1 and 4 mistakes in grammar indicate a significant negative association of  $r(250) = 0.136, p < 0.05$ . Furthermore, the correlation between P1 and 5 improvement in Writing skills no significant negative association of  $r(250) = 0.017, p < 0.05$ . Moreover, the correlation between P1 and 6. Spelling mistakes, 7. Amount of vocabulary known by students, 8. Translation from and to other languages indicate a significant negative association of  $r(250) = 0.262, p < 0.01, r(250) = 0.225, p < 0.01, r(250) = 0.209, p < 0.01$ . Apart from constructs 3 and 6 there is a general correlation between writing skill and performance of student.

The correlation constructs of writing skill on academic performance of students have indicated that Taking notes has positive significant correlation. Weakness in technical vocabulary, mistakes in grammar, and Translation from and to other languages they have indicate that a significant negative association, while important of writing skill and improvement in writing skills are no significant negative association.

**Table 4. 4 Students response to speaking skill**

Response	Feels comfortable speaking English in class		Rarely participate in class out of fear to make mistakes in speaking English		Usually ask questions in class when they do not understand		Feels comfortable asking my content teachers		Can express them self clearly in writing in English.	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
<b>SD</b>	22	8.8	63	25.2	15	6.0	23	9.2	10	4.0
<b>D</b>	25	10.0	48	19.2	45	18.0	44	17.6	24	9.6
<b>U</b>	40	16.0	50	20.0	60	24.0	78	31.2	32	12.8
<b>AG</b>	71	28.4	48	19.2	74	29.6	60	24.0	93	37.2
<b>SA</b>	92	36.8	41	16.4	56	22.4	45	18.0	91	36.4
<b>Total</b>	250	100.0	250	100.0	250	100.0	250	100.0	250	100.0

**Table4.4 Students response to speaking skill on academic performance.**

Table 4.4 showed the responses of students about their ability to speak in English language. From the responses, nearly 65% of the respondents agreed that they felt comfortable speaking in English while in class whereas 18% disagreed. Secondly, about 35% agreed that they rarely participate in class out of fear to make mistakes, whereas 45% disagreed. On the other hand, 50 % usually ask questions in class when they do not understand and only slightly below 25% do not ask follow up question. Likewise, 42% of respondents felt comfortable asking their teachers about what was taught and 25% disagreed. Generally, about 75% of respondents agreed that they can express them self clearly in writing in English unlike 14% who cannot fully express themselves in English.

In the data analysis of student responses to the effect of speaking ability on academic performance, a few of students responded that they disagreed, that speaking skill has no impact on academic performance. Though a significant number of students accepted that speaking skill does have an impact on academic performance.

**Table 4.5 Correlations between speaking skill constructs.**

	P1	1	2	3	4	5
<b>P1. Current CGPA</b>	1	.151*	-.159*	.157*	.033	.139*
<b>1. Feels comfortable speaking English in class</b>		1	-.281**	.446**	.226**	.491**
<b>2. Rarely participate in class out of fear to make mistakes in speaking English</b>			1	-.236**	-.069	-.308**
<b>3. Usually ask questions in class when they do not understand</b>				1	.227**	.323**
<b>4. feel comfortable asking my content teachers</b>					1	.139*
<b>5. Can express them self clearly in writing in English.</b>						1
* . Correlation is significant at the 0.05 level (2-tailed).						
** . Correlation is significant at the 0.01 level (2-tailed).						

**Correlation constructs of speaking skill and academic performance of students**

The Table 4.5 showing correlations between five constructs that form speaking skill as a component of language and the performance of students measured by CGPA. The constructs include 1. Speaking English comfortable in class, 2. Speaking mistakes in English, 3. Usually ask questions in class when they do not understand, 4. Felt comfortable asking their teachers about what is taught, 5. Can express them self clearly in writing in English unlike. The results of Pearson Correlations for the sampled 250 students for each construct are as follow: The Correlation between P1. Current CGPA and 1. Speaking English comfortable in class indicate positive significant correlation  $r(250) = 0.151$ ,  $p < 0.05$ , likewise the correlation between P1 and 2. Speaking mistakes in English indicate a significant negative association of  $r(250) = 0.159$ ,  $p < 0.05$ . In addition, the correlation between P1 and 3 Usually ask questions in class when they don't understand and indicate a significant positive association of  $r(250) = 0.157$ ,  $p < 0.05$ , also , the correlation between P1 and 4 feel comfortable asking their teachers about what is taught indicate no significant association of  $r(250) = 0.033$ ,  $p < 0.05$ . Furthermore, the correlation between P1 and improvement in speaking skills a significant positive association of  $r(250) = 0.139$ ,  $p < 0.05$ . Apart from constructs 4 there is a general correlation between speaking skill and performance of student.

The correlation constructs of speaking skill on academic performance of students have indicated that speaking English fluently in class, making English mistakes, and developing speaking skills

are all normal, and students often ask questions in class when they don't understand anything, has positive significant correlation of speaking skill on academic performance of students. While students feel comfortable asking their teachers questions about what they are studying, there is no evidence of a negative relationship.

#### 4.6 Impact of Perceived understanding on performance

Without a good perceived understanding students waste time to gain engineering skills. The lack of proper skills will contribute to needless challenges and dissatisfaction. When students show high degree of perceived understanding of engineering works they raise the probability that organizations will choose them for better employment. Besides, having a good understanding of integrated skills improves student confidence in their learning. It helps the students to work hard and get closer to their interests.

