Training Teachers for Teaching English in Higher Institutes of Engineering and Technology: Challenges and Perspectives

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Abstract - Higher Education in India and abroad has undergone radical and seamless changes. The advent of information technology has redefined the attitude to English language learning and teaching. In order to meet the challenges and demands of the profession, teachers of English in Engineering colleges need to upgrade their professional and subject competence. This paper aims to explore the need for teachers of English in Higher Institutes of Engineering and Technology, to equip themselves to face their professional challenges. This necessitates teachers of English to undergo specific training programmes designed based on their target needs that would in turn enable them to become better teachers. A preliminary data was collected from135 teachers of English from various Engineering colleges in Tamilnadu, India. The findings reveal that more than 75 percent of the teachers expressed their views that there is an existing need for in-service training and development for teachers to teach English in Engineering colleges in Tamilnadu.

Keywords: Teacher Development; In-Service Training; Teacher Competency

I. INTRODUCTION

The importance of English language has grown multi-fold in a world of change, uncertainty and increasing

opportunity. Human resource development has become so critical in this modern technology based economies and so higher is the priority that must be accorded to the teachers responsible for that education [1]. It is fair to say that teacher training is one of the central pillars of ELT and what teacher training seeks to do is to equip teachers with the skills and abilities they need to help them, or help them develop in their work [2]. So the need for training teachers of higher institutes of Engineering and technology deserves high priority in Tamilnadu education, as it is an investment for the present and the future well-being of both the teachers and the students.

II. CHALLENGES IN HIGHER EDUCATION

The World Economic Forum conducted a study to examine the talent shortage in the developing nations in the next few decades and India is one among them [3]. India will have the largest population of young people in the age group (15-35) for the next few decades in the entire world. Though Indian education system has improved in terms of the number of universities and colleges, it still caters only to 6 percent of the relevant age group. On the other hand, it is more than 80 percent in the developed countries. This illustrates the difficulty of the developing nations in bridging the gap and keeping in pace with the developed nations. The quality of

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education available to most Indian students is questionable in terms of its ability to face the challenges posed by further education as well as job market [4]. Reference [5] supports the view that teaching a course is an important instructional duty and if it is not handled well, it can impact a department and also it can negatively affect the employment prospects of the poorly performing graduate students. Though many committees have recommended a number of changes for the improvement of students in the past few decades, the scenario remains the same in most of the colleges. But the need to compete economically in ever more competitive world markets leads inexorably to a market- oriented education service [6].

III. PERSPECTIVES OF TEACHING ENGLISH IN HIGHER INSTITUTES OF ENGINEERING AND TECHNOLOGY

In the current trend of higher educational institutions, training of university teachers is established in every university in the UK, Norway and Srilanka and is becoming increasingly common in many other countries [7]. In India, with special reference to second language teaching in engineering colleges, completion of a training programme is not a requisite to start the career as a teacher. The All India Council for Technical Education (AICTE) states that a candidate with a minimum of 55% in Post Graduation is eligible to teach, upon completion of an M.Phil/ PhD or a pass in National Eligibility Test (NET)/ State Level Eligibility Test (SLET). But basically a course in M.Phil/ PhD hones up the candidate's research ability and a pass in NET/SLET attest the candidate's retention of the subject matter. A good researcher or anybody with good retention capacity need not be a good teacher. The art of teaching is an entirely different skill, which requires an array of skill sets and a sense of commitment. So teaching as a profession requires systematic training. Such a training programme will enable the teachers to understand the purpose and possibilities of what they are teaching. They will be able to know what are the expected outcomes of the learners at the end of the course. As far as English curriculum in an engineering programme is concerned it should enable the students to use English effectively for their various communicative needs. As most teachers have no systematic training of how to teach English in Engineering colleges, they proceed with their own models of how they were taught. They are not accustomed to peruse the objectives of the syllabus and relate it to the expected learning outcomes of their learners. So the focus on in-service training programmes in the context of teaching English to students of Engineering colleges can facilitate teachers to prepare their students to meet their career needs in this competitive world.

IV. TEACHER EDUCATION AND TRAINING

In India, the number of graduates with masters' and doctoral degrees has increased. However, scanty researches have been conducted concerning the need for the preparation of these graduates to teach in higher institutes of engineering and technology. It is mandatory for the school teachers to undergo training in education for two years before they step into the thresholds of their teaching career. Reference [5] again raises a question whether the same kind of instruction in pedagogy is given to college teachers. He also adds that once the degree is obtained, they are considered "credentialed" to teach in a college or university classroom. As he says, the college teachers after a research degree may it be M.Phil/ Ph.D is eligible to teach in higher institutions of engineering and technology. It is assumed that they possess the requisite competence and proficiency to enter the teaching profession. Reference [8] opines, "it has been sarcastically noted that college teaching is the only profession requiring no formal training of its practitioners". Reference [9] expresses that in many academic departments, acceptance into a graduate program conveys an automatic license to teach. This notion presumes that, if a person can learn the subject, they can also teach it. Though teacher development has been a familiar conception in the last few decades, in India it still receives insufficient attention.

