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A STUDY ON THE STATUS OF FACULTY DEVELOPMENT ACTIVITIES IN ENGINEERING INSTITUTIONS**S. MURALI****RESEARCH SCHOLAR****NATIONAL INSTITUTE OF TECHNICAL TEACHER TRAINING AND RESEARCH
CHENNAI****ABSTRACT**

Growth and prosperity of a country greatly depends on the higher education system which prepare the young minds to face the global challenges. An ever increasing complexity of the higher education, together with advancement in new approaches to teaching/learning and growing educational demands of 21st century learners require teaching faculty to acquire broad range of skills in addition to subject knowledge. Hence the quality attributes of faculty gains significance in the light of developments in technology and innovations in educational practices. An effort is made through this study to understand the issues in professional development of faculty members in private engineering institutions Tamilnadu, India. The study explores the adequacy of professional development opportunities available to the teaching faculty, the extent to which faculty make use of the activities available for professional development in engineering institutions, role of faculty administrators in helping faculty development activities across the institutions. The results of the study show that teaching faculty has begun to realize the importance of faculty development activities as a vehicle to move up in their career ladder and to equip the millennial students. The study recommends that that faculty administrators need to play a key role in designing, promoting faculty development activities in a continuous manner.

KEYWORDS

Faculty, Faculty development, Professional development, Training and development.

1. INTRODUCTION

Higher education in India has profoundly changed in the last couple of decades with an impressive growth in number of institutions and explosive student enrollment. India became the third largest higher education system next to China and U.S. The rapid expansion of higher education has brought several issues related to standards of its quality to the forefront. Many experts from academia severely criticize that the massive growth is mainly quantitative one and it needs to be compounded by qualitative inputs.

One of the immediate threats facing the higher education in India is the poor quality of faculty members to cater the increasing student needs. The quality of education greatly depends on the knowledge, skill and abilities of teaching faculty. Many studies have proved that quality of faculty members directly impacts the students and the quality of education greatly depends on the skill and abilities of teaching faculty (Rahman & Ahmed, 2009).

Educators of the present generation can no longer act as 'sage on the stage' as they used to be in rather they need be proactive in dealing with students. Thus educators are increasingly assumes the new role of serving as 'guide by the side' to develop the millennial students.. Faculty are expected to be highly knowledgeable of their profession, required to maintain high academic standards and possess the ability to teach all types of learners through a variety of teaching strategies, and be accountable for each student's academic progress. Hence it becomes significantly important that the issues in skills and training of teachers to impart quality education to the students needs to be taken into account (Rahman and Ahmed, 2009). Rapidity of change of 21st century forces faculty to become obsolete within a short time if they fail to update themselves by participating in professional development activities. Faculty development refers to any effort to improve teacher's knowledge, skills, and abilities so that they perform their roles more effectively (Gall Meredith, 1994). It is strongly believed that faculty development activity can be the ladder for faculty members to reach the pinnacle of glory in their teaching endeavor.

2. STATEMENT OF THE PROBLEM

Above discussions clearly provide a broad picture of the issues surrounding the quality of faculty members in engineering institutions. Faculty development activities present a viable option to improve the quality and competency of faculty members. This study was an attempt to investigate the current trend in faculty development activities in engineering institutions. The current study was an attempt to explore to what extent the faculty members take advantage of the faculty development opportunities aimed at helping them to improve their skills, knowledge and abilities. The study highlighted to what extent the faculty administrators (head of the department, deans, director and principal) acknowledges the importance of faculty development activities and integrate into the academic plan.

3. RESEARCH QUESTIONS

Based on the statement of the problem following research questions were framed to address the problems identified.

- What is the current status of faculty development activities in engineering institutions?
- What are the various faculty development opportunities available to faculty of engineering institutions?
- What is the extent of support by the institutions to promote faculty development activities?
- What is the general perception of faculty administrators about faculty development activities?

4. DESIGN OF THE STUDY

A single method was not sufficient to elicit the views and experiences of all the stakeholders involved in faculty development process. Hence it was proposed to use the Mixed Method of research which encompasses both quantitative and qualitative research paradigm in the same study. The strength of quantitative method lies in its interpretation in the form of rich data and advantage of qualitative methods are its support for deep analysis in exploring the phenomenon under study (Creswell 2003).