**Table:4.6 Response to Perceived understanding constructs academic performance of students.**

Finds it difficult to understand long	Percent	23.6	28.4	18.4
Friends help me to understand the	Frequency	59	71	46
Finds it difficult to understand technical	Percent	13.2	14.8	21.2
Translates many words into Arabic /	Frequency	33	37	53
Teachers re-explain if students do not	Percent	15.2	24.4	27.6
Asks friends to explain if they do	Frequency	38	61	69
Feels that their English language is	Percent	31.6	22.4	12.4
English listening skills have improved	Frequency	79	56	31
Sometimes they do not understand what	Percent	8.0	9.6	20.0
Some subjects should be taught in	Frequency	20	24	50
Beside English, I need Arabic /	Percent	5.2	18.0	14.8
Needs to study in English to get a	Frequency	13	45	37
	Percent	32.4	30.4	18.0
	Frequency	81	76	45
	Percent	8.8	14.0	17.6
	Frequency	22	35	44
	Percent	8.0	23.6	20.8
	Frequency	20	59	52
	Percent	30.4	18.8	21.2
	Frequency	76	47	53
	Percent	9.6	10.8	20.4
	Frequency	24	27	51
	Percent	8.0	13.2	18.4
	Frequency	20	33	46
	Response	SD	D	U

	20.0	9.6	100.0
	50	24	250
	33.6	17.2	100.0
	84	43	250
	24.4	8.4	100.0
	61	21	250
	15.6	18.0	100.0
	39	45	250
	37.2	25.2	100.0
	93	63	250
	34.8	27.2	100.0
	87	68	250
	14.4	4.8	100.0
	36	12	250
	27.2	32.4	100.0
	68	81	250
	25.2	22.4	100.0
	63	56	250
	16.4	13.2	100.0
	41	33	250
	28.4	30.8	100.0
	71	77	250
	30.4	30.0	100.0
AG	76	75	250
SA			
Total			

**Table 4.6: Constructs regarding Perceived understanding that impact students' performance student:**

Table 4.6: Showed the responses of students about perceived understanding of teaching at the university. From the responses 60% of the respondent agreed that they need to study in English to get a good job in future, whereas 21% disagreed. Secondly, 58% agreed that beside English they need another language in their future occupation, while 20% disagreed. Approximately 30% of respondent agreed that if some subjects should have been taught in other languages but 48 % disagreed. Likewise, 47% of respondents agreed that sometimes they do not understand what teachers' sides in class and 30% disagreed to this point. Generally, 39% of respondents agreed that their listening skills in English had improved and 22% disagreed. While 19% of respondents agreed that their English language was not good enough and 62% disagreed. On the other hand, 61% of respondent agreed that they asked friends to explain if they didn't understand what the teacher said 23% disagreed. Similarly, 62% of respondent agreed teachers re-explain if students didn't understand, though 18% disagreed. Generally, 33% of the respondents agreed that they translate many words into other language to understand the course material 54% disagreed. On the issue understand technical vocabulary 32% of respondents' agreed while 39% disagreed. Likewise, 50% of respondent agreed that friends help them to understand the course material 28% disagree. About 30% of respondents agree that they Finds it difficult to understand long English texts.

***Constructs regarding Perceived understanding that impact students' performance.***

The finding of data analysis of Table 4.6 showed the responses of students about perceived understanding of teaching at the university. Listening skills in English had improved student

academic performance, some student indicate that they are getting difficult to understand long English texts, and to translate many words into other language that can help them to understand English contents. In this statement the majority of student has agree, while minority disagree this statement.

**Table 4.7 Correlations between Perceived understandings constructs and performance constructs**

	P1	PU1	PU2	PU3	PU4	PU5	PU6	PU7	PU8	PU9	PU10	PU11	PU12
<b>P1. Current CGPA</b>	<b>1</b>	<b>.046</b>	<b>-.093</b>	<b>-.094.</b>	<b>-.153*</b>	<b>.005</b>	<b>-.358</b>	<b>-.358</b>	<b>.117</b>	<b>-.259**</b>	<b>-.128*</b>	<b>-.031</b>	<b>-.238**</b>
<b>1. Needs to study in English to get a good job</b>		<b>1</b>	<b>.144</b>	<b>.117</b>	<b>.086</b>	<b>.199**</b>	<b>.032</b>	<b>.116</b>	<b>.003</b>	<b>.146*</b>	<b>-.009</b>	<b>.182**</b>	<b>.083</b>
<b>2. Beside English, I need Arabic/ French/ Bangla in my future job</b>			<b>1</b>	<b>.247**</b>	<b>.232**</b>	<b>.233**</b>	<b>.049</b>	<b>.186**</b>	<b>.129*</b>	<b>.164**</b>	<b>.166**</b>	<b>.146*</b>	<b>.134*</b>
<b>3. Some subjects should be taught in Arabic/ French/ Bangla</b>				<b>1</b>	<b>.317**</b>	<b>.030</b>	<b>.369**</b>	<b>.142*</b>	<b>-.058</b>	<b>.386**</b>	<b>.410**</b>	<b>.198**</b>	<b>.424**</b>
<b>4. Sometimes they do not understand what the teachers say in class</b>					<b>1</b>	<b>.012</b>	<b>.353**</b>	<b>.258**</b>	<b>-.059</b>	<b>.363**</b>	<b>.303**</b>	<b>.192**</b>	<b>.330**</b>
<b>5. English listening skills have improved</b>						<b>1</b>	<b>-.009</b>	<b>.235**</b>	<b>.324**</b>	<b>.015</b>	<b>.004</b>	<b>.100</b>	<b>.014</b>
<b>6. Feels that their English language is not good enough to study in English</b>							<b>1</b>	<b>.167**</b>	<b>.196**</b>	<b>.559**</b>	<b>.534**</b>	<b>.214**</b>	<b>.612**</b>
<b>7. Asks friends to explain if they do not understand what the teacher says</b>								<b>1</b>	<b>.192**</b>	<b>.178**</b>	<b>.153*</b>	<b>.396**</b>	<b>.154*</b>

<b>8.</b> Teachers re-explain if students do not understand	1	-.169**	-.071	.028	-.144*
<b>9.</b> Translates many words into Arabic / French /Bangla to understand the course material		1	.519**	.267**	.544**
<b>10.</b> Finds it difficult to understand technical vocabulary			1	.190**	.581**
<b>11.</b> Friends help me to understand the course material.				1	.311**
<b>12.</b> Finds it difficult to understand long English texts.					1

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\* . Correlation is significant at the 0.01 level (2-tailed).

***Table 4.7 Correlations between Perceived understanding constructs and performance constructs***

The Table showed correlations between 12 constructs that form perceived understanding of subject content taught in English and the performance of students measured by their CGPA. The constructs include 1. The need to study in English to get a good job in future, 2. Having another language of instruction beside English for their future occupation, 3. If some subjects should be taught in other languages, 4. If sometimes they do not understand what the teachers teach, 5. If their listening skills in English have improved, 6. If their English language is not good enough, 7. They ask friends to explain if they do not understand what the teacher teach 8. If the teachers re-explain when they do not understand, 9. If they translate words into other language to understand the course



material, 10. If they find it difficult to understand technical words, 11. If Friends help them to understand the course material, 12. If they find it difficult to understand long English texts.

