Need Analysis and Designing a Bridge Course in English for Diploma Engineers

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Abstract

This study describes a systematic approach for designing an English Bridge course for diploma students to improve their English language communication skills before joining B Tech course. It has been observed that diploma students admitted in 2nd yr. (Mechanical, Computer Science, Electrical and Electronics Engineering and Electronic Communication Department) have a very poor knowledge of English language and communication skills. To determine their current level and need of language, does it adequately meet with the prerequisites of the program or not, a questionnaire survey was conducted. This well-structured questionnaire was circulated among 100 newly admitted diploma students. After obtaining the need analysis of learners, the findings of survey revealed that learners are poor in four language skills while learning English. This questionnaire method-based survey enables the researcher to establish to the course objectives and outcomes. This newly framed course content provides a golden opportunity to improve language skills through utilizing a variety of activities from simple to complex level of language along with enhancing listening, reading, writing and speaking skills simultaneously. The outcomes of the course are expectedly to observe the shift of improvement in both, written and oral communication.

Keywords: *Bridge Course, Need Analysis, Communication Skills & Diploma Engineering students*

Introduction

In India, English is recognized as foreign language. It is essential to design to fulfil learner's requirements with all pedagogical based objectives. Although there are two types of syllabuses; process-oriented syllabus and product-oriented syllabus. Undoubtedly, a valid syllabus covers all aspect of any one types and appropriate implementation of pedagogies. That leads to the success of language learning. This designed content has its purpose of deep leaning cum understanding, a comprehensive knowledge of concepts and a mature insight to decode various issues. This Bridge course consists a systematic approach to teach that included content in a given specific duration with certain purposes. Basically, the syllabus is designed on essential parameters to perform in sequence as classroom activity. This course is designed as inclusion of various kinds of approaches such as structural, task-based, critical, notion, skills and functional.

The Principle of the Course

This Bridge course will be useful for all engineering students who have enrolled into a course of a university just after completion of diploma only.

The content of this syllabus will help to build up their language skills- Listening, reading, writing and speaking in order to use English language in both, academic and social context. It will stress on their skill development and enable them to practice them. In India, some students pursue diploma after their 10+2. In diploma they don't have English language as subject. And, just after completion, they enrol for second year of graduation where regular students already would have completed English course as a subject in their first year. As the result of this, diploma students are unable to be an active learner in the classroom. This is crucial phase of student life where this bridge course build-up a link between their gaps of learning and motivate them in positive direction.

During this course, students will recognize the significance of language in academic and non-academic life. First, by this course, they will get a golden opportunity

to gain knowledge in English language while considering it as global language, in order to understand the core subjects content taught by the respective faculty and to pass in term end exams with good scores. Second, they will be able to pass any other competitive entrance exam for higher education. Third, this course will be qualifying them not only academically improvement of language skills but interpersonal communication with confidence.

Literature Review
Significance of Need Analysis

Macmillan Dictionary [9] provides a definition of a needs analysis as the process of defining what a language learner's needs are in order to design a course for them. However, need analysis is a systematic approach that fills the gap between current performance of students and expected outcomes of the course. This process allows the facilitator to understand learners level and to execute the course with specific.

Berwick proposed a salient definition of need: a need is a "gap or measurable discrepancy between a current state of affairs and a desired future state (52)."According to Duddley-Evans and St. Johnhave categorized eight components into five broad groups including:

1. target situation analysis and objective needs analysis
2. linguistic analysis, discourse analysis, genre analysis
3. subjective needs analysis, i.e. learners' wants, means, subjective needs-factors that affect the way they learn
4. present situation analysis for the purpose of identifying learners' current skills and language use;
5. means analysis, i.e. information about the environment where the course will run. (John, 2009).

According to Cowling (2007) there is often a lack of awareness of the existence and the importance of needs analysis as a tool in course designing. He even has disapproved on the use of textbook as the whole syllabus by some institutions as it may disregard the specific learning needs of the target students. In order to accommodate students' specific needs, it is significant to delve deeper into the needs of students so that the right measures can be taken to embark on materials preparation. In order to do this, an English language needs analysis (NA) was administered to students in order to delineate their needs and wants (429-30).

In his study entitled, "Investigating the English Language Needs of Engineering Students" Mohamed Salehi (2010) has emphasised the emergence of technical writing skills for future. If students are not having good knowledge and command on language skills, it's difficult for them to survive in workplace. Besides that, the study stressed on the grey side of education system where this skill has been totally ignored in the English curriculum in the university (Salehi, 4).

