

## RESEARCH ARTICLE

# A Needs Analysis on the language skills required by the industry from vocational graduates

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**Abstract:** This paper presents a segment of a larger Needs Analysis, conducted among the diverse stakeholders involved in Vocational Education (VE) in Sri Lanka, related to the Bachelor of Technology (B.Tech) in Mechatronics. The focus of the study is on the perceptions of industry personnel on the kind of English vocational graduates need to use in the workplace. VE plays a significant role in the educational sphere, providing higher educational opportunities to individuals who are less fortunate with regard to formal schooling, and providing employment for skilled youth in many identified vocations. One significant challenge these graduates face at the work place is their poor English language skills, which hinder their chances of entering the world of employment. To ensure that the English language skills provided to prospective graduates of the University of Vocational Technology (Univotec) are adequate and helpful in performing effectively in industry, this study explored the perceptions of industry personnel and identified the shortcomings of the English course designed for vocational graduates. The findings were used to revisit the English language course offered to vocational graduates at Univotec by critically exploring whether they needed English for Specific Purposes (ESP) or English for General Purposes (EGP). In order to ensure that the findings are focused, rich and nuanced, industry personnel from the field of Mechatronics were a part of the focus group discussions. The sample consisted of 15 industry personnel who shared their perceptions on the needs required by vocational graduates at the workplace. The key findings included the vital need of English for effective performance in industry. The study also revealed the importance of knowledge of ESP with a foundation in EGP and also the importance of Technical English which could be used in specific situations.

**Keywords:** ESP, EGP, Needs Analysis (NA), vocational needs.

## BACKGROUND

Vocational education has gradually gained popularity as it prepares youth to face the future in a variety of trades, such as Information Technology and Construction Technology, that fits the requirements of the contemporary world. Mouzakitis (2010) states that a majority of the countries in the world is in the process of strengthening or have already strengthened their vocational sector in preparation for future challenges. It could be stated, therefore, that vocational education is at the forefront in responding to major global challenges. For a variety of reasons, vocational education seems to be more beneficial than the education that a graduate can gain from a state university system. An individual who is equipped with a particular skill as well as paper qualifications is more likely to be employed by industry than one who possesses paper qualifications only. This is the significance of vocational education. For reasons such as higher participation in the labour market, reduction of unemployment, the opportunity to acquire a qualification for categories that did not previously have one, and the chance to advance in the professional hierarchy, vocational education has become a key attraction to many.

In the Sri Lankan context, vocational education plays a noteworthy role, and in order to cater to the needs of various vocational sectors, a multitude of institutes have been established giving value to the skills of youth through awarding paper qualifications.

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Although the future of vocational students seemed to become promising with the move towards awarding paper qualifications, there still appears to be a barrier to their advancement due to the fact that the industry seeks vocational graduates who are not only skilled but are also capable of communicating effectively in English, in order to perform in industry in local and international labour markets. The industry is on the lookout for graduates who are able to communicate in English with companies, and who can popularise brand names in both local and international markets. Although many vocational institutes offer English language training along with the primary educational qualifications, yet, very often, the English language skills acquired by the students do not meet industry requirements.

Although currently, during students' first year in their respective courses, they are offered an English component as part of their studies with the aim of enhancing their performance in industry, employers seem to be dissatisfied with their English language skills as observed from surveys that have been carried out and also from the direct feedback provided on the performance of students. The current English module taught at Univotec consists of English for General Purposes (EGP), and as per the teaching experience of the researcher, it is observed that the current EGP course offers little help to students to perform effectively, both in the academic context and in industry. If EGP does not help students to perform effectively at industrial levels, then what type of English training is required?

This paper will examine the vocational sector and the English language communication skills required by industry employers. In order to carry out this study, the sample was drawn from the University of Vocational Technology (Univotec), the only university that awards degrees to the vocational sector in Sri Lanka. The Bachelor of Technology in Mechatronics has a high demand in the vocational sector and in other Sri Lankan contexts as well as globally. An exploration of the type of English needed at the industry level will help English Language teachers at the Vocational University to cater more effectively to their students. To this end, the current study sought to answer the following research question: What are industry personnel's academic and professional communicative expectations?

## LITERATURE REVIEW

English Language Teaching (ELT) could be divided into numerous categories. Kojour *et al.* (2015) highlight ESP as a branch of ELT which could be sub-divided into two main categories: English for Academic Purposes (EAP) (such as English for Medicine, Engineering, Theology,

etc.) and English for Occupational Purposes (EOP) (such as English for secretaries, technicians, etc.).

### What is ESP?

Various definitions of English for Specific Purposes (ESP) have been presented in the literature. Hutchinson & Waters (1987) stated that ESP is an approach to teaching a language and that this approach is based on learners' needs. Thus, as per Hutchinson & Waters (1987), the foundation of ESP should revolve around the following simple question: Why does the learner need to learn a foreign language? It is further explained that ESP is not a matter of teaching 'specialized varieties' of English and not even a matter of scientific words and scientific grammar for scientists, hotel related words and grammar for hotel staff and so on. Further, ESP is said to be based in the first instance on principles of effective and efficient learning, where a proper command of the syllabus, methods and activities used for learning a language on the basis of the needs of the learners and on the antecedents of their learning, are needed. Dudley-Evans & St John (1998) state that ESP has absolute characteristics and variable characteristics. These absolute characteristics and variable characteristics are categorised as follows.