V. REVIEW OF LITERATURE

There is a growing body of literature on teacher training for teaching English as a foreign or second language (TEFL/TESL). Teacher preparation in Indian universities can be traced to the medieval European university culture with reference to French and German [10]. In this traditional method teachers are required to have 'mastery' knowledge of the subject matter i.e., English, to be taught [11]. In the long history of education, the professional improvement of the teachers in service has received very little official support. According to Reference [12], until the late nineteenth century teaching was hardly considered a professional business and teacher training was unheard of. Reference [13] also expresses, in comparison to primary and secondary teachers, most college and university professors received minimal or no training in educational theory and methodology.

In the Indian scenario, the government has appointed a few committees and study groups to examine the study of English and the teaching of English. To be very specific, the Study Group Report (1967) makes the following observation on the training programmes of teachers of English in India: "The teaching of English is both a complicated art and science... that is why the preparation of teachers of English has to be provided for in the most careful manner possible" [14]. They recommended that every state in India should

establish a State Institute of English to train teachers of English in content and methods. However, the recommendations were not implemented by the authorities responsible for the making of policies and their implementation at various levels. Dr.Ramesh Mohan, Director, CIEFL, Hyderabad, in his inaugural address to the Fifteenth Annual Conference of English Language Teaching Institutes of India declared that, 'English teachers who need longer and more sustained training in the English language itself have to be identified and trained in addition to being given reorientation in scientific methods and techniques of teaching English' [15]. Writing about in-service training of teachers, Reference [16] observes that, it is appropriate to review, ongoing events to search for clues that will enhance the professional expertise of the practitioners. The developed countries of the world, especially the western countries, have shown a great awareness to this challenge. Thus, much good work has been carried out in the sphere of teacher in-service education leading to important developments in the planning and execution of professional self-renewal programmes for teachers at all levels. India, for historical and socio- political reasons has lagged behind in the field of in-service education. The country needs to keep pace with developments in ELT/ESP and work towards high standards of teacher performance in the classrooms. Reference[17] comments, new knowledge is bursting on the consciousness of the world at an unprecedented rate, and to keep pace with this new growth is an undeniable challenge to the teacher. Reference [18] claims there can be no curriculum development without teacher development, that there can be no curriculum implementation without training.

VI. RESEARCH QUESTIONS

The study has addressed the following questions: 1. Do teachers of English in Engineering colleges believe that there is a need for training to teach in Higher Institutes of Engineering and Technology?

2. Do teachers of English in Engineering colleges consider inservice training would improve teachers' language skills, knowledge and practice of ELT methodology?

VII. METHODOLOGY

A preliminary study was conducted to establish the need for training the teachers of English in Higher Institutes of Engineering and Technology. The questionnaire was administered to 135 teachers of English in Engineering colleges throughout Tamilnadu, India. It included questions to know their opinions on the need for training and development programmes. Interviews were conducted with 9 experienced teacher trainers who have also endorsed the dire necessity for such training programmes.

A. Participants

The participants of the study were 135 teachers of English (63 male and 72 female) from various Engineering colleges of Tamilnadu. Of the 135 teachers, 27 of them had less than 3 years of experience in teaching, 31of them had experience ranging from 3 to 5 years, 50 of them had 5 to 10 years of experience and 27 of them had more than10 years of experience in teaching English.

B. Questionnaire

The questionnaire administered to the teachers was used as a basic research tool to collect data from the teachers. The questionnaire comprises two parts. Part I involves the demographic details such as gender, academic and professional qualification, years of experience in teaching, etc. Part II deals with their priorities in students' need to learn English language skills and their obstacles to learn English, their views on the need for training programmes for teachers and usefulness of specific methods and materials in improving their own language and practice of ELT methodology. Interviews were also conducted with experienced teacher trainers in the field.