Md. Momtazur Rahman (2012), in his "The English Language Needs of Computer Science Undergraduate Students at Putra University, Malaysia: A Focus on Reading Skills" explained the lack of reading skills among students and due to that, their inability to understand the gist of the text in English. Furthermore, the study problem of existed syllabus of English prescribed by university is not suitable for students as per their requirements of language learning. Hence, the study suggested a new English language as per that the needs of undergraduate students to develop their reading skills in English language for their specialized discipline at the university.

The existing research has set a preposition of requirement to maintain a special register of Bridge course- English language for engineers that can include the most common grammatical and lexical features used as a part of activities. The students will be engaged to acquire subject based knowledge and enhancement in communication skills to make them effective speaker. Such improvisation will direct them for the workplace (2012).

All these studies are evident to identify learner's level and set the objectives of the course accordingly. Here, need analysis has a vital role in designing the course with expected outcomes.
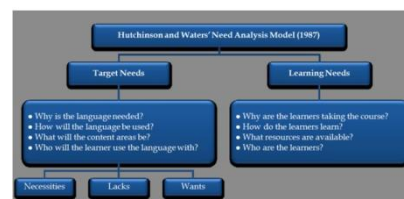

Figure 1 Hutchinson and Waters' Need Analysis Model

Procedures/Pedagogies to Conduct need Analysis

Before framing any language course syllabus, the first question that is emerged in the facilitator 's mind that what can the objective be of this bridge course? How can students be benefited by this course? Does the content of course satisfy the requirements of the learners? In order to serve the specific purposes of the course, it has essential to collect information about the learner's requirements; what is their necessity and what they wish. In this regard, the first step is to collect the need analysis to determine the objectives of the course. There are many methods to conduct need analysis. The questionnaire method is often used method. For this survey, a well-structured questionnaire has been circulated among 100 diploma students of all branches (Mechanical, Computer Science, Electrical and Electronic and Communication department). This survey will help us to finalize the loop between plan and execution. It has also been designed to collect their gravity towards language skills and their perceptions while learning language skills. The framework after considering their obstacles cum experiences that theyprovide and inclusion of some other important concepts in the course, those are necessary to them will improve their language and interpersonal communication skills certainly.

Findings of Need Analysis

It has been noticeable that most of the students always have difficulties in LSRW (Listening, reading, writing and speaking) language skills to get mastery in English. On one hand, listening skills are foremost language skills to acquire knowledge while on other hand, speaking is counted as the most difficult one skill, in which learners face complication in context of accent, stress and pronounce the word, then to select the suitable meaning of the word. In speaking, learner hesitate to express more although they have good understand and knowledge about the concept. As they are not fluent and don't have a good command in language, they lose their confidence and optimistic growth in their performance. Due to lack of vocabulary, some students face difficulty to understand the text, a lecture, taking notes, topic's content and given instructions. Some students are unable to the faculty as they have a different pronunciation and accent in

language. In writing context, students face difficulty to use suitable vocabulary as per the given context of the sentence, coherence and Cohesive devices to write an effective essay. Subsequently, students prefer to read a little and take print out of selected chapter's notes and screenshots for exam's preparation.

Aims & Objectives of the Course

After conducting the need analysis to understand the requirements of the learners, the next step is to set up the objectives and to design the content accordingly.

Listening Skills

Aim

- To establish the significance of listening in learning.

Objectives

At the end of the course, learners will be able to-

- Build up the confidence among learners. Able to decode the abstract, central idea of the text/lecture, summary while preparing notes.
- Understand the given instructions, lectures, audio content, interview and discussion on formal and informal contexts.
- Improve language skills through listening audio clips, cassettes and English movies to observe accent to improvise pronunciation.
- To train them to interpret any lengthy paragraph/text grammatically, to develop vocabulary.

Reading Skills

Aim

- Read various texts while using different texts in rationale speed.

Objectives

At the end of the course, learners will be able to-

- To familiarize learners with multiple reading strategies depending on texts and purpose. To enable learners to enrich their repertoire of vocabulary (ESP).
- To understand the content while applying any technique of reading skills; skimming or scanning in the text.

- To interpret the vocabulary to summarize the text.

Writing Skills
Aim
- To train how to write an effective paragraph and essays.