#### *Dudley-Evans & St John (1998)'s definition of ESP*

##### Absolute characteristics

- ESP is defined to meet specific needs of the learner;
- ESP makes use of the underlying methodology and activities of the discipline it serves;
- ESP is centered on the language (grammar, lexis, register), skills, discourse and genres appropriate to these activities.

##### Variable characteristics

- ESP may be related to or designed for specific disciplines;
- ESP may use, in specific teaching situations, a different methodology from that of General English
- ESP is likely to be designed for adult learners, either at a tertiary level institution or in a professional work situation. It could, however, be for learners at secondary school level;
- ESP is generally designed for intermediate or advanced students. Most ESP courses assume basic knowledge of the language system, though it can also be used with beginners.

Richards & Rodger (2001) highlighted ESP as a movement that seeks to serve the language needs of learners who need English in order to carry out specific roles, and some of these roles are, for example, that of student, engineer or nurse. ESP is necessary for those who need to acquire content and real-world skills through the medium of English, rather than master the language for its own sake.

### EGP vs. ESP

Widdowson (1983), as cited in Ajideh (2011), highlights that the distinction between ESP and EGP lies in the way one defines and implements the learning purpose. ESP is stated as objective-oriented learning, where the specification of the objective corresponds to the aim — the training operation — which deals with the development of restricted competence, whereas EGP is largely aim-oriented. The fact that it is aim-oriented does not equate the specification of objective to aim — an educational operation — dealing with the development of general capacity. Further, as stated by Widdowson (1983), the primary role of an ESP teacher is to design a syllabus based on realistic goals and evaluate students' performance through an examination of the relevant language skills. The EGP teacher, however, does not necessarily set the goals and objectives of the programme, while the ESP teacher is basically involved in a 'training operation' equipping the learners with a 'restricted competence' to cope with defined tasks.

Rahman (2015) states that learners and their purposes for learning English are the important differences between ESP and GE (General English). Furthermore, ESP learners are characterised as adults who already have some acquaintance with English and learn the language to communicate a set of professional skills and to perform particular profession-related activities. Thus, it is further stated in Rahman's study that an ESP course is developed based on an assessment of the purposes and needs of the students and the activities for which English is needed. In this sense, an ESP course is developed based on an assessment of the purposes and activities for which English is needed. This is an opening into the debate whether vocational sector students actually need ESP, or, since their current knowledge of English stands at a very low level, whether an EGP course would serve their needs better.

Larouz & Kerouad (2016) state that many scholars and researchers argue that the methodology in ESP bears many similarities to the methodology used in EGP. Although ESP is said to prepare students for authentic situations, it is also stated that both EGP and ESP incorporate the same concepts and approaches such as authenticity.

Thus, it has been stressed that the use of authentic materials in language classes serves learners well and helps them engage in the learning process. However, other researchers describe the ELT methodology used in ESP as considerably different from the one adopted and adapted in EGP by virtue of the two contrasting contexts they represent. Huckin (1988), as quoted by Larouz & Kerouad (2016), point out that the difference between ESP and EGP may reside in what is referred to as 'academic' and 'real world-problems'. Huckin (1988) further states, as quoted by Larouz & Kerouad (2016), that the "academic" is usually neatly laid down for the students by the professor, and is well defined and usually has one correct answer, whereas real world problems, by contrast, are often disordered, ill-defined and open to many possible solutions, none of which may be totally correct.

Zohrabi (2013) highlights EGP as a foundation course in any curriculum which is intended to pave the way for ESP. The investigation of attitudes in the study of Esmailpour & Shahrokhi (2015) examines views and attitudes of university students and English instructors toward ESP and ESP-related issues, through the administration of a modified version of a questionnaire developed by Tsao (2011). It was here revealed that students are generally in favor of ESP, but this opinion contradicted the views of the teachers, who were more passive regarding the idea of replacing General English education with ESP. Although Zohrabi (2013) highlights EGP as a foundation course in any curriculum which is intended to pave the way for ESP, Harding (2007) as quoted by Moštėková (2010), mentions, in a critical analysis, that the type of learners who come to ESP are often demotivated by courses of General English, and students follow ESP courses because purely language-based work would not help them acquire practical or manual skills in lessons. However, the statement of Gass (2012) is an inspiration to the current study as it highlights the fact that by designing of ESP courses, students could be prepared for professional English that suits the specific purposes of the world in which they work. This would be a probable solution to the existing issue in the vocational sector, as the target group is not currently taught the type of English that would be useful in industry.

### Needs Analysis (NA) in ESP curriculum development

The process of designing an ESP curriculum should be preceded by a Needs Analysis. Channa *et al.* (2013) state that Needs Analysis (NA) was introduced into language teaching through the English for Specific Purposes (ESP) movement. Ting (2010) highlights NA as the first stage in ESP curriculum design, before the syllabus, materials and

teaching activities are decided on. NA is defined as the process or an element of designing a curriculum through the gathering of information, and as Brown (2009) states, this information gathering will involve a client group in an industry or in education.

