

## RESEARCH ARTICLE

## Effectiveness of intervention strategies in enhancing self-esteem through developing communicative competencies among engineering students

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### Abstract

Language is a device for human communication, either spoken or written, consisting of the use of words in a structured and conventional way. English has a predominant role in the communicative sphere of the world and got a special identity in the field of education. With globalization, revolution in ICT and the ever increasing international exchanges, the gap between the professional competencies and the required matching communication competencies has always been highlighted. Experience has shown that communicative competencies and self-esteem are interdependent. People with low self-esteem are less sensitive to environmental cues. The emphasis in this investigation is to enhance the self-esteem of engineering students through developing communicative competencies. The study presents a framework of communicative competencies developed by the investigator to enhance self-esteem. The frame work will serve as a basis for training the engineering students in order to enhance their self-esteem through developing communicative competencies.

**Keywords:** Language, human communication, self-esteem, communicative competencies, engineering.

### Introduction

The ability to learn languages and adapt communicative competencies to the changing needs and situations of a global knowledge society is becoming a necessity for future engineers (Joane Pierce, 2008). Effective communication is made possible with the help of language. In engineering profession also, good communication is mandatory as they are interacting with their co-workers, the public, their clients, superiors, and using English to read and write emails, letters, reports and proposals. Such a demand is placed on the part of the engineer's right from the beginning of their career. Individuals who are efficient in oral and written communication always have an edge over others in persuading people to their thinking and plan of action (Mehta and Mehta, 2002). They can impact others and have some influence over the thinking process and action plans of others. With globalization, information revolution and the ever increasing international exchanges, the amazing gap between the professional competencies and the required matching communication competencies has been highlighted. In order to be fluent in English, students need to have a good command over the language.

English has today become one of the major languages of the world (Dash and Dash, 2007). It is strongly felt that English is the only language that prevents isolation, and must be given importance as it is the key to access the treasure of knowledge, by providing opportunities to students to get employment in developed countries of the world. It is the language of communication, trade, industry and helps to have contact with western science and technology.

Therefore, this language occupies an important place in school curriculum. In India, teaching of English in engineering colleges has always held a dubious status (Veenakumar, 1999). A repertoire of good language and communicative competencies are imperative for good engineers, but the curriculum is inadequate in meeting the needs of engineering students. In most developing countries, only a very diminutive percentage of students have access to learn through English medium. But the medium of all higher and professional education is in English. Inclusiveness in higher education has provided opportunity for the learners from backward and under developed sections of the society to enroll in professional courses especially, the engineering course. Consequently, at the level of higher education, the expectations change and progressively become more demanding. In spite of good subject knowledge, students with poor communicative skills are selected out in interviews for placements in jobs, thereby they become unemployables much to the disappointment of both the job aspirants and their parents who strongly believe that their wards are their only future.

Communicative competencies and self-esteem are interdependent. 'Self-Esteem' according to A.H. Maslow means an essential human need that is vital for survival and normal healthy development. It develops naturally based upon a person's beliefs and consciousness. But it is found that 60% to 80% of the general population of youths suffers from low self-esteem because of having poor communication skills. The emphasis in this investigation is to enhance self-esteem of students through developing communicative competencies.

Intervention strategies have more to do with what the teachers and students like to do. Effective intervention strategies, ideal instructional approaches, would definitely yield desired results. A review of related literature showed that there were several studies done on the communication skills of students especially during school education (Huckin and Olson, 1983; Branden, 2001; Mehta and Mehta, 2002). But on college students particularly, on engineering students, only a few studies have been done relating communicative competencies with self-esteem. The need for the study is felt due to inadequacies of researches in this area. Most of the studies reviewed were descriptive and some focused only on the reasons for having poor communication skills among the students. There were no studies linking communicative competencies with self-esteem. There were experimental studies trying effectiveness of some techniques/strategies to improve communication. Similarly some studies were done on effectiveness of strategies to enhance self-esteem. Further, most of the students of engineering display low self-esteem on account of poor communicative skills. Therefore, a study was conducted employing intervention strategies with activity modules to develop communicative skills thereby enhance the level of self-esteem of engineering students.

### Materials and methods

*Study population:* The study was confined to the First year engineering students of Saranathan College of Engineering, Tiruchirappalli, Tamil Nadu, India having low self-esteem and poor communication skills.

*Study design:* The present study is a single group, pre-test-treatment-post-test experimental design with intervention strategies I to enhance communicative skills and intervention strategies II to enhance self-esteem. These strategies were the independent variables and communicative competencies and self-esteem were the dependent variables. At the first phase of the study, self-esteem was the dependant variable and at the second phase the enhanced communicative competencies served as independent variable. Observation, interaction and discussion were the approaches employed to make the study more empirical.

*Communicative competencies identified for engineering students:* There are several general communicative competencies, which are essential for an engineering student. Based on the obligatory needs, the investigator identified 45 general communicative competencies. As the number of competencies is more the investigator identified **seventeen** communicative competencies essential for the engineering students.

1. Expresses self clearly by providing essential information.
2. Asks open questions effectively and giving answers politely.
3. Asks follow up questions.
4. Arranges appointments and meetings.