Objectives
At the end of the course, learners will be able to-
- To understand the need and purpose of writing at different level.
- Understand the different processes and stages of writing.
- To apply coherence and cohesiveness while featuring punctuations, using capital letters, syntax and pragmatics.
- Write a paragraph while using a variety of simple, compound and complex sentences in a range of clause and phrases.
- Organize a lengthy paragraph with its clear topic, salient content and supporting details.

Speaking Skills
Aim
- To polish and enhance their communication skills

Objectives
At the end of the course, learners will be able to-

- To create an awareness among students about the importance of speaking skills
- To express their ideas easily
- To encourage speaking in any contexts
- To train them for impromptu speech.

Course Outcomes
In conducive to plan to develop a language skills course, it is essential to investigate the requirement of exact level to the expected level at the end of the course. This course was introduced in our college to diploma students who enrol in the 2nd year of B Tech boost up their confidence and to improve their knowledge level in language skills. At the outcomes of the bridge course, the learners are expected to improve their communication skills in both oral and written. They will be able to decode the text following different reading strategies without any difficulty.
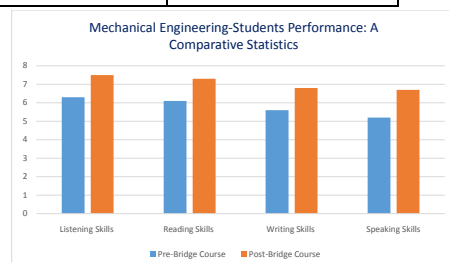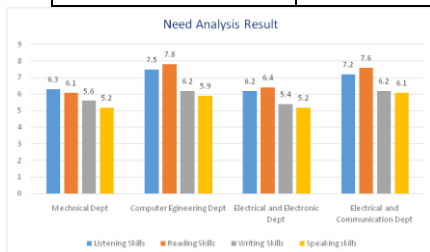
Syllabus
For this bridge course, the syllabus is categorized topics wise. These topics cover all four language skills; listening speaking, reading and writing while associating them with their strategies. Each topic is connected with all skills to observe holistic development in learner. The course can be 3 months course learning in the classroom. The content as diagram is shown below:
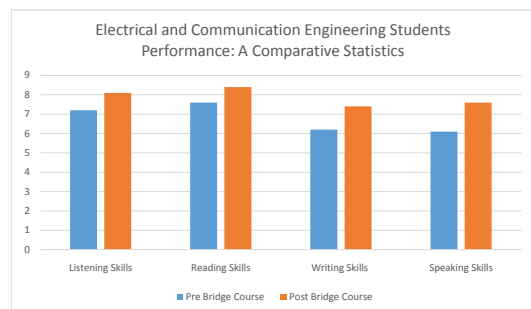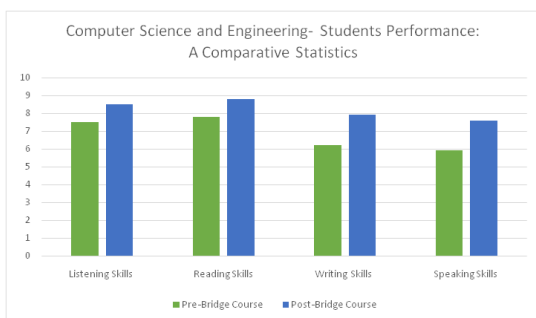
	Topic	Listening	Speaking	Reading	Writing
1	Personality	Listening short video/audio. Listening people's talk. Note taking. Listen and repeat. Watching movie to improve pronunciation.	Self-Introduction Pronunciation Accent Voice modulation	Read moral story Unseen passage. Using reading techniques. Vocabulary Synonyms- Antonyms	Write self-introduction. Prepare self-portfolio. Usage of prepositions/ punctuation marks. Check spellings. Usage of Capital letters.
2	Describe incident/places	Self Intro, Daily Routine, Likes & Dislikes, Vocabulary.	Narration (Historical places, events, Picture narration, Memorable incidents of life,) JAM Role play	An article of historical place or incident from a newspaper. Using skimming technique	Describing an incident or place (what is it, where is happened /located, who built it, when and where) in systematic manner.