### Models and approaches related to Needs Analysis

The literature discusses various models of NA and of these models, a sociolinguistic model (Munby, 1978), the learning-centered approach of Hutchinson & Waters (1987), and other learner-centered approaches (Berwick, 1989; Brindley, 1989) are in the forefront. An influential sociolinguistic model by Munby (1978) was developed for defining the content of purpose-specific language programmes. The respective model chosen can be used to specify valid 'target situations' that aim at communicative competence.

Munby's sociolinguistic model (1978) presents a profile of communication needs, comprising communicative events (e.g. discussing everyday tasks and duties), the purposive domain (e.g. educational), medium (e.g. spoken), mode (e.g. dialogue), channel of communication (e.g. face-to-face), setting of communication, main communicator/s, person/s with whom the communicator/s communicates, dialect, attitudinal tone (e.g. informal), subject content and level of English ability required for the communication. Although this model provides a wealth of detail, it has been criticized by West (1994) for being impractical, inflexible, complex and time-consuming. This model does not include needs that are dependent on human variables and the fact that the learner's voice is not taken into account is an example used to display a weakness of the model.

While Munby's (1978) sociolinguistic model concentrates on defining the content of purpose-specific language programmes, Hutchinson & Waters (1987) contribute to ESP with the introduction of the learning-centred approach, which argues that in other approaches there is too much attention paid to language needs. Hutchinson & Waters (1987) also point out that more attention should be paid to how learners actually learn. The learning needs approach is said to be the best route to convey learners from the starting point to the target situation. Here, "the target needs are what the learner needs to do in the target situation". These learner needs in the target situation, as per Hutchinson & Waters (1987), are divided into three categories as follows: necessities, lacks and wants. In the learning-centered approach, Hutchinson & Waters (1987) recommend that needs be checked constantly through a Needs Analysis. Although the model recommends a Needs Analysis,

it does not specify how to carry out a Needs Analysis, and this knowledge gap is the focus of the current study. Brown (2009) defines a Needs Analysis as,

"the systematic collection and analysis of all subjective and objective information necessary to define and validate defensible curriculum purposes that satisfy the language learning requirements of students within the context".

For this purpose, he introduces a step by step approach which consists of three systematic steps listed as follows: Making basic decisions about the Needs Analysis, gathering information, and using the information. The fact that the approach is flexible and that it allows continual data gathering and use, suits the current study, and hence, this approach becomes the core methodology followed by the study.

### English language needs and wants of the industry

Quite a number of studies have looked at the type of English industry needs. Hutchinson & Waters (1987), as mentioned before, divide target situational needs into three categories, namely: necessities, lacks and wants. In a study carried out by Chao *et al.* (2016), English needs of Transportation Science students were investigated, and the study reveals the similarities and differences between teachers' and students' perceptions of their needs. The study also revealed that the English needs and wants of the Transportation Science students were different from their actual shortcomings in English. Although the results showed that the students lacked ESP skills, the students believed that they needed and wanted to learn EGP skills. A need to improve General English proficiency, especially speaking skills, was also revealed in the study.

However, the results of the study of Hossain (2013) were different, as they revealed that the content areas of business and advanced English communication taught to the target group should be connected to engineering because, in the future, they would work as technicians and managers in their respective fields. This result is in line with the result obtained in the study by Pillana-Breznica (2016), which also outlines the importance of teaching ESP. In line with the studies of Hossain (2013) and Pillana-Breznica (2016), the current study explores the importance of English that is being taught for academic purposes as well as for target careers, where the focus would be on Mechatronics and the future occupations of students as technologists and managers in their respective field.

Alfehaid (2011) carried out a research study that incorporates a NA and a course evaluation to create a

proposal for the development of an ESP course at a health science college in Saudi Arabia. This study attempted to evaluate the ESP course and to investigate the needs of two groups of stakeholders: ESP students and health professionals. The researcher adopted a mixed-methods approach by administering questionnaires to current students, graduates and language teachers and carried out semi-structured interviews. Furthermore, he/she employed a documentary analysis as an ancillary research method. The findings of his/her study reveal the importance of all four language skills for students' academic work and for their target careers. As the study is based on an evaluation of an existing course, the results of the evaluation indicate that the ESP course was helpful to some extent but had some limitations which include the curriculum, the teaching-learning materials used and the assessment procedures adopted. Through the study results, a new ESP curriculum based on stakeholders' needs was proposed, and further suggestions include the provision of teacher training and the recruitment of additional ESP teaching staff as first steps towards the enhancement of the effectiveness of the ESP programme. An idea drawn from Alfehaid's study is that through the collection of multiple types of data from various sources and places, many problems commonly associated with Needs Analysis and evaluative studies could be overcome.