4.1 Tools

A survey questionnaire aimed to collect data from faculty related to the level of participation in faculty development activities was designed by the investigators. The necessary input for developing the tool was obtained by seeking expert's opinion and reviewing the existing research literature. As a part of the study an interview schedule was prepared to seek the opinion and experiences of faculty administrators related to issues in faculty development activities in their institutions. The format of the interviews was more of an unstructured one to elicit maximum response from the participants (Best, 1959). The investigators employed field notes method for collecting interview data from the respondents.

4.2 Design of Quantitative Survey Instrument

Quantitative questionnaire was designed to enumerate detailed information from faculty members regarding their level of participation/involvement in development activities and contribution to the chosen field as a part of their professional activities. After reviewing the research literature on faculty development the researcher has assumed that faculty members can upgrade their skills and competency primarily by three means as listed below:

4.2.1. Involving in the professional development activities

The study identified that a faculty involve in professional development activities in the following ways:

- Attending national level or international level seminar / conference

- Presenting in a national level or international level seminar / conference
- Attending in technical workshops
- Presenting in a technical workshop

4.2.2. Contributing to knowledge in the profession/discipline

The study identified that a faculty contributes to the knowledge in ones profession in the following ways:

- Carrying out research
- Publishing in a journal
- Publishing or reviewing a book

4.2.3. Participating in formal training in teaching/learning

Considering the fact that teaching faculty requires better knowledge in pedagogy to function properly as teachers, it was necessary to measure how frequently faculty members undergo formal training in teaching/learning process.

4.3 Design of Qualitative Survey Instrument

Unstructured interviews were conducted with few faculty administrators (Head of the Department, Deans, Principal, Vice -Principal) to elicit following aspects of information:

- General perception about faculty development activities.
- Faculty development opportunities available in their institutions.
- Extent of the support by institutions to promote faculty development activities.
- Impediments to effective professional development activities.

The researchers employed detailed field notes as a method for collecting from interviews. This approach is useful if time is short, the results are needed quickly, and the evaluation questions are simple.

4.4 Context of the study

The study was conducted among the randomly selected sample consisting of 218 faculty members from Ten Engineering Institutions affiliated to Anna University, Chennai, Tamilnadu. All the participating institutions are conducting four year degree courses leading to B.E. (Bachelor of Engineering) / B.Tech. (Bachelor of Technology) degree. Out of the ten institutions participated in the study, four are located in urban, two are in semi urban and remaining four are located in rural area of Tamilnadu, India. All the institutions participated in the study are privately managed. The reason for conducting the study with private institutions is that they enroll more than 80% of students in engineering studies (Banerjee and Muley, 2010).

4.5 Demographics of the study

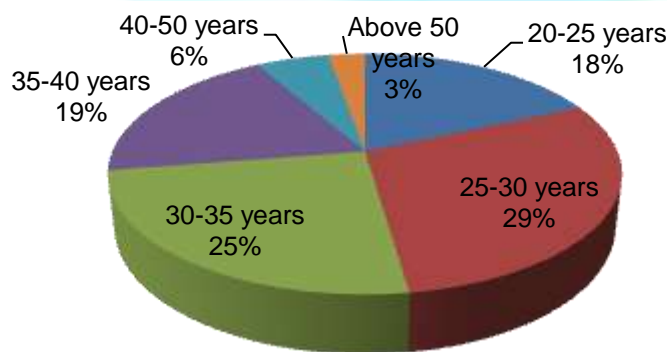
The distribution of the respondents in terms of their Gender is shown in Table 1.