3.	Family Tree	Listening the conversation of people (direct-indirect speech), Summarize the specific information. Stressed/unstressed words, vowels	Creating a family tree and mentioning their hobbies, interests and other facts. Read catalogues of family's interests or travelogue.	A text about Indian's cultures' traditions, tourism and their hobbies. Using Scanning and skimming technique. Usage of suitable vocabulary.	Writing a paragraph on your favourite personality/ family members. Organizing paragraph(coherence-cohesive) Phrase and Clause (subordinate & coordinate)
4	Environment	Listening the lecture on environment, its significance in human life, animals and other creatures. Movie based on environment Summary assessment	Oral presentation including their recommendation. Accent/ stress/ pronunciation. Public speaking	Any moral story or text taken from website. Few comprehensions question. Collocation/idiom/voca bulary	Write an essay- *(Environment & Life on earth)* Usage of types of sentences-positive, compound, contrast & complex. Usage of modifiers, Advance Level-Prepositions, adverb.
5	Employability	Watching some job-oriented videos; how to start the conversation.	Situational dialogues Mock Interview Verbal-non-verbal language.	Reading stories of saucerful personalities Idiomatic expressions Parts of speech	Drafting resume Precise Writing

Rubrics of Presentation/Role Play Activity

2 (all key points covered effectively)	1.5 (some key points missing)	1 (missed all key points but said a bit about content)	0 (no content)
3 (Presentation skills, Pronunciation, Voice modulation,	2 (Presentation skills, Pronunciation)	1 (Presentation skills)	0.5 (need improvement)
2 (Presentation skills, Pronunciation)	1 (Presentation skills)	0.5 (need improvement)	0.5 (Need improvement)
2 (Body language, Confidence, Mode of delivery)	1.5 (Body language, Confidence)	1 (Body language)	0.5 (Need improvement)
1.5	1	0.5	0 (no content)
1.5	1	0.5	0 (no content)
			15 Marks

Need Analysis Result

Mechanical Engineering-Students Performance: A Comparative Statistics

Computer Science and Engineering- Students Performance: A Comparative Statistics

Electrical and Communication Engineering Students Performance: A Comparative Statistics

Conclusion

The findings of the study suggest that student's proficiency level should be investigate before designing desired results in learners. In this process, need analysis method enable them to provide necessary training. It is rightly said that a good listener only can be a good communicator. Therefore, in framed content, listening skills should be emphasized. The material sticked in the course should fill the required gap, train them in their core discipline, build up their motivation. This transformation will lead to enhance their professional skill in workplace.

References

1. Al-Tamimi, A. S. (2010). Investigating the English Language Needs of Petroleum Engineering Students at Hadhramaut University of Science and Technology [Review of *Investigating the English Language Needs of Petroleum Engineering Students at Hadhramaut University of Science and Technology*]. *The Asian ESP Journal.*, *6*(1).

2. Berwick, R. (1989). Needs Assessment in Language Programming: From Theory to Practice. In R. K. Johnson (Ed.), The Second Language Curriculum (pp. 48-62). Cambridge: Cambridge University Press.

3. Browne, J. D. (1995). *B The Elements of Language Curriculum: A Systematic Approach to Program Development*. MA: Heinle & Heinle.

4. Celce-Murcia, Marianne. *Teaching English as a Second or Foreign Language*. Boston, Mass., Newbury House, 1991.

5. ---. *Teaching English as a Second or Foreign Language*. Boston, National Geographic Learning, 2014.

6. Cowling, J. D. (2007). Needs Analysis: Planning a Syllabus for a Series of Intensive Workplace Courses at a Leading Japanese Company. English for Specific Purposes, 26, 426-442.

7. Hutchinson, T., & Waters, A. (2010). *English for specific purposes: a learning-centred approach*. Cambridge University Press.

8. Li, Juan. "Needs Analysis: An Effective Way in Business English Curriculum Design." *Theory and Practice in Language Studies*, vol. 4, no. 9, 1 Sept. 2014, 10.4304/tpls.4.9.1869-1874. Accessed 9 Dec. 2019.

9. Rahman, M. M. (2012). The English Language Needs of Computer Science Undergraduate Students at Putra University, Malaysia: A Focus on Reading Skills. English for Specific Purposes World, 12(34), 1-25. Retrieved from http://www.esp-world.info/Articles_34/DOC/ESP_Rahman.pdf

10. Salehi, Mohemmad. (2010). "Investigating the English Language Needs of Engineering Student." *English for Specific Purposes World*, vol. 10, no. 31, 2010.