5. Makes, cancels and reschedules appointments.
6. Seeks clarifications.
7. Extends apology.
8. Expresses an opinion.
9. Offers help, makes requests and asks permission.
10. Complains politely, using neutral tone and be helpful to other person.
11. Listens carefully for making inferences.
12. Expresses agreement and disagreement.
13. Possesses telephone etiquette.
14. Listens carefully for facts to draw inferences.
15. Listens attentively for specific information.
16. Listens attentively for overall information.
17. Understands and follows directions when presented orally.

A sample of 32 first year engineering students from 160 students of electronics and communication engineering branch and instrumentation and control engineering branch was selected through performance test and a scale to assess self-esteem. The investigator utilized English language laboratory of her college to conduct the activities. The validated activities on communicative competencies and self-esteem were designed as modules. A systematic schedule was prepared to implement the modules of activities and students were given directions for doing the activities. The difference in the performance by the students between pre-tests and progressive tests, progressive tests and post-tests and pre-tests and post-tests for both the intervention strategies revealed the effectiveness of intervention strategies. The scores obtained were subjected to statistical analysis employing following techniques:

1. Measure of central tendency-Arithmetic mean.
2. Measure of variability-Standard deviation.
3. Test of significance-'t' test.
4. Effect size.

### Results and discussion

- Intervention strategies I developed by the investigator have significantly improved the communicative competencies among engineering students.
- Intervention strategies II developed by the investigator have significantly enhanced the self-esteem among engineering students.
- Improved communicative competencies have significantly enhanced self-esteem among the engineering students.

#### *The nurturant effects of intervention strategies I and II*

- The present research has facilitated the students to get pass marks and score grades A, B, C, D and E in their first and second semester University examination conducted by Anna University, Chennai, Tamil Nadu. This shows the long term effect of the intervention.
- The students who served as the sample for the present research are now doing IV semester and they don't have English as a subject in their syllabus.

But the investigator could witness students' communication with their peer group and faculty with confidence. The colleagues of the investigator handling classes for the students who were sample for the study reported that these students now take better initiative, and take up responsibilities willingly. This is a proof for the change that the intervention strategies have brought about on the erstwhile low esteem students.

- The collective response from the students revealed gain in certain learning aspects. During the investigation most of the students were very much interested and completed all the activities with ease and confidence. Later on those activities promoted self study among students. The teaching method used by the investigator made the students to develop inquisitiveness in learning second language with better confidence.
- The feedback of the students revealed that, as a result of implementation of intervention strategies, they have understood the content, developed mutual understanding, learnt co-operation, ready to do volunteered activities and to help each other.
- They revealed intervention strategies provided an opportunity to understand and internalize the basic communicative concepts through concrete situations. Repeated activities made them to rethink and recollect the activity for their day-to-day life situations. It allowed to understand the structure, vocabulary, appreciate the grammar and to use in the surroundings and real life situations. The verbal and non-verbal expressions in the activities involved both the mind and senses working together which facilitated cognition. It widened the experimental base and prepared the ground for better learning of new areas of subject.

#### *Educational implications*

- The curriculum for English in engineering institutions is mark-oriented and therefore a thorough revisions keeping in mind the need priorities of those potential professionals. Books should be rewritten including competency and activity based learning experiences in order to achieve the real purpose of developing communicative competencies of students.
- Students from slum areas, tribal pockets and interior rural areas who exhibit low self-esteem may be identified in the first month of first semester and given appropriate activities for building better self-image. This will be a useful investment for their future.
- Steps should be taken to have specific syllabus for communicative competencies from I to III year in engineering colleges which may be introduced as modules with evaluation provision. This will address the problem of educated unemployables on account of poor communication though with good subject knowledge.
- The objective of inclusive education will be fully realized in a democratic country like India, if free flow of funds can be ensured by the government.
- The strategies developed, validated and successfully implemented by the investigator may be adopted by other teachers from engineering colleges.

#### **Conclusion**

Language learning is a matter of practicality. The development of learners' oral skills, like that of any other skills, requires the learners' own active participation and initiative practice. As Maslow, the eminent psychologist rightly told, humans need to feel a sense of belonging and acceptance. All humans have a need to be respected and to have self-esteem and self-respect. People need to engage themselves to gain recognition. The investigator strongly believes that the outcome of this study will definitely help the students of engineering to enhance self-esteem. The findings of the present study provide useful and practical information to the technical universities and to the AICTE to improve the competencies of the students of English in engineering colleges by giving a fair trial to the activities developed and successfully tried out by the investigator. The students with their proficiency in the set of competencies identified by the study would be able to function more efficiently in their great future prospects that await them.

#### **References**

1. Branden, N. 2001. The psychology of self-esteem. New York: Bantam Books.
2. Dash, N. and Dash, M. 2007. Teaching English is an additional language. Atlantic Publishers and Distributors (P) Ltd. p.240.
3. Huckin, T.N. and Olson, L.A. 1983. English for science and technology: A handbook for non-native speakers. McGraw-Hill New York.
4. Joane Pierce. 2008. Language communication competencies in engineering revisited. *Revista deLinguisticay Lenguas Aplicadas*. 3: 59-71.
5. Mehta, D. and Mehta, N.K. 2002. Communication Skills for Engineering Professionals. Retrieved 17 Oct 2011. Retrieved at <http://www.adit.ac.in/AditJournal>.
6. National communication association. 1998. Speaking and listening competencies for college students.
7. Veenakumar. 1999. Open learning strategies for enhancing on-campus training. PAN *Commonwealth*, 1-5 March 1999, Forum on open learning, Bandar Seri Begawan.