Instigating Research Culture at Institute level

Geetha Kiran A[1], Mohana Lakshmi J[2]

[1]Department of Information Science & Engineering, Malnad College of Engineering, Hassan, geethaamk@gmail.com

[2]Department of Electrical & Electronics Engineering, Malnad College of Engineering, Hassan, mohana2024@gmail.com

ABSTRACT

The approach dealt in this paper reveals the real-time situation of a technical Institute with respect to the research culture adapted. It is a drive for the faculty members of the technical institute to improve /start research practices to enhance their professional skills. It is a motivation not only to the young teachers but also to the senior professors who have ceased/withheld their research after the completion of their doctoral degree. Initiating practices of research is essential but maintaining the same in a long run is the vital part. There is a need to start somewhere and focus on practices of research culture with strong research traditions.

Key Words: research culture, productive research environment,

1.   INTRODUCTION

To be at par with other institutes,there is a necessity that the faculties pursue research, have publications and even have patents for a righteous and innovative research. Research is essential to catch up with current trends in the field of engineering and other sciences and there is a need for innovative teaching methods to invoke interest among prospective researchers.The existing research culture needs to be revamped to cater to the current scenarios. There is a need for the new guidelines to be framed and financial aid to support and keep the research initiative intact.There is a need to rear teams comprising of an expert faculty member who has the capability to lead at least a couple of Research scholars, M.Tech students and designated number of UG students mentored by an industry experienced researcher.Research laboratories should be established at all colleges and a volunteer mentor from the industry whose expertise can guide the researchers at these laboratories and also can bridge the gap between academics and industry.

To initiate research culture at a large extent requires setting clear initiatives / goals and communicating the same effectively.The goals should be supported by well-defined plan/steps and to accomplish the goals, the faculty workload should be balanced along with constant motivation and support by heads of respective institutes.The plan for a research culture should consist of student involvement. Research assistance will encourage them to take up research work but that should not only be the major step. Faculties and students alike should be supported by the institute.

Attempt should be made to identify and appreciate researchers and to transform a faculty from being regular academician to a researcher, as a result, the professor can update himself/herself on the current innovations and deliver lectures which in turn would inspire or seed research culture in the students.

2.   RELATED WORKS

Developing such a culture is not simple, straightforward or formulaic. If it were, every institute in the country would be applying the winning formula.

A case study of the School of Management Studies at the University of Waikato identified certain important managerial decisions made to transform a faculty from being undergraduate teaching dominated in the late 1980s to one with a strong research profile by the mid-1990s. The work emphasised more on management theory to show the links between changes in beliefs, attitudes and values in bringing about a change in the organisational research culture [1]. Organisation of economic co-operation and development elaborates the difficulties and challenges in building a research culture, especially in those institutions where research is relatively new or fragile.' The work proposed points out that research is not a one – off project but it is a result of series of strategic policies and actions [2]. Various strategies have been put forth towards a national, systematic research culture. These can be adapted for application to institutional research culture development. For example, public pronouncements from opinion-formers as to the value of research, university promotions criteria which focus on research excellence [3]. Certain Universities investigated about improving research culture system through Quality Assurance Practices (QAP) pertaining to the views of students, teachers and Directors of Quality Enhancement Cells' (QEC's) and to differentiate the ideas of

students, teachers and Directors of QECs regarding research culture system as well as offer quality assurance practices in the universities [4].Although research is still understood as the process of creating new knowledge, certain governments in UK define research as a measure of quality. Research comes to be known as process when individuals compete for selective grant funding and where the results of the work funded by the grants are published in journals ranked and deemed by the government. This allows academicians to become more proactive towards research and in a recognised manner [5].Hanover University considers successful practices for initiating and maintaining a culture of research, focusing on developing a productive research environment. It emphasises on factors such as allocating significant resources for faculty training and support, support services in research practices, grant writing, and grant management [6]. Worldwide various research and innovation strategies have been proposed to inspire and support staff and students to achieve their potential and meet the challenges of society. There are various issues in collaborativeresearch process and the situation of new academics in the early stages of research careers. The importance of collaborative research has tended to encourage individualism and competition between researchers [7]. There have been numerous attempts in the past few years within education research—and social science research more generally—to alter the character of research practices. There has been a systematic effort to address perceived shortcomings in research practice through a series of 'research-capacity building' initiatives, aimed at the restructuring of professional learning. Few methodologies explored empirically have been discussed in [8 -10] where different modes of professional learning are implicated in the social practices of education research. Certain case studies state that creating or reinforcing a research culture requires leaders who can influence others towards the goal of creating and disseminating new knowledge, and as academics it may be up to us to facilitate this by promoting research with learning at undergraduate level. Indeed this may provide additional benefits such as increasing the research and scholarly activity of academic staff and provide recognition of excellent research skills internal and external to the department [11-12].