TABLE – 1: GENDER PROFILE OF THE PARTICIPANTS

Gender	Number	Percentage
Male	130	60
Female	44	40

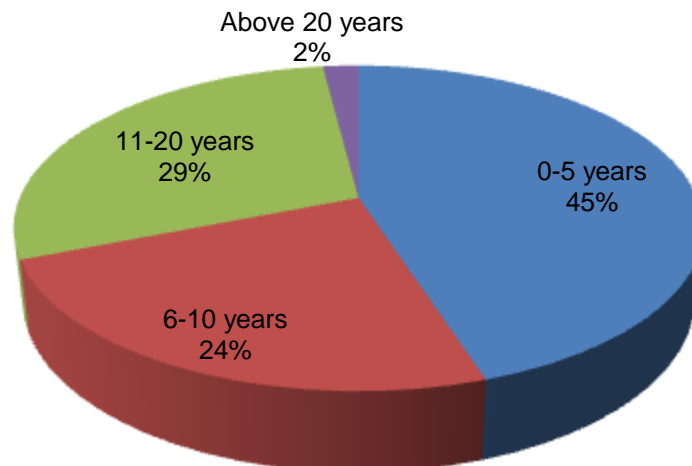
The distribution of the respondents in terms of their Age Group was as shown in the Figure 1. It is evident from the figure that majority of the respondents are below 40 years.

FIGURE 1: DISTRIBUTION OF RESPONDENTS IN TERMS OF THE AGE GROUP



The distribution of the respondents with respect to their experience was as shown in the Figure 2. In terms of experience, faculty members with less than 5 years constitute the majority group.

FIGURE 2: DISTRIBUTION OF THE RESPONDENTS IN TERMS OF THEIR EXPERIENCE



5. MAJOR FINDINGS

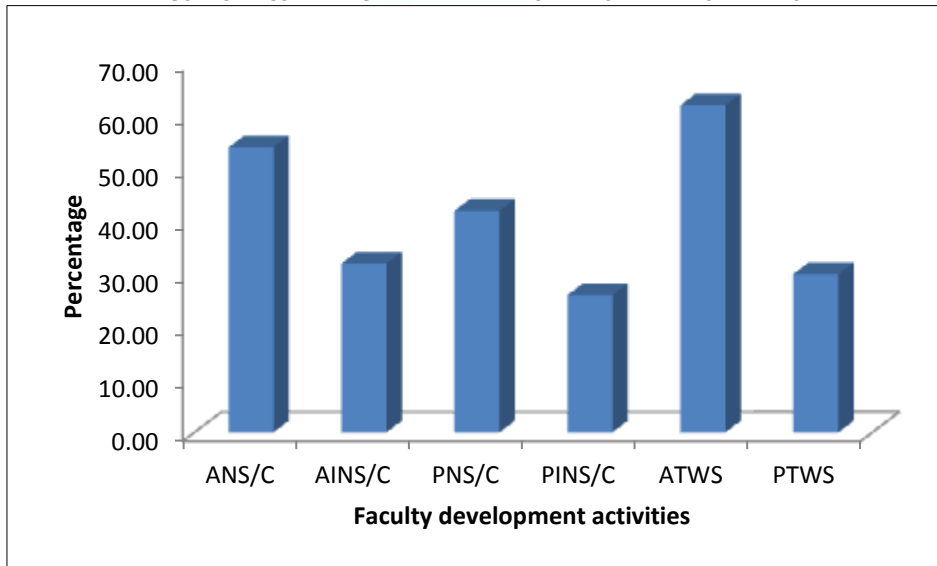
5.1 Faculty involvement in professional development activities in the last 2 years

Data collected from faculty reveals that 54%(N=118) of the respondents participated in national level seminar/conference but did not presented their work while only 32%(N=70) of the respondents participated in international level seminar/conference but did not presented their work.

42%(N=92) of the faculty presented their work in the national level seminar/conferences while 26%(N=56) of the respondent faculty members presented their work in the international level seminar/conferences.

62%(N=136) of the faculty divulged that they have participated technical workshops related to their field in the past 2 years while 30%(N=66) had the experience of served as guest speakers in the technical workshops.