The results of Pearson Correlations for the sampled 250 students for each construct are as follow: The Correlation between P1. Current CGPA and 1. They need to study in English to get a good job in future indicate no significant correlation  $r(250) = 0.046$ ,  $p < 0.05$ , similarly the correlation between P1 and 2 having another language of instruction beside English for their future occupation, indicate no significant association of  $r(250) = 0.093$ ,  $p < 0.05$ . In addition, the correlation between P1 and 3. If some subjects should be taught in other languages, indicate no significant correlation of  $r(250) = 0.094$ ,  $p < 0.05$ , also , the correlation between P1 and 4. If sometimes they do not understand what the teachers said indicate a significant negative association of  $r(250) = 0.153$ ,  $p < 0.05$ . Furthermore, the correlation between P1 and 5. If their listening skills in English have improved, showed no significant negative association of  $r(250) = 0.005$ ,  $p < 0.05$ . Moreover, the correlation between P1 and 6. If their English language is not good enough moderate correlation but not significant association of  $r(250) = 0.358$ ,  $p < 0.05$  Furthermore, the correlation between P1 and 7. If they ask friends to explain if they do not understand what the teacher said moderate correlation but not significant negative association of  $r(250) = 0.358$ ,  $p < 0.05$ , , Furthermore, the correlation between P1 and 8. If teachers re-explain if students do not understand, indicate a significant negative association of  $r(250) = 0.117$ ,  $p < 0.01$ , also the correlation between P1 and 9. If they translate many words into other language to understand the course material, no significant negative association of  $r(250) = 0.259$ ,  $p < 0.01$ . Moreover, the correlation between P1 and 10. If find it difficult to understand technical, no significant negative association of  $r(250) = 0.128$ ,  $p < 0.05$ . Similarly, the correlation between P1 and 11. If friends help them to understand the course material, no significant negative association of  $r(250) = 0.005$ ,  $p < 0.13$ . Lastly, the correlation between P1 and 12. If they Finds it difficult to understand long English texts, showed no significant negative association of  $r(250) = 0.238$ ,  $p < 0.01$ . Apart from constructs 4, 9 and 12 there is a general no impact of perceived understanding and performance of student.

The structures of correlation Students' academic success is affected by their perceived comprehension, according to studies. have indicated that not significant negative association.

Except for constructs 4, 9, and 12, there is no association between perceived understanding and student success.

**Table 4. 8 Students’ response to reading skill**

Does a lot of reading in English for my study?	Stops reading when I do not understand the text	Reading in English is difficult because my grammar is weak	Spends less time studying the content if it were in Arabic / French/Bangla	Memories the content in order to pass quizzes and exams
---	---	---	--	--

Respo nse	Freque ncy	Perce nt	Freque ncy	Perce nt	Freque ncy	Perce nt	Freque ncy	Perce nt	Freque ncy	Perce nt
SD	14	5.6	55	22.0	74	29.6	65	26.0	23	9.2
D	29	11.6	67	26.8	82	32.8	45	18.0	45	18.0
U	38	15.2	37	14.8	38	15.2	38	15.2	65	26.0
AG	97	38.8	65	26.0	39	15.6	48	19.2	72	28.8
SA	72	28.8	26	10.4	17	6.8	54	21.6	45	18.0
Total	250	100.0	250	100.0	250	100.0	250	100.0	250	100.0

**Table 4.8: Constructs regarding reading that impact students’ performance**

Table 4.8 showed the responses of students about their ability to read in English language. From the responses nearly 70% of the respondent agreed that they did a lot of reading in English for their study where as 16% disagreed. Secondly, nearly 36% agreed that they Stop reading when they didn’t understand the text, whereas 48% disagreed. On their reading in English, 21 % felt difficulty because their grammar was weak and 62% disagreed. Similarly, 40% agreed that they spend less time studying the content if it was in other language and around 44% disagreed. Habitually, about 46% of respondent’s memories the content in order to pass quizzes and exams. The suction about the responses of students reading that impact students’ performance on academic performance, the majority of student agreed that reading has impact in academic performance and fewer of student disagree that reading have impact on academic performance.

**Table 4.9 Correlations construct Reading skill that impact students' academic performance**

	P1	1	2	3	4	5
<b>P1. Current CGPA</b>	1	-.016	-.113	-.245**	-.141*	-.155*
<b>1. Does a lot of reading in English for my study</b>		1	.060	-.001	.099	.181**
<b>2. Stops reading when I do not understand the text</b>			1	.468**	.293**	.226**
<b>3. Reading in English is difficult because my grammar is weak</b>				1	.474**	.293**
<b>4. Spends less time studying the content if it were in Arabic / French/Bangla</b>					1	.224**
<b>5. Memories the content in order to pass quizzes and exams</b>						1
* . Correlation is significant at the 0.05 level (2-tailed).						
** . Correlation is significant at the 0.01 level (2-tailed).						

***Correlations construct Reading skill that impact students' academic performance***

The Table 4.9 showed correlations between five constructs that form reading skill as a component of language and the performance of students measured by CGPA. The constructs include 1. They do a lot of reading in English for their study 2. They stop reading when they do not understand the text, 3. felt difficulty because their grammar was weak, 4. They spend less time studying the content if it is in other language, 5. Memories the content in order to pass quizzes and exams. The results of Pearson Correlations for the sampled 250 students for each construct are as follow: The Correlation between P1. Current CGPA and 1. They did a lot of reading in English for their study where indicated no significant correlation  $r(250) = 0.016, p < 0.05$ , Furthermore the correlation between P1 and 2 They stop reading when they didn't understand the text indicate no significant association of  $r(250) = 0.113, p < 0.05$ . In addition, the correlation between P1 and 3. felt difficulty because their grammar was weak indicate a significant negative association of  $r(250) = 0.245, p < 0.01$ , likewise , the correlation between P1 and 4. They spend less time studying the content if it is in other language indicate a significant negative association of  $r(250) = 0.141, p < 0.05$ . Similarly, the correlation between P1 and memories the content in order to pass quizzes and exams significant negative association of  $r(250) = 0.155, p < 0.05$ . Apart from constructs 1 and 2 there was a general correlation between reading skill and performance of students.