### **Needs and wants related to english in the Sri Lankan context**

In the Sri Lankan context, there is a dearth of research on English for Specific Purposes and the vocational sector, and hence, the current study fills the existing gap. There is an obvious link between English and employment and many students express their intention to develop fluency in English. Ratwatte (2016) states that lack of good communication is the primary reason for unemployment among state educated learners, in the opinion of powerful persons in different spheres: private and state sector employers, politicians and policy makers, educationists and funding agencies. In the Sri Lankan context, De Silva & Devendra (2014) have looked at the needs and expectations of a group of students registered for an undergraduate degree programme offered in the English medium, which is the students' second language (L2), conducted prior to an English for General Academic Purposes (EGAP) course. The needs of the students, revealed in the study, include academic, occupational and social needs, all of which are expected to be fulfilled through the EGAP course. This particular study has looked at students who have gained entry to the university system through the G.C.E Advanced Level Examination. At this point, it should be highlighted that these undergraduates are more

likely to have a better knowledge of English than those in the current study. In the current study, the entrants have diverted from the path of traditional education at various stages. Furthermore, at the General Certificate of Education (Advanced Level), which is known as the G.C.E A/Level, students are expected to follow a course in General English (GE) and sit for that paper at the examination, whereas the university concerned in the current study does not get many students who have studied for the GCE A/L, as these students have diverged from traditional educational paths. The current study will look at the English module offered to undergraduates, but the target group of stakeholders will be different, as they have gained entry to the university through the National Vocational Qualification. Thus, their language proficiency would be at a lower level than those in the study of De Silva & Devendra (2014). Hence, the current study will look closely at the type of English module that the vocational sector needs, in order to enhance the performance of students in their target careers.

## **METHODOLOGY**

In order to carry out the research, the Univotec and the B.Tech in Mechatronics were selected as the setting of the current study. This was because the Univotec is the only university that awards vocational degrees to entrants through the NVQ ladder, in other words, those who have exited the traditional education system. The focus will be on the B.Tech in Mechatronics programme because this degree attracts a larger number of applicants in comparison to other degrees. The reason why this degree programme is so popular could be related to its demand in the job market.

### **Needs Analysis (NA)**

At the centre of the study is a Needs Analysis due to its key role played in developing a curriculum. The current study is a segment of a much larger study and in the larger study, the researcher used questionnaires and focus group discussions to carry out the Needs Analysis with the following stakeholders: undergraduates, graduates, lecturers in the Department of Language Studies and the Department of Manufacturing Technology, and industry personnel. However, in the current study, only the perceptions of the industry personnel will be considered.

NA is the first stage in the ESP curriculum design before the syllabus, materials and teaching activities are decided upon. The NA model introduced by Brown (2009) was used in the current study due to its step by step guidance and feasibility. The NA used for the current study consists of three systematic steps: making basic decisions about the Needs Analysis, gathering information, and using the information. All of these main



Figure 1: Needs Analysis process (adapted from Brown, 2009)

steps together comprise 10 sub-steps as illustrated by Figure 1.

In order to carry out the NA, a mixed method research design was used, incorporating both quantitative (questionnaires) and qualitative (focus group discussions) data. As cited in Alfehaid (2011), Long (2005) states that “triangulation of sources plays an important role in validating findings” (p. 94), and thus, all these data collection tools were incorporated in the study. Analysis of focus group data was carried out through coding data thematically, summarising, synthesizing and drawing conclusions. As for the quantitative data, a descriptive analysis was carried out as the quantitative data were used, more or less, for triangulation of data obtained from qualitative methods.

### The study sample

In the current study, as the focus will be especially on the perceptions of industry personnel, the sample consisted of industry personnel from Mechatronics related industries. Therefore, 15 industry personnel from the field

of Mechatronics were selected to answer questionnaires, and 05 out of those 15 were selected for focus group discussions. During this selection process, the researcher selected the people responsible for the placement of interns in industrial training. It must be highlighted that in the selections, gender did not play a key role. The study sample was selected through purposive sampling. Kothalawala (2014) mentions that purposive sampling techniques could be used to select stakeholders who are typical, suitable and convenient for study.

## RESULTS AND DISCUSSION

The results obtained from the study have been analysed both qualitatively and quantitatively, with a primary focus on qualitative data.

### The need for English

One aspect of the study was the need for English in the industry. The strength of the need for English was explained through the data drawn from the questionnaires as well as the interviews. The following statement by an

interviewee emphasises the strong need for English in the industry:

“It is a weapon to survive in the industry”  
(Industry personnel 4).

The fact that the interviewee uses the word “weapon” gives a strong indication that English is essential in industry. Due to the competition in the job market in the vocational sector, many institutions are engaged in producing individuals who are trained for vocational trades, and Univotec is one of them. It was highlighted that although students are skilled in their respective trades, many lack a key attribute that is needed to be able to perform effectively, which is English language proficiency. What made an individual stand out from other vocationally qualified individuals was his/her English language proficiency. Thus, English proficiency was termed a “weapon” by one of the participants.

“In industry we are expected to move with companies and most of the companies now are using English as the language of communication. So the graduates who come out of university must be equipped with a sound language proficiency”  
(Industry personnel 3).