FIGURE 3: FACULTY INVOLVEMENT IN PD ACTIVITIES IN THE LAST 2 YEARS



PD – Professional Development

ANS/C - Attended a national level seminar / conference but did not present

AINS/C - Attended a international level seminar / conference but did not present

PNS/C - Presented at a national level seminar / conference

PINS/C - Presented at a international level seminar / conference

ATWS - Participated in a technical workshop as participant

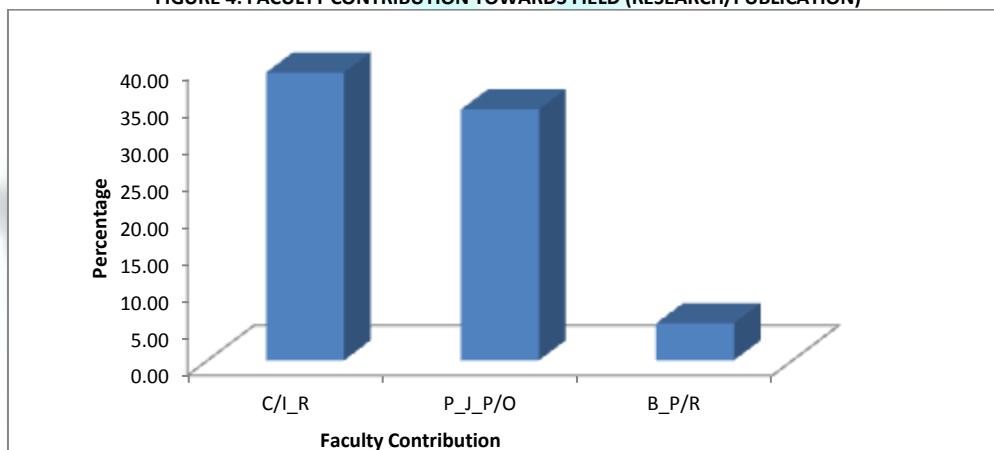
PTWS - Presented in a technical workshop

An analysis of the data reveals that faculty members participation in technical workshops and seminar/ conferences remain as the major faculty development activity in engineering institutions. Publications in conferences remain a major challenge to the faculty members. A further analysis into the experience profile of faculty who have presented their work in the national/international level seminar/conference shows that junior faculty tend to publish more in the national level technical symposium/conferences while senior faculty are more involved in publication in international level conferences/seminars.

5.2 Faculty contribution towards the field – Research/Publication in the last 2years

Technical productivity of the engineering faculty is gauged by their contribution to the field through research, publications in the journals or chapters in the book. Key findings from the study shows that only 39%(N=86) of the faculty have either conducted or initiated research in their field/related field of specialization. 34%(N=74) of the respondents reported involving in publications in peer reviewed/general interest journals either in online or print mode. 5%(N=10) of the respondent published/reviewed books during last 2 years.

FIGURE 4: FACULTY CONTRIBUTION TOWARDS FIELD (RESEARCH/PUBLICATION)



C/I_R - Conducted/Initiated original research

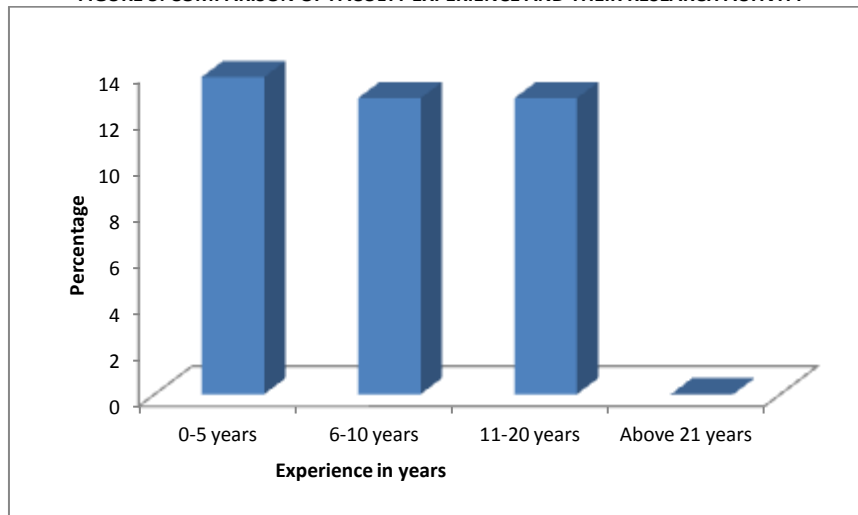
P_J_P/O - Published in a peer reviewed or general interest publication