The suction about the responses of students' academic success is affected by reading structures. There is no meaningful connection between constructs 1 and 2 in the table, since the student

Memories the material in order to pass quizzes and exams. While constructs 3, 4 and 5 strongly agree that reading have correlation between reading skill and performance of students.

**Table 4.10 Students response to assessment skill that impact students’ performance**

Response	Teachers are more concerned about the content of my assignment		Often copy content from the internet		Teachers help me improve my writing skills		English is weak, hence get low grades.		GPA would be higher if the courses were taught in other language.		Do not answer correctly in the exam because of English weakness.		Important to study in English even if they get low grades	
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent
<b>SD</b>	22	8.8	57	22.8	88	35.2	71	28.4	67	26.8	61	24.4	15	6.0
<b>D</b>	30	12.0	71	28.4	64	25.6	59	23.6	40	16.0	48	19.2	24	9.6
<b>U</b>	57	22.8	47	18.8	35	14.0	49	19.6	40	16.0	43	17.2	31	12.4
<b>AG</b>	84	33.6	54	21.6	45	18.0	32	12.8	46	18.4	58	23.2	77	30.8
<b>SA</b>	57	22.8	21	8.4	18	7.2	39	15.6	57	22.8	40	16.0	103	41.2
<b>Total</b>	250	100.0	250	100.0	250	100.0	250	100.0	250	100.0	250	100.0	250	100.0

**Constructs regarding assessment skills that impact students’ performance**

Table 4.10: showed the responses of students about their assessment in English language. From the responses nearly 55% of the respondent agreed that their teachers were more concerned about the content of their assignment where as 20% disagree. Again, 30% agree that they often copy content from the internet but 50% disagreed. Nearly 25% of respondent agreed that the teachers helped them to improve their writing skills 60% disagreed. About 28 % of respondent agree that the student got low grades due to their weak English 52% disagreed. Similarly, 40% of respondents agreed that the GPA would be higher if the courses were taught in other language but 42% disagreed. Nearly, 40% didn’t answer correctly in the exam because their English weak 43% disagree. Lastly 72% of responses agreed that English was important to study even if they get low grades.

The Constructs of assessment skill on academic performance of students’ academic performance have indicated that, the result of data analysis sowed the responses of students about their assessment in English language, the minority of students disagree that there is correlation between

assessment and academic performance. Despite the fact that the majority of them received low grades, respondents agreed that learning English was important.

**Table 4.11 Correlations between assessment skills constructs**

	P1	1	2	3	4	5	6	7
<b>P1. Current CGPA</b>	1	.139*	-.155*	.069	-.249**	-.199**	-.253**	.025
<b>1.</b> Teachers are more concerned about the content of my assignment than the correctness of my English language.		1	-.033	.030	-.021	-.080	-.042	.165**
<b>2.</b> Often copy sentences/paragraphs from the internet because my English language is weak.			1	.130*	.553**	.443**	.487**	.001
<b>3.</b> Teacher Important to study in English even if they get low grades help me improve my writing skills through correcting my mistakes.				1	.132*	.112	.217**	.062
<b>4.</b> Because my English is weak, they get low grades.					1	.585**	.547**	-.046
<b>5.</b> GPA would be higher if the courses were taught in Arabic or French/Bangla.						1	.489**	.017
<b>6.</b> Do not answer correctly in the exam because of English weakness.							1	.124*
<b>7.</b> Important to study in English even if they get low grades.								1
* . Correlation is significant at the 0.05 level (2-tailed).								
** . Correlation is significant at the 0.01 level (2-tailed).								

**4.11 Correlation constructs of assessment skill language background on academic performance of students**

The Table 4.11 showed correlations between seven constructs that form assessment skill as a component of language and the performance of students measured by CGPA. The constructs included 1. Their teachers were more concerned about the content of their assignment, 2. They often copy content from the internet, 3. Teachers helped them to improve their writing skills, 4.

The student got low grades due to their weak English, 5. The GPA would be higher if the courses were taught in other language, 6. Didn't answer correctly in the exam because their English was weak, 7. English was important to study even if they get low grades. The results of Pearson Correlations for the sampled 250 students for each construct are as follow: The Correlation between P1. Current CGPA and 1. Their teachers were more concerned about the content of their assignment indicate positive significant correlation  $r(250) = 0.139, p < 0.05$ , similarly the correlation between P1 and 2. They often copy content from the internet indicate no significant association of  $r(250) = 0.155, p < 0.05$ . In addition, the correlation between P1 and 3 Teachers helped them to improve their writing skills indicated a significant negative association of  $r(250) = 0.069, p < 0.05$ , similarly , the correlation between P1 and 4.The student got low grades due to their weak English indicate a significant negative association of  $r(250) = 0.249, p < 0.01$ , Moreover, the correlation between P1 and 5. The GPA would be higher if the courses were taught in other language indicate a significant negative association of  $r(250) = 0.199, p < 0.01$ , moreover , the correlation between P1 and 6. Do not answer correctly in the exam because their English weak, indicate a significant negative association of  $r(250) = 0.253, p < 0.01$ , final the correlation between P1 and 7. English is important to study even if they get low grades indicated a significant negative association of  $r(250) = 0.025, p < 0.05$ . Apart from constructs 3 and 7 there is a general correlation between writing skill and performance of student. The suction, assessment ability language history association constructs on student academic success has revealed a major negative relationship correlation between constructs that form assessment skill as a component of language and the performance of students CGPA stands for Cumulative Grade Point Average. while Apart from constructs 3 and 7, there is a general connection between writing ability and student success.

## **Summary of the main findings**

### **i. Impact of writing skill on performance of students**

The hysteria surrounding student responses the effect of writing abilities on academic success in students. A majority of students accepted that writing ability has an effect on academic performance, while a minority of students disagreed that writing ability has no impact on academic performance.

### **ii. Students response to speaking skill on academic performance**

A few students disagreed that speaking ability has no influence on academic performance in the data analysis of student responses to the effect of speaking ability on academic performance. Despite the fact that a substantial majority of students acknowledged that speaking ability has an effect on academic success. The majority of students agree with this argument, although a small percentage disagree about perceived understanding constructs academic performance of students.