Here, it is explained that with regard to the particular vocation that a person is engaged in, it is not only within one company that communication takes place. In industry, individuals are expected to interact with personnel from other companies that belong to the same industry. This interaction is supposed to enhance opportunities to share knowledge and obtain new knowledge, and in this sense, an employee becomes more of an ambassador of his/her company and needs to promote it. The ability to interact with other companies requires not only knowledge of the particular vocation that one is engaged in but also sound English language skills. “Is it only in English that you communicate?” was one of the questions that was posed during the focus group discussions and to this question, the response was that although at certain times industry level discussions took place in Sinhala, the majority of discussions are carried out in English.

As explained by the participants, one of the reasons why these discussions or meetings were carried out in English is to maintain standards, and, as Industry personnel 5 explains, as stated below, the Mechatronics industry interacts with many foreign companies and also deals with a large number of foreign customers, and therefore, English was highlighted as a need for effective performance.

“If there are foreign customers, then there is no choice. We have to use English” (Industry personnel 5).

As per the above examples, what emerged from the discussions was that even though an individual could be highly skilled with regard to the vocation that he/she is engaged in, if he/she is unable to communicate effectively with the audience, not only will that individual fail on a personal level, but the failure will have an impact on the company that is being represented. Therefore, most industry personnel stressed that no matter how skilled you are, if your level of English does not satisfy the needs of the company that you are employed in, it hinders the development of the company. This discussion emphasised how the knowledge of English has come to play a key role despite the number of qualifications or the list of vocational skills that an employee may possess. Another fact that emerged was that industries have to be promoted not only locally but also internationally, and this is clearly visible in the following extract;

“As per my observation and experience, many multinational companies are now making English mandatory and not as a foreign language that you could use if you want to” (Industry personnel 1).

Although formerly, in companies within the industry, English language proficiency was only recognised as an additional skill, with modern developments all over the world, it seems that English is an essential skill for the workforce. To promote its products internationally, the staff of a company should be equipped with a good command of English. With the existing level of competition in the business environment, more and more companies are recruiting staff that have a sound command of the English language. At one of the discussions, a participant expressed that many countries that produce graduates with good English language skills are economically more sound and have better incomes. He pointed out that there is a noted correlation between the increase in economic performance and graduates with proficiency in English, while being skilled in their area of expertise. Therefore, the participant emphasised that if graduates or diploma holders who will perform effectively in industry are to be produced, then special attention should be paid to the kind of English that is taught to students in the vocational sector.

Another question posed to the participants during focus group discussion was as follows: Is English essential in industry only for purposes of brand promotions and meetings?

“The need for English changes according to the nature of employment that an individual is engaged in, and because of this, certain job roles may not need English at all” (Industry personnel 3).

**Table 1:** Industry personnel's' views on the four language skills for the target career

Skills	Very important	Quite important	Not very important	Not important at all
Reading	00	05	00	00
Writing	02	03	00	00
Listening	00	02	02	00
Speaking	02	03	01	00

This statement was elaborated on, in that there might be instances where an individual gets lucky and is able to work with the minimum amount of English skills they possess. For example, if an individual is engaged in employment that deals with the operations of machines, then he/she needs only to be able to read manuals prior to working on the machines. However, as mechatronics is a foreign subject and involves a great many documents in English, and hardly any in Sinhala or Tamil, employees are expected to be able to read and understand the relevant material such as rules and regulations in English.

Although English was said to be essential in order to comprehend manuals and lab reports, the discussions held with industry personnel revealed that the majority of vocational graduates who come into the industry fail to meet this requirement.

“We are working for an industry and in an industry everyone has a role to play in order to move towards success. Hence, no one would spare time helping you understand a catalogue of a product that has newly arrived, as everyone is assigned a task, and this is where an individual's English comes in handy” (Industry personnel 3).

The above statement further explains that in industry, English is a requirement, and if one lacks proficiency in the language, then there is no language support provided. For this reason, it was expressed by the industry personnel that in most cases, individuals with sound English language skills are hired. However, it was also pointed out that the level of English needed varied with the nature of the job in the work place. For example, it was stated that an individual who was more involved with the operation of machines required less English than one in a managerial position. However, as per the majority of industry personnel, since Mechatronics is a foreign subject, at least a certain level of language proficiency was needed. The industry personnel stated that English was essential if an employee was in a managerial position with a vocational qualification, whereas the demand for English was less if he/she were more into the operation of machines. However, the majority stated that English is a key requirement in the industry.

### Importance of the four language skills

While it was vital to find out how essential English was for industry, it was equally important to find out the significance of the four language skills in carrying out a particular task. “If the industry needed English, what four skills are in demand in the industry?” was another question that was posed during the discussions. The questions that were posed revolved around how important the respective skills were. For example, the questions explored whether speaking in English is essential and the role that writing played in the work lives of employees. Listening skills were also inquired into and with these series of questions, the manner in which industry personnel rated the significance of the four skills is set down in Table 1.

It was interesting to explore why these personnel rated the four skills as they did. As per one of the industry personnel, first impressions count. This view is explained in the statement below:

“Especially as we are in a huge competition not only among companies but also among individuals. This is seen especially at interviews” (Industry personnel 2).

For interviews, speaking plays an important role and in most cases in interviews, how well you perform depends not on how well you write but on how well you speak.