B_P/R - Published a book or reviewed a book

5.3 Faculty Experience and Research Activities

A detailed look in to the faculty participation and involvement in the research activities suggests that out of 39%(N=86) of respondents who had exposure to research activities, 14%(N=30) of faculty has total experience between 0-5 years, while 13%(N=28) ha total experience between 6-10 years, 13%(N=28) of faculty has experience between 11-20 years. It is a good sign that young faculty started investing their time in research in early part of their career.

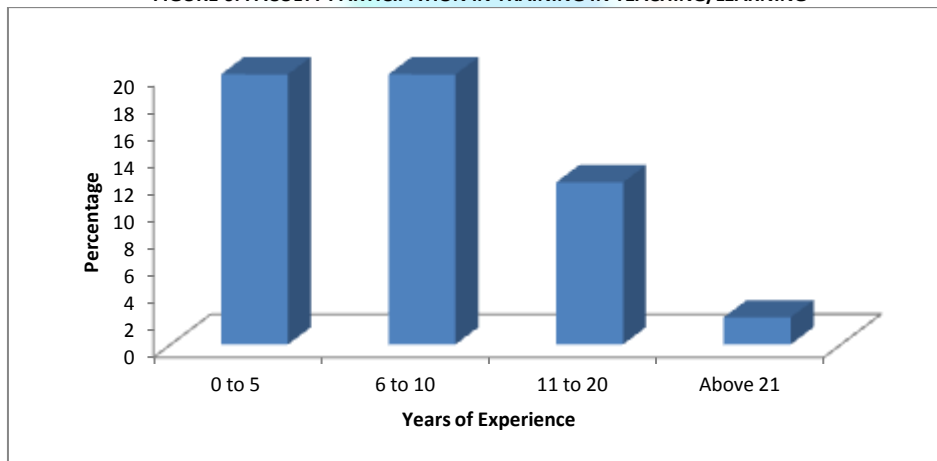
FIGURE 5: COMPARISON OF FACULTY EXPERIENCE AND THEIR RESEARCH ACTIVITY



5.4 Faculty participation in pedagogical training in the last 2 years

An analysis of faculty participation in training in pedagogy indicates that 54%(N=118) of the respondents attended training of some kind in teaching/learning. Further analysis reveals that 20%(N=44) of the faculty with experience between 0-5 years and 6-10 years attended training in teaching/learning in the last two years. Only 12%(N=26) of faculty with experience between 11 to 20 years participated in training in teaching/learning in the last two years. Only 2%(N=4) of faculty belonging to more than 20 years of experience attended training in teaching/learning.

FIGURE 6: FACULTY PARTICIPATION IN TRAINING IN TEACHING/LEARNING



5.5 Current Status of faculty development

A thematic analysis of the qualitative data collected from faculty administrators reveals the following key points:

- Most of the faculty administrators admitted that some form of faculty development activities prevail in their institutions. However most of the faculty development programs are not centrally controlled and coordinated by the management in general.
- Faculty members participate in short term training programs/workshops mostly out of their self interest.
- Some of the institutions which participated in the study admitted rewarding faculty members monetarily for publication of their work in national/international peer reviewed journals.
- Also some of the institutions sponsor their faculty for presenting their work in national/international conferences.
- A faculty administrator stated that “funding for sponsoring the faculty to the training programs remains a major bottleneck to the institution”. He further added that “industries need to take responsibility in providing hands on training to faculty in latest tools and technology”.
- Few institutions have devised policies to support faculty to participate in training programs in phased manner based on certain criteria such as years of work experience in the same institution.
- It can be observed that senior faculty administrators often stress the importance of journal publication in faculty meetings.
- Few faculty administrators opined that faculty are adult learners and they don't like them to be trained by other faculty/trainers. They questioned the very concept of training faculty to use ICT Tools in teaching.
- It is quite evident that institutions feel the heat of poor publication/research output during the accreditation reviews.
- Most of the senior faculty members divulged that they constantly experience more pressure of publication compared to junior faculty members.