### **iii. Constructs regarding Perceived understanding constructs academic performance of students**

The responses of students regarding their perceived perception of teaching at the university were revealed by data analysis in Table 4.6. Students' academic performance increased as a result of their improved English communication skills. However, some students complain that it is becoming more difficult for them to understand long English texts and to translate many words into another language that will help them understand English contents. The majority of students agree with this argument, although a small percentage disagree.

### **iv. Constructs regarding reading that impact students' performance**

The finding of this research found that the majority of students accepted that reading has an effect on academic performance, and fewer students disagreed that reading has an impact on academic performance, according to the suction.

**v. Constructs pertaining to assessment skills that impact on students' performance.**

The product of data analysis sowed the responses of students about their evaluation in English language, the minority of students deny that there is a connection between assessment and academic performance, according to the constructs of assessment ability on academic performance of students' academic performance. Despite the fact that the majority of them got bad grades, they persevered.

**• Correlation between writing skills and academic performance of students at Islamic university**

**i. Correlation constructs of writing skill and academic performance of students**

The correlation constructs of writing skill on academic performance of students have indicated taking notes has a significant positive correlation. Weakness in technical vocabulary, grammatical errors, and translation from and into other languages all display a major negative relationship, while value of writing ability and development of writing skills show no such relationship.

**ii. Correlation constructs of speaking skill and academic performance of students**

This study found that the correlation constructs of speaking skill on academic performance of students have showed that speaking English fluently in class, making grammatical errors, and developing speaking skills are all normal, and students often ask questions in class when they don't understand anything, has positive significant correlation of speaking skill on academic performance of students. Students are at ease asking their teachers questions about what they are learning, however, there is no evidence of a negative relationship.

**iii. Correlation between response from respondents of perceived understanding constructs academic performance of students**

The correlation mechanisms according to research, students' perceived understanding has an effect on their academic performance have shown that there is no substantial negative correlation. There is no correlation between perceived understanding and student performance, with the exception of constructs 4, 9, and 12.



**iv. Reading construct that impact students' academic performance**

The suction about the responses of students' academic success is affected by reading structures. There is no meaningful connection between constructs one and two in the table, since the student memories the material in order to pass tests and exams. Although constructs 3,4, and 5 strongly agree that reading ability and student success are related, constructs 3,4, and 5 disagree.

**v. Correlation constructs of assessment skill language background on academic performance of students**

This study has sowed the assessment ability language history association constructs on student academic success has revealed a major negative relationship correlation between constructs that form assessment skill as a component of language and the performance of students CGPA stands for Cumulative Grade Point Average. Significant difference in academic performance of native and international students in semesters 3 and 7.

## **CHAPTER FIVE**

### **DISCUSSION OF FINDINGS**

#### **5.0 Discussion of findings, implications, recommendations and conclusion**

The major objective of the study was to assess the implications of students' language background towards their academic performance in IUT. A sample of 250 students drawn from six departments was used in this study to investigate the impact of constructs of background language on academic performance. From our study the constructs that were identified included writing, speaking, perceived understanding, reading and assessment. We used both frequency analysis to explore the construct and correlation analysis to ascertain the impact of each item of each student. In the following subsection we discussed our findings in relation to the constructs above.

#### **5.1 Discussion of finding:**

##### **5.1.1 Important of writing skill on performance of respondents.**

Results in Table 4.2 and Table 4.3 showed the impact of writing as a construct of background language on performance. From frequency and correlational analysis, the impact of writing on academic performance was fuzzy showing slight positive impact on measure of academic performance. We observed restrained impact on writing words correctly, writing technical expressions and weakness in taking notes. This observation was in line with studies done in (Bangert-Drowns et al., 2004). They stated that effect writing was contingent on the context in which it occurs. For example, proficiency in writing in some engineering courses like mathematics was viewed with less attention (Mirshekaran et al., 2018). While taking notes was important. On the other hand, having weakness in English vocabulary may have slight impact on technical engineering skills gained but not knowing how to write technical vocabulary may fail to earn the student marks in an examination (Studies, 2017). On this point, we concluded that the implication of writing of students' performance was small and depended on insight it was viewed in. Otherwise writing was useful in many ways including presentation of notes, exams, course works, etc.

### **5.1.2 Important of speaking skills on performance of respondents.**

Table 4.4 and Table 4.5 present results from which we concluded that like writing, reading presents a slight/little bit impact positive or negative on academic performance. This could be caused by the fact that languages taught in their background studies had the same teaching structure (Nikitina, 2011) . However, speaking played, a great role in articulation whose impact could affect spelling and reading, and pronunciation (Khadidja, 2009). Secondly lack of reading impact on fluency that inhibits participation which latter affects self-confidence (Husnawati, 2017). Further deficit in reading deter attention and memorizing content in the curriculum (Srinivas, 2019). All the about impact performance at different levels of education (Lotunani et al., 2014). At the core, reading plays an important part in building student's confidence by increasing participation, and self-expression.

### **5.1.3 Important of perceived understanding on performance of respondents**

From the result in Table 4.6 and Table 4.7 we found that i) sometimes they did not understand what the teachers said in class, ii) they translated many words into Arabic / French /Bangla to understand the course material, iii) the researchers they had found that it was difficult to understand technical vocabulary and long English texts (Albakri, 2017). All the perceived understanding construct that impact students' performance was related to cognition, translation, and grasping through content. This was consistent with results in 5.1.2 and 5.1.3 respectively. In languages background which control to cognition component of student. Whenever a student cannot comprehend content through reading, writing and listening the academic achievement was impaired. This is in line with other authors (Waring, 2007) who clearly elaborated that components of language affect performance in relation to other factors may include their environment, previous school attended, status of parents etc. (Ali et al., 2009; Kim, 2016). Student performance was affected by how well teachers teach, interact and provide support (Pol et al., 2011) . In conclusion, we noted that perceived understanding had slight negative impact on student performance at IUT.

### **5.1.4 Important of reading skill on performance of respondents**

From Table 4.8 and Table 4.9 the constructs that had direct impact on performance are difficulty in reading due to weakness in grammar. This was proved by (i) when content was in another language other than English students agreed that they took less time fined to read and understand.