Hence, during interviews, English speaking skills play a significant role. Although an individual may be equipped with paper qualifications, he/she may not get the job if he/she does not market himself/herself. It was expressed here that although many vocational graduates walk in with qualifications, their lack of speaking skills hinder them from exhibiting their talents and potential effectively at the interviews which results in the inability to get hired, since most of the interviews are carried out in English. Therefore, it is an added advantage for a prospective employee to possess a good command of English.

“We have thousands of applications that flow in but we give much consideration to English Language proficiency” (Industry personnel 4).

It was further explained that at interviews, a candidate is evaluated on whether he or she would be able to market himself/herself, and hence the skill “of speaking” is given much weight.

“If one has the ability to speak fluently, then that individual would be able to help towards the progress of a company” (Industry personnel 4).

As mentioned before, one of the requirements of industry is that an individual is able to promote the company and its products. For this, he/she needs to speak in English. Hence the majority of industry personnel interviewed stated that speaking played a significant role in the hiring process. Furthermore, it was expressed that within companies, workers are encouraged to communicate among peers in English. Although this was not expressed by respondents from all companies, some did express the need to build an environment where more staff would be able to use at least simple expressions in English.

Is the skill of speaking needed only to communicate with colleagues? The above was another important questions that was posed during the focus group discussions.

“Well, speaking is needed depending on the job role that one is engaged in. For example, if one is engaged in a managerial position, then there is a robust need to answer phone calls with etiquette and this is part of the skills that is needed in the field of Mechatronics” (Industry personnel 2).

In certain situations, individuals are expected to make presentations, and hence, “speaking” plays a vital role. Speaking, however, was not the only skill that had a major role to play in industry. Reading and writing too were stressed as being essential. As per the interviewees, an individual who walks out with a vocational qualification is not full- fledged, as mentioned before, until he/she acquires sound English language skills. An individual should be able to handle whatever the task assigned in his/her job, especially documentation, and skills of writing and reading are very important here.

“Mechatronics is a foreign subject and therefore, the majority of manuals are in English” (Industry personnel 3).

The above comment emphasises the need for the skill of reading. Individuals are often expected to read and comprehend manuals, and if an individual is working

in a laboratory, there is a need to be able to read lab reports. Further, the ability to read emails and memos was also considered essential. For all of this, reading in English plays a vital role. Hence, the majority of industry personnel have highlighted the need for English reading skills.

Just as reading was expressed to be essential, good writing skills also emerged as a strong need from the discussions. With technological development, employees in every industry are required to write emails and memos and other types of documents. It is essential to be able to document clearly the tasks that one has carried out, and therefore, good writing skills are highly significant in the workplace.

“Although writing is not needed for all types of job responsibilities, those with a Mechatronics degree employed in managerial positions need to pay more attention to writing skills” (Industry personnel 1).

Thus, it was stated that if an individual is engaged in a managerial position or in any clerical position, he/she should be able to compile reports and type memos in a manner that is well organised and easily comprehensible. Apart from the memos and the emails, an individual employed in industry should also be capable of writing lab reports related to mechatronics and fill out purchase orders.

Listening too was highlighted as important, especially in terms of listening and comprehending during discussions and meetings, and also in comprehending oral instructions and directions. Thus, it is clear that each skill has an important role to play in industry.

The need for the four skills is further displayed in Figures 2, 3, 4 and 5. The acronyms and the Likert scale are given below.

ACE - Academic Staff English

ACM - Academic Staff Mechatronics

GR - Graduates

UG - Undergraduates

IE - Industry Personnel

Very important - 4

Quite Important - 3

Not very Important - 2

Not Important - 1

The Acronym IE stands for industry personnel and the Figures 2, 3, 4 and 5 display how industry personnel see the need for the four English language skills.

Figure 2 displays the importance of the reading skill for a student’s target career and it is seen that 90% of industry personnel have stated that these skills are quite important for industry, while 10% have expressed that reading is very important. As per the skill of writing, as displayed in Figure 3, 60% of industry personnel have stated that it is quite important, whereas 40% have stated the skill to be very important. Figure 4 displays the importance of listening for a student’s target career, and as per the data obtained, 60% of industry personnel have stated this skill to be not very important, while 40% have stated it to be quite important. The skill of speaking is rated as not very important by 5% and said to be quite important by 40%, whereas 45% of industry personnel have expressed that the skill is very important for students’ target careers (Figure 5). Thus, as per the data, skills such as speaking, reading and writing in

English are highlighted as more essential than the skills of listening in English.

The discussions and the statistics presented above show that although Mechatronics is a hands on subject, a knowledge of the four skills of the English language are needed in certain job roles for communication purposes and performance. Although this need for language skills was emphasised often in the interviews, it was also observed that the graduates lacked these skills to perform effectively in industry.