11. Kaur, S., & Hua, L. "Analyzing workplace oral communication needs in English among ITgraduates. ESP World,

12. Paltridge, B., & Starfield, S. (2014). *The handbook of English for specific purposes*. John Wiley & Sons.

13. Schutz N. W., Derwing B. I., (1981). The Problems of needs assessment in English for specific purposes: Some theoretical and practical considerations. In R. Mackay J. D. Palmer. Language for specific purposes. Program Design and Evaluation. Rowley MA : Newbury House, 1981. P. 29–45.

14. Venkatraman, G. & Prema, P., 2007. English language skills for Engineering students: A needs survey. ESP World, 3 (16).

Appendix

Please tick one answer for each statement.

	strongly agree	agree	disagree	strongly disagree
1. I am confident speaking English.	☐	☐	☐	☐
2. I am able to articulate my thoughts clearly, fluently and coherently in English.	☐	☐	☐	☐
3. I am an effective communicator. (Others can understand me easily when I communicate my ideas)	☐	☐	☐	☐
4. I am comfortable with using English as a way to express my thoughts.	☐	☐	☐	☐
5. I am comfortable with others using English when speaking to me.	☐	☐	☐	☐
6. I am comfortable with thinking in English. (cognitive aspect)	☐	☐	☐	☐
7. English conversational skills are an aspect that I think I need to work on.	☐	☐	☐	☐
8. I need to improve my understanding of spoken English.	☐	☐	☐	☐
9. I am proficient at using the English language for oral purposes other than basic communication: like debate, presentations, emceeing, drama, competitions etc.	☐	☐	☐	☐
10. I am afraid or hesitant in using the English language to express my feelings and thoughts.	☐	☐	☐	☐
11. I often find myself not being able to express myself clearly and fluently in English in public.	☐	☐	☐	☐
12. I think my school is doing enough to aid students in learning how to communicate their ideas using English.	☐	☐	☐	☐
13. I feel motivated to practice speaking up in class (eg. class discussions and presentations)	☐	☐	☐	☐
14. I have a fear of public speaking.	☐	☐	☐	☐
15. My school puts in effort to help develop their students' fluency in speaking.	☐	☐	☐	☐
16. My school provides every student with many opportunities to present before a crowd. (class presentations, speech competitions, etc.)	☐	☐	☐	☐
17. My school has programmes in place for students to hone my conversational skills.	☐	☐	☐	☐
18. My school implements programmes to help me improve my oratorical skills. (e.g. Speech training, immersion programmes, etc.)	☐	☐	☐	☐
19. The programmes my school have implemented have been helpful in improving my skills in speaking fluently.	☐	☐	☐	☐
20. Using English as an communication tool is easy for me.	☐	☐	☐	☐
21. I am afraid of speaking up in class.	☐	☐	☐	☐
22. I am confident in speaking up in class.	☐	☐	☐	☐
23. Learning how to communicate better is a challenge.	☐	☐	☐	☐
24. I would attribute my proficiency in oral communication to out-of-school factors (e.g. Tuition lessons, Programmes from previous schools, Living overseas) Please specify:	☐	☐	☐	☐

25 If you think that you are an ineffective/effective communicator, why do you think so

_____

_____

26 What programmes will be able to benefit YOU in improving your ability to speak clearly and fluently?

_____

Thank You for Your Cooperation
Hyderabad Institute oF Technology & Management
UGC - Autonomous
Bridge Course in English for B.Tech II-I (LE) 2021-2022
Pre-Test Total Marks: 20 Duration: 30 Minutes Branch: Date:

(Answer all questions)

A) Choose the correct answers (5 Marks)

i) Lockdown in my district is lifted up. When will school _____?

ii) Road is wet road and slippery. Walk carefully or you may _____ down.

iii) The sun rises in _____

iv) Vegetables are excellent source _____ vitamins.

v) What's wrong with you? You look _____.

(fall, reopen / start, of, worried / sad, the east)

B) Write a paragraph on any one of the following topics (5Marks)

1. My favourite sport person
2. Nature is best teacher
3. Save water save earth

C) Fill in the blanks with suitable prepositions (5 Marks)

i) Life is not a bed —- roses. (with, of, for, off)

ii) The work was completed —— sunset. (for, in, at, about)

iii) Can you write —— this pen. (by, in, with, on)

iv) We are pleased —— your visit. (with, at, by, on)

v) He comes —— a car. (at, by, with, on)

D) Write a letter to your friend inviting him to attend your birthday party. (5Marks)