(ii) in order to pass exams respondents agreed that they resort to memorizing content taught. Our findings implied that student acknowledge important of reading in order perceive questions in examinations. Reading played an important role in acquiring knowledge, entertainment, learning new thing and also acquiring new skills in engineering. Naturally there was slight influence of reading as part of language on performance exhibited by correlation in Table 4.9, but played significant role in uplifting the student ability to recognize content taught in class and relate it to other literature found in textbook, journals or magazines (Pobi, 2016). On this point, we concluded that reading, as part of background language, had a significant role in performance of students.

### **5.1.5 Important of assessment on performance of respondents.**

Table 4.10 and Table 4.11 showed the result of how respondents viewed their assessment in there learning carrier as being affected by language background. From our results we had found out that assessment was impacted on by the fact that teachers were not concerned about their background language but more interested in the engineering skills gained. Secondly, there was a lot of content on the internet from where respondents agreed that they copied. In many occasion some part of their assessment work was copied from the internet and other resources such as books; thirdly, they agreed that weakness in background language discourages them from getting better grades; fourthly, they also agreed that they would perform better if they were taught in language they study in at high school. Finally, they had found it was difficult in answering questions correctly because of weakness in language in which they were taught. The above data analysis showed that language played an important role in perceived assessment by student in their academic performance which was similar to what students have done (Kurnia, 2017). In that study, the authors agreed that language was of significance in assessing student about the skill they gained in learning. We conclude that language form a basic tool to assessed students' performance.

### **5.2 Implication of the study**

Languages have a profound effect on academic performance and social effect of learners. Language is ignited through perceived understanding. Perception of content in class give students where to begin learning. Language exposure promotes learning and encourage research skill, development social interaction and improves the way student think. The implication of good

background language is to effectively enhance their engineering knowledge and enforce significant scores obtained in their examinations. Therefore, languages should be considered in proper learning of engineering at the University. In our study languages is among of the forecasters of academic performance. Students' with weakness in languages often performed less than those who were strong in the same. This recognized the fact that language studies at the IUT in Bangladesh were not given the priority as it was deserved. It could be important to identify the impact of languages training in engineering education. Besides, learning a language for academic purposes give opportunity to learn the cultures of the people speaking the same language. The significant impact of this was seen in how people can responded to members of such a community. Being exposed to such culture give a substantial social development of self-respect and accepting variances in cultures. To conclude, background language has implications on students performs in a course; secondly, the social aspects of each member of the university; development of engineering skills; and influences interaction between members of different communities in the university.

In summary, we examined the implication of students' background language on academic performance. From our study, we found that language played a significant role on academic performance of students, and languages had implied/implicit effect on student performance. Furthermore, the findings indicated that not the background language only presents a fraction of the problem of performance but also language factors such as background of student in terms of origin, students' interest in course, etc. also influenced students' academic performance.

### **5.3 Limitation of the study**

- i) The limitation of this study was that a sample of 250 students drawn/selected from one university therefore further studies are required to generalize these findings.
- ii) Other factors that may affect students' performance in general were not considered in this study.
- iii) Relationship between language constructs and language skill are transferable. In this study it was considered that transferable language skills have minimum effect on performance of student.

## **5.4 Recommendation for further study**

It is expected that the future study will explore the relationships among other factors and students' learning achievement. There is also a scope to explore intra language relationship that is transferable amongst language constructs. Finally, policy issues could be explored in the future studies.

## **5.5 Conclusion**

- i) The OIC considers three official languages that is French, Arabic, and English. It is recommended all the three languages be taught at the departmental level so that the effect of background language will be mitigated which may open up opportunities for graduates to work in different OIC countries.
- ii) It is recommended that students will be taught some of the core courses of language they understand best. This might be possible by adopting team-teaching, focus-group teaching, online support teaching, etc.
- iii) Proper mechanism and policies to handle assessment of students in different language may be proposed in future.

## References

- Aburezeq, I. M. (2020). The Impact of Flipped Classroom on Developing Arabic Speaking Skills. *The Asia-Pacific Education Researcher*, 29(4), 295–306.
- Aithal, S. (2017). *Teaching - Learning Process in Higher*. June 2016.
- Albakri, S. (2017). Effects of English medium instruction on students' learning experiences and quality of education in content courses in a public college in Oman. *PQDT - UK & Ireland*, 1–312.  
[https://ore.exeter.ac.uk/repository/bitstream/handle/10871/27743/AlbakriS.pdf?sequence=1&isAllowed=y%0Ahttps://search.proquest.com/docview/2001125927?accountid=13042%0Ahttp://oxfordsfx.hosted.exlibrisgroup.com/oxford?url\\_ver=Z39.88-2004&rft\\_val\\_fmt=info:o](https://ore.exeter.ac.uk/repository/bitstream/handle/10871/27743/AlbakriS.pdf?sequence=1&isAllowed=y%0Ahttps://search.proquest.com/docview/2001125927?accountid=13042%0Ahttp://oxfordsfx.hosted.exlibrisgroup.com/oxford?url_ver=Z39.88-2004&rft_val_fmt=info:o)
- ALGHADRI, A. M. A. (2019). *STUDENTS ACADEMIC PERFORMANCE COMPARED WITH THEIR ENTRY LEVEL ACADEMIC RESULTS: A CASE OF ISLAMIC UNIVERSITY OF TECHNOLOGY (IUT)*. Islamic University of Technology.
- Ali, N., Jusoff, K., Ali, S., Mokhtar, N., & Salamat, A. S. A. (2009). The Factors Influencing Students' Performance at Universiti Teknologi MARA Kedah, Malaysia. *Management Science and Engineering*, 3(4), 81–90.
- Bangert-Drowns, R. L., Hurley, M. M., & Wilkinson, B. (2004). The effects of school-based writing-to-learn interventions on academic achievement: A meta-analysis. *Review of Educational Research*, 74(1), 29–58. <https://doi.org/10.3102/00346543074001029>
- Barak, M., Watted, A., & Haick, H. (2015). Motivation to learn in massive open online courses: Examining aspects of language and social engagement. *Computers and Education*, 94, 49–60. <https://doi.org/10.1016/j.compedu.2015.11.010>
- Bostrom, R. N. (2011). Rethinking conceptual approaches to the study of “listening.” *International Journal of Listening*, 25(1–2), 10–26.  
<https://doi.org/10.1080/10904018.2011.536467>