Section 3 elucidates the key findings briefing about the initiative taken for inspiring researchers at UG level with a conclusion in Section 4.

3.   KEY FINDINGS

A research culture requires support from administrators to strike a balance between research and teaching expectations. Conducting/attending faculty training should be appreciated and supported. Personal ties among faculty are also likely to foster during collaborative research efforts. Mentoring each other and also their students plays a vital role. Student involvement in research stimulates young minds and helps them garner strong work ethics. There is a need to build a team comprising a mentor from industry, a dedicated faculty in the same field, a Ph.D. scholar, PG students and UG students.

In the outline, the work reported comprises of two sectors:

I Sector: Developing productive research environment.
- Steps should be taken to develop research environment at institutions in tandem with the University.
- Should have vital points in having a research culture and address vital attributes of a productive research environment.
- Initiate a successful research culture with clear guidelines and effective leadership from university and institutions.

II Sector: Strong elements in inculcating the research culture
- Successful steps in implementing the research culture.
- Institutions shall endow major support to faculty to improve their research culture.
- They can have variety of strategies to increase the research culture and in turn increase research productivity in faculty.
- The possible strong elements to be inculcated in the development of research culture are:
    i. Having a recognized research centre.
    ii. Allowing faculty to attend/conduct related workshops.
    iii. Research products shall be recognized, appreciated and published.
    iv. Flexibility to researchers in academic work.

4.   CONCLUSION

This paper is an attempt to encourage the professors to get involved in research and in turn create an environment of research at their institutes. In a whole, it articulates the responsibility of the administrators and management along with the professors. Students should have a research culture built-in unknowingly with the environment provided leading to productive research practices at the institute level.

REFERENCES

[1]   Michael Pratt, Dimitri Margaritis and David Coy, " Developing a Research Culture in a University Faculty", Journal of Higher Education Policy and Management Vol. 21 , issue 1, pp. 43-55, May1999.

[2]   Hazelcorn, E. (2005) University Research Management: developing research in new institutions, Paris, OECD.

[3]   Dyson, A. and Deforges, C., "Building Research Capacity: some possible lines of action", (NERF working paper number 1.1), National Educational Research Forum (NERF), 2002.

[4]   Muhammad Shabbir, Prof. Dr. M. Ibrahim Khalid, Dr. Khuda Bakhsh, "Improving Research Culture System through Quality Assurance Practices In the Universities Of Pakistan", The Sindh University Journal of Education, Vol. 45, Issue No.1, pp. 131 – 140, 2016.

[5]   Teresa Marchant, "Developing Research Culture – Overcoming Regional and Historical Obstacles", Professional Doctorate Research in Australia: Commentary and Case Studies from Business, Education and Indigenous Studies, 2009.

[6]   Hanover Research, "Building a Culture of Research: Recommended Practices", May 2014.

[7]   Belinda R. Tynan and Dawn L. Garbett, "Negotiating the university research culture: collaborative voices of new academics", Journal Higher Education Research & Development (Taylor & Francis), vol. 26, Issue 4, 2007.

[8]   Gareth Rees, Stephen Baron, Ruth Boyask and Chris Taylor, "Research-capacity building, professional learning and the social practices of educational research", British Educational Research Journal, vol. 33, issue 5, pp. 761-779, Oct. 2007.

[9]   Linda Evans, "Reflective Practice in Educational Research ", Bloomsbury Publishing, London, 2002.

[10]   Ellen Hazelcorn, "University Research Management: Developing Research in 4 New Institutions – ISBN 92-64-00694-X – © OECD 2005.

[11]   Robert T. Blackburn, Jeffery P. Bieber, Janet H. Lawrence and Lois Trautvetter, "Faculty at work: Focus on research, scholarship, and service", Research in Higher Education, Volume 32, Issue 4, pp 385–413, August 1991.

[12]   Dubrin, A.J., Dalglish, C. and Miller, P. Leadership 2nd Asia Pacific Edition, Wiley, Milton, Queensland, 2006.