VIII. ANALYSIS

Va ria bl e No	Name of Variable	N	Range	Occu rrenc es	Perce ntage	Mean	Stand ard Devia tion
5	Prior experience in teaching General English in Arts & Science colleges	13 5	Yes No No Respons e	70 64 1	51.9 47.4 0.7	1.511 1	0.516 40
6	Difference in approach in teaching English in Arts& Science and in Engineering colleges	70	Yes No Not sure	65 1 4	92.9 1.4 5.7	2.871 4	0.479 17
8	Need for training to teach in Engineering colleges, as perceived by a student of English literature	64	Yes No Not sure	45 5 14	70.3 7.8 21.9	2.484 4	0.835 56

Table I. TEACHERS' OPINION ON DIFFERENCE IN APPROACH IN TEACHING IN ARTS & SCIENCE AND ENGINEERING COLLEGE

In table 1, variables 5, 6 and 8 provide particulars regarding teachers' opinion on the difference in approach in teaching English in Arts& Science and Engineering colleges. In variable 5, out of 135 teacher respondents 70 teachers(51.9%) have got experience in teaching English in both Arts & Science and Engineering colleges and 64 teachers(47.4%) have experience of teaching English only in Engineering colleges. This question intended to know whether the teachers have taught General English in Arts & Science colleges. The basic presumption is, a student of English literature could manage with the General English classes in Arts & Science colleges. But then when it comes to teach English for specific purposes in Higher Institutes of Engineering & technology they are clueless of how to handle their technical English classes effectively. Most of the teacher trainers have expressed that the teachers try to complete their syllabus based on the semester examination pattern. Some of the teachers have also admitted that they are pressurized for 100% result by their employers.

In variable 6, 65 out of 70 teachers (more than 92%) who have taught English in both Arts & Science and Engineering colleges, have agreed that they perceive a difference in their approach to teaching in both the environments. It is inferred that, the teachers have agreed to the notion that the teaching methodology, for students of higher institutes of Engineering and Technology is entirely different. Reference [19] argued that "elementary principles of learning, especially in higher education, have been neglected, abandoned to an abiding faith in traditional methods, or periodically subjugated to innovative hunches" (p ix) i.e. they teach the way they were taught. The teacher trainers have also opined that the teachers in higher institutes of Engineering & technology are not able to meet the target needs of their students. Most of the teachers perceive English to be taught as a Subject rather than as a language/skill to be imparted and acquired by the students during their course. As the teachers are not well equipped with the techniques of teaching English in EAP and ESP context, they land up teaching grammar as outlined in the syllabus document. The teacher trainers also feel that the teachers must be trained to peruse the objectives of the syllabus, which would result in the expected outcome of the learners in the due course.

In variable 8, 45 out of 64 teachers (70.3 %) who have experience in teaching English only in Engineering colleges have responded that they would like to undergo a training for teaching English to students of Engineering colleges. Reference [20] states that, teaching is not a profession in which most people, even intelligent and accomplished graduate students are automatically skilled [14].Hence, teachers realised that from their own experience as a student of General English and English Literature courses, the theoretical knowledge gained from their degree courses does not prove to be sufficient for their practical teaching needs required in Engineering classes. Teacher trainers have also reinstated that as Engineering students are adapted to experiential mode of learning, technical English classes also can theorize from practical examples. The creative exercises will allow the learners to think on their own. The tasks administered in the English classrooms must concentrate in enhancing their skill set. When language becomes a meaningful instrument, the learners' working knowledge of English will nurture them as independent learners over a period of time.

Vari able No.	Name of Variable	N	Rang e	Occurr ences	Perce ntage	Mean	Standard Deviation
	Need for training teachers in		Yes	100	74.1		
9	Engineerin g colleges	135	No	25	18.5	2.666 7	0.61085
	similar to school		Not sure	10	7.4		
	education system						
	Kind of training		Pre- servi	2	2		
	and education	100	ce				
10	for teachers of	100	INSE T	50	50	2.460 0	0.53973
	English in Engineerin g colleges		Both Pre &	48	48		
			INSE T				
	Usefulness of training in		Yes	103	76.3		
10	EAP/ESP for	135	No	6	4.4	2.570	0.79683
18	teachers of English in Engineerin		Not sure	26	19.3	4	
	English in			26	19.3		

Table II. TEACHERS' OPINION REGARDING THE NEEDFOR IN-SERVICE TRAINING

In Table 2, variable 9, 10 and 18 project the teachers' opinion regarding the need for in-service training. In variable 9, 100 teachers (74.1%) have mentioned that as in the case of school education system, a mandatory training and education would be helpful for teachers of English in Engineering colleges. But the remaining 25 teachers who do not want to attend training programme and the 10 teachers who are not sure of their needs imply that they do not aspire for change or they are not aware of the usefulness of such training programmes. Reference [21] writes, if you need training to teach in a school, you need training to teach in university.