- Brito, J. De. (2015). *The Effects of Listening Comprehension on English Language Learners Writing Performance while Taking Notes*.
- Callahan, R. M. (2006). The intersection of accountability and language: Can reading intervention replace English language development? *Bilingual Research Journal*, 30(1), 1–21.
- Civan, A., & Coşkun, A. (2016). The effect of the medium of instruction language on the academic success of university students. *Kuram ve Uygulamada Eğitim Bilimleri*, 16(6), 1981–2004. <https://doi.org/10.12738/estp.2016.6.0052>
- Collier, V. P. (1992). A Synthesis of Studies Examining Long-Term Language Minority Student Data on Academic Achievement. *Bilingual Research Journal*, 16, 37–41. <https://doi.org/10.1080/15235882.1992.10162633>
- Dickinson, D. K., Golinkoff, R. M., & Hirsh-Pasek, K. (2010). Speaking Out for Language: Why Language Is Central to Reading Development. *Educational Researcher*, 39(4), 305–310. <https://doi.org/10.3102/0013189X10370204>
- Ehsan, N., Vida, S., & Mehdi, N. (2019). The impact of cooperative learning on developing speaking ability and motivation toward learning English. *Journal of Language and Education*, 5(3 (19)).
- Florez, M. A. C. (1999). Improving adult English language learners ' speaking skills. *Burns*, June, 1–4.
- Graham, S., Harris, K. R., & Mason, L. (2005). Improving the writing performance , knowledge , and self-efficacy of struggling young writers : The effects of self-regulated strategy development. *Contemporary Educational Psychology*, 30, 207–241. <https://doi.org/10.1016/j.cedpsych.2004.08.001>
- Hsu, C.-K., Hwang, G.-J., Chang, Y.-T., & Chang, C.-K. (2013). Effects of Video Caption Modes on English Listening Comprehension and Vocabulary Acquisition Using Handheld Devices. *Educational Technology & Society*, 16(1), 403–414.
- Husnawati. (2017). *Student's speaking performance : some challenging factors*. 80.



- İncirci, A., & Şükrü Parmaksız, R. (2016). The Effects of Writing to Learn (WTL) on Academic Achievement and Attitude to Lesson in English Classes. *Universal Journal of Educational Research*, 4(9), 2163–2173. <https://doi.org/10.13189/ujer.2016.040928>
- Islam, M. H. (2016). Implementation Scheme Techniques in Improvement Understanding Ability in Reading. *Attalim*, 2(1), 51–58.
- Jimoh, R., & Kenneth, I. N. N. (2016). Effect of English Language proficiency on students performance in cataloguing and classification courses in polytechnic - based library schools in Nigeria. *International Journal of Library and Information Science*, 8(6), 54–61. <https://doi.org/10.5897/ijlis2016.0708>
- Khadidja, K. (2009). the Effect of Classroom Interaction on Developing the Learner’s Speaking. *Journal*, 100(education), 200.
- Kim, E. (2016). Understanding customer perception of restaurant innovativeness and customer value co-creation behavior. *Graduate Theses and Dissertations*, 15006, 1–163.
- Komba, S. C., & Bosco, S. (2015). Do Students’ Backgrounds in the Language of Instruction Influence Secondary School Academic Performance? *Journal of Education and Practice*., 6(30), 148–156. <http://search.ebscohost.com.proxy-ub.rug.nl/login.aspx?direct=true&db=eric&AN=EJ1081374&site=ehost-live&scope=site>
- Kurnia, D. (2017). Опыт аудита обеспечения качества и безопасности медицинской деятельности в медицинской организации по разделу «Эпидемиологическая безопасность»No Title. *Вестник Росздравнадзора*, 4, 9–15.
- Lai-Mei Leong, S. M. A. (2017). c r v i h o e f c f. *International Journal of Research in English Education*, 34–41.
- Lotunani, A., Idrus, M. S., Afnan, E., & Setiawan, M. (2014). The Effect of Competence on Commitment , Performance and Satisfaction with Reward as a Moderating Variable ( A Study on Designing Work plans in Kendari City Government , Southeast Sulawesi ). *International Journal of Business and Management Invention*, 3(2), 18–25.
- Marye Anne Fox, P. D. (2003). *Pan-Organizational Summit on the U.S. Science and Engineering Workforce* (Issue 1). <https://doi.org/10.16309/j.cnki.issn.1007->

1776.2003.03.004

- Mathers, N., Fox, N., & Hunn, A. (2007). Surveys and questionnaires. *The National Institute for Health Research Services for the East Midlands/Yorkshire & and the Humber*, 395–420. <https://doi.org/10.4324/9780203154281-35>
- Mirshekaran, R., Namaziandost, E., & Nazari, M. (2018). The Effects of Topic Interest and L2 Proficiency on Writing Skill among Iranian EFL Learners. *Journal of Language Teaching and Research*, 9(6), 1270. <https://doi.org/10.17507/jltr.0906.16>
- Nikitina, A. (2011). *Arina Nikitina Successful Public Speaking*.
- Nouchi, R., Taki, Y., Takeuchi, H., Nozawa, T., Sekiguchi, A., & Kawashima, R. (2016). Reading Aloud and Solving Simple Arithmetic Calculation Intervention (Learning Therapy) Improves Inhibition, Verbal Episodic Memory, Focus Attention and Processing Speed in Healthy Elderly People: Evidence from a Randomized Controlled Trial. *Frontiers in Human Neuroscience*, 10, 217. <https://doi.org/10.3389/fnhum.2016.00217>
- Pobi, E. K. (2016). *Reading Habits and Its Effect on Academic Performance of the Students of St. John's Grammar Senior High Secondary School, Accra*. University Of Ghana.
- Pol, J. Van De, Volman, M., & Beishuizen, J. (2011). Patterns of contingent teaching in teacher-student interaction. *Learning and Instruction*, 21(1), 46–57. <https://doi.org/10.1016/j.learninstruc.2009.10.004>
- Qamar, M. B. (2016). The impact of learner's autonomy on teaching oral skills (speaking skills) in an EFL classroom. *Journal of Language Teaching and Research*, 7(2), 293–298.
- RAND Study Group. (2002). Reading for Understanding: Toward an R & D program in reading comprehension. In *RAND* (Vol. 22, Issue 10). <https://doi.org/10.1044/leader.ov.22102017.np>
- Remali, Azrinawati mohd, Jiventeren Selavathy, Nurulnadiyah Mohd Aris, Fatin Zakirah Zulkhepli, N. S. S. (2015). Understanding the impact of Students' Perception in Learning toward Academic Performance. *National Symposium & Exhibition on Business & Accounting, December*, 1–9. [https://www.researchgate.net/publication/287195181\\_Understanding\\_the\\_impact\\_of\\_Stude](https://www.researchgate.net/publication/287195181_Understanding_the_impact_of_Stude)