6. RECOMMENDATIONS

Faculty members of the net generation require unique needs in professional development. To support and leverage the talents of the faculty members, institutions may consider utilizing the following recommendations:

- Include faculty development programs as a mandatory component in the academic schedule.
- Constitute a central monitoring body to oversee the effective conduct and coordination of various faculty development activities across the institution.
- It is suggested that a database in suitable format may be created and maintained in the institutions to record each faculty members' participation in professional development activities. The database should be able to fetch complete data of a faculty member's professional development activity over the years in a simple and elegant format.
- Reward faculty members suitably for publication in journals and conferences. More than reward give a wider recognition and respect for good work by the faculty members.

- It is suggested to avoid offering any faculty development program with preconceived notion about what faculty members need. Instead, develop and administer annual Need Assessment Survey to identify trends in faculty development needs.
- Design programs to enable faculty to familiarize with instructional technology. For instance, the program menu may include components of course management system, media in classrooms, social networking tools, and mobile technologies in instruction.
- Prepare faculty to take advantage of the benefits of online resources to the maximum extent in their teaching, learning and research.
- Offer flexible schedules while designing the courses and look out the possibility for various delivery options including online, blended and self-paced learning.
- Advocate faculty mentoring as a means to guide and train the young faculty and to tap the tacit knowledge of senior faculty.
- Incorporate assessment into faculty development programs, which need to align with institutional strategic initiatives. Assessment results can become the driver for the ongoing refinement of current faculty development programs and for the evolution of new programs.
- Anticipated outcomes of the programs should be clearly defined and measured. Look for possible collaborations in offering programs by involving institutions/industries in the nearby regions.

7. CONCLUSION

Going by the above discussion it is imperative that institutions need to consider faculty development programs in the same way that they view academic programs for students. Institutions must acknowledge that faculty faces various problems and difficulties at various stages of their academic career. It is necessary to acknowledge that such problems exist and adopt measures through effective design of intervention and faculty development activities to remediate from occurring again.

Hence the faculty development programs should address the multiple roles and needs of the faculty member as facilitator, teacher, advisor, mentor, leader and researcher. Institutions should anticipate that problems exist and the preemptive measures must be addressed.

It is the right time for the institutions to think about including mentoring as an important component in the faculty development programs. Institutions can add flavor to the faculty development programs by offering a variety of on-campus and off-campus formats such as face-to-face, blended, online, self-initiated/self-paced, and anyplace/anytime programs to accommodate just-in-time needs.

It is suggested that drastic change is required on the part of higher education administrators to look into the ways the faculty development programs are conceived, organized and promoted among faculty.

Finally, implementing and sustaining successful faculty development initiatives continues to be both an opportunity and challenge. Thus it is significant that institutions must continue to seek systematic ways and means to support teaching and learning innovation. A critical component of an innovative teaching and learning environment continues to be sustainability. It is suggested that the process of faculty development must begin as soon as the faculty enter the academic profession and continue at all subsequent levels of their career.

8. REFERENCES

1. Banerjee, Rangan and Vinayak P Muley (2010). "Engineering Education in India". (*New Delhi: Observer Research Foundation*).
2. Best, John W (1959). "Research in Education". Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1959, 278-81, 307
3. Creswell, J. W. (2003). "Research design: qualitative, quantitative, and mixed approaches (2nd ed.)". Thousand Oaks, CA: Sage Publications, Inc. Dayhaw-Baker, 1994
4. Gall, Meredith D., and Roseanne O'Brien Vottek (1994). "Planning for effective staff development: Six research-based models". Eugene, OR: ERIC Clearinghouse on Educational Management.
5. Rahman and Ahmed (2010). "Academic Professionalization in Higher Education Through Staff Development. An overview of Indian experience". University News, 2010.
6. Seidman, I.E. (1991). "Interviewing as Qualitative Research: A Guide for Researchers in Education and Social Sciences". New York: Teachers College Press.

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