In variable 10, 48 teachers have expressed that both pre-service and in-service will be helpful for them to teach English in Engineering colleges and 50 teachers have expressed that in-service training will be helpful for them and 2 teachers have expressed that pre-service education will be helpful for them in teaching English in Engineering colleges. This explicitly reveals the fact that substantial number of teachers are aware of the kind of requisite training they need to undergo in their career. The teachers have also revealed that they are not permitted to undergo training in the normal working schedule.

In variable 18, 103 teachers (76.3%) have mentioned that in the light of their experience in teaching in Englineering colleges in Tamilnadu, they think training in English for Academic Purposes (EAP) and English for Specific Purposes (ESP) will be useful for them. This implies the attitude of teachers' willingness to undergo training pertaining to their ESP/ ELT proficiency.

Table III. TEACHERS' OPINION ON USEFULNESS OF IN-SERVICE COURSES

Va ria bl e No	Name of Variable	N	Range	Occurre nces	Perce ntage	Mean	Standar d Deviatio n
20	Usefulness of INSET in improving	135	Certainly Very Probably	69 17	51.1 12.6		
	teachers' language skills		Probably	45	33.3	4.1111	0.99751
			Probably Not	3	2.2		
			Certainly Not	1	0.7		
	Usefulness of INSET		Certainly	66	48.9		
22	in improving teachers'	135	Very Probably	18	13.3		
	knowledge and		Probably	46	34.1	4.0667	1.00892
	practice in ELT methodolo		Probably Not	4	3.0		
	gy		Certainly Not	1	0.7		

In Table 3, variables 20 and 22 provide particulars regarding the teachers' opinion on the usefulness of inservice courses. In variable 20, 69 teachers(51.1%) have answered 'certainly' when asked if an in-service course designed to improve their language skills would make them a better teacher. 17 teachers(12.6%) have replied 'Very probably' and 45 teachers(33.3%) have replied 'probably'. This indicates that most of the teachers believe that a specific course designed exclusively for their need would be helpful for them.

In variable 22, 66 teachers (48.9%) have expressed 'certainly' when asked if an in-service course designed to

improve the teachers' knowledge and practice of ELT methodology would help them become a better teacher. 18 teachers(13.3%) have expressed 'very probably' and 46 teachers(34.1%) have expressed 'probably'. This gives us a presumption that an exclusive course designed to improve the teachers' knowledge and practice of ELT methodology would enable them to become better practitioners of teaching profession.

IX. RESULTS AND DISCUSSIONS

The preliminary study establishes the view that the absence of professional training and development for teachers of English in Institutes of higher education, tend to base their teaching on their own experience as students. In this way, old teaching methods that focus on the teachers rather than the students' needs and on the subject matter rather than on the transformation of student knowledge perpetuate from generation to generation [22]. The teacher trainer experts have emphasized the fact that in higher institutes of engineering and technology, teachers must make sure better classroom management through their improved English language abilities. This could be ensured by strengthening teachinglearning centres and training teachers across the disciplines, with a view to develop their professional competence by enhancing their classroom communication. The training courses organised earlier by the Government and private institutions were mostly designed on the basis of what the teacher trainers and administrators considered to be the inservice needs of teachers of English in Engineering colleges. This study proposes to change this trend by attempting a survey of teachers' views concerning in-service courses and prioritising their training needs. In order to make teacher inservice training effective, such programmes should be made as explicit as possible, because if they are not, they will prove impossible to object to, adjust and improve [23].

The National Research Council's Division of Behavioural and Social Sciences and Education has published several in-depth research reports which reinforce the necessity for adequate teacher preparation. Effective teaching requires teachers with a deep knowledge of the subject, an understanding of how people learn and an ability to use principles of learning and teaching to stimulate student learning and achievement [24].

Hence centres of excellence with reference to professional development and training need to be established as nodal centres in every zone. Thus the strength and quality of this profession gets enriched with the teacher training programmes which should be a central priority in teacher education and professional development. Researches have proved that training helps teachers to develop the knowledge and skill they need in the classrooms; to be able to apply strategies to stimulate student learning and achievement [24]. So the need of the hour is teacher training programmes enabling teachers raise their professional competence which would lead to effective teaching and learning.

X. CONCLUSION

In all professional fields, the knowledge base keeps changing over a period of time, education included. That too, with the influence of advancement of technology on global industries, it becomes mandatory for teachers to develop an attitude for lifelong learning with proper exposure and updates in their respective fields. Learning can never be complete and it is always a work in progress. To conclude, if the professional and subject competence of teachers are enhanced, it is bound to improve students' own English language ability vis-a- vis writing and speaking.

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