nts' Perception in Learning toward Academic Performance

- Rodrigues, P. D., & Vethamani, M. E. (2015). The impact of online learning in the development of speaking skills. *Journal of Interdisciplinary Research in Education (JIRE)*, 5(1).
- Shali, S. K. (2017). *The Power of Listening Ability and Its Effects on Academic Performance : An Examination of College Students*. 5, 1891–1896.
- Smith, R. A., & Khawaja, N. G. (2011). International Journal of Intercultural Relations A review of the acculturation experiences of international students. *International Journal of Intercultural Relations*, 35(6), 699–713. <https://doi.org/10.1016/j.ijintrel.2011.08.004>
- Srinivas, P. R. (2019). The Importance of Speaking Skills in English Classrooms. *Alford Council of International English & Literature Journal(ACIELJ)*, Vol 2(Issue 2), 18.
- Studies, L. (2017). The impact of vocabulary knowledge on reading, writing and proficiency scores of EFL learners. *Dil ve Dilbilimi Çalışmaları Dergisi*, 13(1), 352–378.
- Syamsinar, S. (2016). Improving the Listening Achievement of the Students of Smu Negeri 1 Sungguminasa Through the Use of Kangguru English Learning Packages. *Exposure : Jurnal Pendidikan Bahasa Dan Sastra Inggris*, 5(1), 65. <https://doi.org/10.26618/ejpb.v5i1.814>
- Waring, J. W. (2007). THE IMPACT OF WRITING ON STUDENT ACHIEVEMENT. In *University of North Carolina Wilmington*.


# Appendix: Questionnaire

## *Questionnaire Introduction*

I'm Ebrima Samyang ..., a second-year student pursuing Masters in Technical education (M.Sc.T.E. with specialization in Electrical Electronic Engineering) student at Islamic University of Technology, a subsidiary organ of Organization of Islamic Cooperation (OIC).

As part of my M.Sc. T.E thesis requirement, I therefore humbly request you to be one of the participants in this study titled: "University Students 'The implication of language background on students' academic performance: a case study of Islamic University of technology (IUT).

Any information you give here will be kept confidential and please note that your honest response and contribution will highly contribute positively towards the success of this study.

Signature of the student:  .....

Please complete the information below yourself. (Tick appropriate).

1. Age  (20-24)  ( 25-29)  (30-34)
2. Gender:  male  female
3. Nationality: .....e.g. Bangladesh:
- 4.Previous language of instruction at High school English French Arabic Bangla other.
- 5.Department: TVE EEE CSE CEE MPE BTM.
- 6.year of studies: Fist year second year third year  fourth year.
7. Did you study English in the Foundation programme? Yes No.
8. Level: Diploma Bsc Eng BscTe  Masters  PHD.
9. How do rate your English? Weak average strong.
- 10.What is your current CGPA?  (below 2.0)  (2.0-2.49)  (2.5-2.99)  (3.0-3.49)  (3.5-4.00).

Please read the statements and tick the best reflects your learning experience in this university.  
**1)Strongly Disagree, (SD) (2) Disagree, (D) (3) Undecided, (U) (4) Agree, (AG) (5) Strongly Agree (SA)** (Albakri, 2017).

Basic Language Skills					
Writing skills	SD	D	U	AG	SA
1. I can easily take notes in English during the class.					
2. Writing is an important skill in my specialization.					
3. Because my technical vocabulary is weak, I find it difficult to write assignment in my specialization.					
4. When I write in English, I make grammar mistakes.					
5. My writing skills have improved because I have to write a lot of assignments in my specialization.					
6. I always make spelling mistakes when I write in English.					
7. I find it difficult to write in English because I do not know a lot of vocabulary.					
8. Because my writing is weak, I first write in Arabic/ French / Bangla and then translate it into English.					
Speaking skills	SD	D	U	AG	SA
9. I feel comfortable speaking English in class.					
10. I rarely participate in class out of fear to make mistakes in speaking English in front of my classmates.					
11. I usually ask questions in class when I do not understand.					
12. I feel comfortable asking my content teachers (non-Arabic / French/ Bangla speakers) questions outside class.					
13. I can express myself clearly in writing in English.					
Perceived Understanding	SD	D	U	AG	SA
14. I need to study in English to get a good job.					
15. Beside English, I need Arabic/ French/ Bangla in my future job.					
16. Some subjects should be taught in Arabic/ French/ Bangla at this university.					
17. Sometimes I do not understand what the teachers say in class.					
18. My English listening skills have improved because all classes are in English.					
19. I feel that my English language is not good enough to study in English.					
20. I ask my friends to explain if I do not understand what the teacher says.					
21. My teachers re-explain if students do not understand.					
22. I need to translate many words into Arabic / French/ Bangla to understand the course material.					
23. I find it difficult to understand technical vocabulary.					
24. My friends help me to understand the course material.					
25. Our teachers spend a lot of time explaining vocabulary.					
26. I find it difficult to understand long English texts.					
Reading	SD	D	U	AG	SA
27. I have to do a lot of reading in English for my study.					
28. I stop reading when I do not understand the text.					
29. Reading in English is difficult because my grammar is weak.					

30. I would spend less time studying the content if it were in Arabic / French / Bangla.					
31. I memories the content in order to pass quizzes and exams.					
<b>Assessment</b>	<b>SD</b>	<b>D</b>	<b>U</b>	<b>AG</b>	<b>SA</b>
32. My teachers are more concerned about the content of my assignment than the correctness of my English language					
33. When I have to write an assignment in my specialization, I often copy sentences/paragraphs from the internet because my English language is weak.					
34. My teachers help me improve my writing skills through correcting my mistakes.					
35. Because my English is weak, I get low grades.					
36. My GPA would be higher if the courses were taught in Arabic / French/ Bangla.					
37.Sometimes I do not answer correctly in the exam because I do not understand the question in English well.					
38. It is important to study in English even if I get low grades.					

*Thank you for completing the questionnaire*