**Perceptions on the proficiency of workers in the four language skills**

While the need for the four skills was highlighted by the stakeholders, it was emphasised that the majority of graduates do not possess these necessary language skills. Many are unable to express themselves, which is a drawback in the industrial environment. The field of Mechatronics boasts of many work opportunities, both

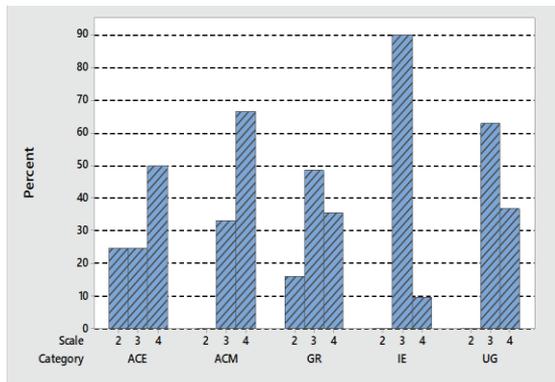


Figure 2: Importance of reading skill for the target career

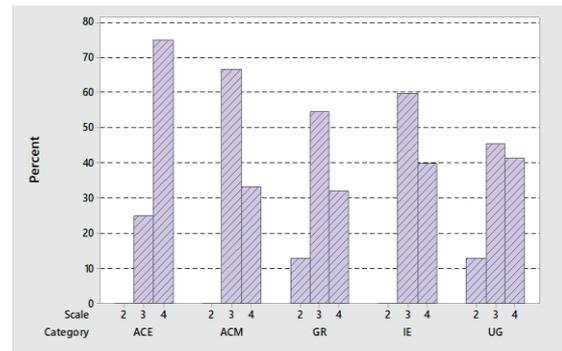


Figure 3: Importance of writing skill for the target career

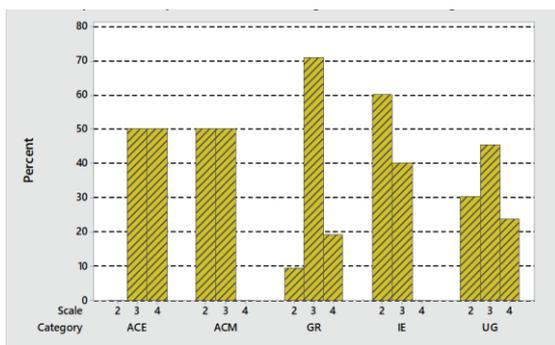


Figure 4: Importance of listening skill for the target career

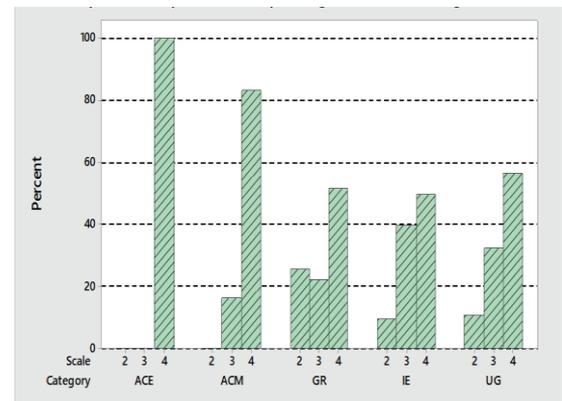


Figure 5: Importance of speaking skill for the target career

locally and internationally, and one of the interviewees stated that if one is not able to work in English, then there cannot be development in the industry.

“No matter how much we invest in the field of Mechatronics, if we are not able to market our ideas and products, then there are drawbacks” (Industry personnel 3).

Since English is the universal language to market the product, an individual should possess a good command of the language. As per the views that emerged from the discussions, the majority of graduates are not equipped with the necessary English language skills. It was revealed that many did not even speak in English and were comfortable only in Sinhala. This affected them when attempting to express their views on certain subjects. Many refrained from speaking due to shyness stemming from their poor command of English. It was also expressed that among peers, English is hardly used.

“There are individuals who are unable to write a sentence in English and this is difficult especially if they are engaged in clerical tasks where they are expected to write e-mails in English” (Industry personnel 2).

Further, it was explained that industry personnel had to hire these individuals as they had sound technological skills, although their language skills did not meet the requirements of the company.

### **Enhancing English language proficiency**

With regard to supporting communicative needs, although Univotec offers an English module, it was observed that industrial needs were not catered to by the content that was being taught. The current English component is more one of General English, and this became a discussion topic among the participants. One of the participants furnished the following observation.

“If we are to look at the type of English that is needed for industry and what should be taught to the students, my opinion is that it should be relevant to what they would be using in industry” (Industry personnel 4).

These views further highlighted the fact that the students should be taught the type of English that they would benefit from when working in industry. Knowing some grammar rules and a smattering of vocabulary would not enable these graduates to achieve the target proficiency and the demands of their work places. The interviews revealed that there is a need for individuals to understand and use technical jargon and this was highlighted as an area that could have been improved

at university level. Through an observation of the current English language content that is being offered to students, it was obvious that the curriculum did not include technical terms, and at one point it was revealed by language teachers that even for presentations, students are given general topics and not subject related ones.

“It would be better if what is being taught concentrates more on speaking skills which would help them to make presentations and communicate with their peers. Also, it is better if the presentations focus more on subject related topics” (Industry personnel 4).

It was also suggested that students’ relative lack of speaking skills may be because they are only learning English as a subject, and that if speaking were practiced in an authentic environment, it would be much more effective.

“They need to feel that they are in an office environment and this, perhaps, will make them speak more comfortably when they actually come to work in industry” (Industry personnel 4).

With regard to the remaining language skills also, similar views emerged. It was suggested that it would be better if students are exposed to more terminology related to their respective target subjects. This will be helpful in industry as they will be able to understand words and phrases in manuals and lab reports. When the industry personnel were questioned on the teaching of General English or EGP, mixed views emerged again. When they were questioned as to what type of English should be provided to vocational undergraduates, it was emphasised that General English should be taught with a mix of ESP.

Some of the participants expressed that it would be better if the students learnt the basics of grammar that would help them form sentences correctly. However, as per the following statement, grammar seemed to be less important.

“I think what they need is to be able to express their ideas and for this, in my opinion, grammar is not important, as long as the message is clear to the audience. Of course, one should improve on grammar, but it’s not a ‘must have’ in industry” (Industry personnel 1).

The emphasis was more on Technical English and all five industry personnel interviewed stated that Technical English was essential in order to play an effective role in industry. It was further stated that undergraduates as

well as graduates come to work in industry with a poor command of vocabulary in the technical field and that they would understand certain terminology only when it was explained in Sinhala. It was pointed out that it is not the mastery of grammar that is important in industry, but the terminology related to mechatronics and the ability to prepare documents. As per another industry person, in the industry, one needs good presentation skills, negotiation skills and email handling.

These discussions produced mixed responses, where some of the industry personnel thought GE should be taught and others emphasised ESP.

“I think what the students need is the type of English content that would help them perform better in industry, so that they would be contributing effectively to the workplace” (Industry personnel 2).

Some participants stated that it would be better if students are taught more subject-specific English content so that they would be familiar with Mechatronic-related terminology, and that they should be taught work related skills such as how to read a lab report. This was thought to be more useful for industry. However, some of the respondents said that while students were taught the basics of English that would include grammar rules etc., that content should be blended with ESP content, as explained in the statement below.

“Well I think we need both. Basic English is needed and also subject-specific English is needed” (Industry personnel 4).

From the above statement and also through analysing the data closely, it was revealed that the current practice of GE needs to be revised to suit industry needs. It was also observed that if an individual is to perform efficiently, the English course content should include a blend of both EGP and ESP. The data revealed that the industry would benefit from an individual who has acquired the kind of language that is a blend of both EGP and ESP. In other words, an individual should be aware of both the common rules of grammar as well as subject-specific terminology and skills.

The perceptions of the industry personnel revealed that all four skills played a significant role in prospective employees’ job performance. Moreover, it was revealed in the study that certain sub skills need to be incorporated into the English module to enhance the performance of students in industry, and these are shown in Table 2.

## CONCLUSIONS/RECOMMENDATIONS

This paper, which is a segment of a much larger study which was a Need Analysis, explored the perceptions of industry personnel on the type of English language skills that employees need to work in industry. The study revealed that the industry personnel strongly believe that English currently plays a significant role in industry. Although industry is on the lookout for individuals who are equipped with English that enables them to handle its communicative needs, this requirement is not fulfilled by most graduates seeking employment. Therefore, this study explored the actual English requirements of the industry and the type of English that is currently taught to students.

**Table 2:** English Language sub skills useful in the target career

	Reading
1	Reading and comprehending manuals, lab reports, emails
2	Comprehending and filling out request forms, quotations
3	Reading and comprehending terminology and vocabulary items related to Mechatronics
4	Reading and comprehending instructions and directions
	Writing
1	Writing out lab reports and other reports related to mechatronics
2	Filling out purchase orders
3	Writing memos, emails and business letters
	Listening
1	Listening and comprehending discussions, meetings etc.
2	Comprehending oral instructions and directions
	Speaking
1	Communicating effectively with co-workers and managers
2	Answering telephone calls using the correct etiquette
3	Communicating with business partners, customers and foreign companies

Furthermore, the study highlighted the need for the four language skills that help an employee perform a task effectively in industry. However, this need varied from one job role to another. While some jobs emphasised the need for speaking, other required more writing skills. However, the perceptions of industry personnel revealed that all four skills played a significant role in an employee's profile, to a greater or lesser extent. Moreover, through the study, it was revealed that certain sub skills needed to be incorporated into the English module being currently taught at Univotec to enhance the performance of the students when working in the industry. These sub-skills include the ability to read and comprehend manuals, lab reports, emails and memos, comprehending and filling out request forms and quotations, writing out lab reports and other reports related to mechatronics, and filling out purchase orders.

The study also examined the type of English needed in industry and if the module that is currently being taught fulfills its needs. It was observed that what was being currently taught was EGP, whereas aligning with the perceptions of the industry, it was stressed that some ESP was also essential to enhance the performance of the graduates.

Hence, the primary suggestion of the industry personnel was that the English course content taught at Univotec should incorporate some elements of ESP. However, certain industry personnel suggested that since in Sri Lanka, the L1 is mainly Sinhala and sometimes Tamil, and students often struggle with the basics of English, it would be better if a blend of both EGP and ESP is incorporated into the course content, and that this would help vocational graduates to perform better in industry.

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