

# **Amalgamating Research with Teaching in Higher Education Some Thoughts and Experiences**

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## **Introduction**

The higher educational institutions have dual role to play. Distribution of the existing knowledge is the primary role of these institutions. At the same time, they are expected to contribute to the growth of knowledge. The Institution is better known by its strength in the second area. The universities and Institutions that create good piece of research are ranked high. In India most of the higher educational institutions are happy in completing the first responsibility. Many of them do not even give attention to the second responsibility. As a result, generation of knowledge is very weak in most of the higher educational institutions in the country. Worse than this is the fact they produce a bunch of students who are proud that to know existing knowledge but have no inclination to add to it. This picture needs to be changed immediately if we want to survive in this competitive knowledge society. In this article I propose a road map of how research can be amalgamated with teaching in higher educational institutions.

In order that there is an amalgamation of research with teaching we need to provide attention to the following four aspects.

1. Enhancing Institutional Capacity
2. Training of Teachers
3. Setting up a Research Culture
4. Encouragement to Presentation and Publications

## **Enhancing Institutional Capacity**

Institution is known by the infrastructure it has. The first important aspect is the campus. It should be pleasant, providing facilities for academic interactions. It should display the success stories and arrange seminars where students can meet their role models. Publications by college teachers and alumni should be made available freely for reading and discussion.

Library is the heart of any educational institution. It should be equipped with text books, reference books, abstract books and journals. It is a pity that the budget allocated in many of the higher educational institutions in India is so low that they can purchase only a few selected textbooks. Reference books like dictionaries, encyclopaedia, handbooks are available in such a short supply that the requirement of the students is hardly fulfilled. Research journals provide information about the current work going on in other countries. In the absence of these journals students are ignorant of modern developments. They cannot think what areas need to be explored to remain competitive in the modern world. Hence, it is necessary that the library facility of the institution should be strengthened adequately.

Along with the library the availability of a laboratory plays an important role in knowledge generation. This is much more important if the work is to be conducted in natural sciences. Even in social sciences like psychology, geography the availability of the laboratory is a crucial issue. It needs space, equipment and manpower. The laboratory has to be strengthened every year. However, many of Indian universities fall short in this aspect. They do not make financial provision to update and upgrade the existing laboratory. As a result, students are exposed to age old gadgets that are hardly used in modern industries. This point has been brought forward on many occasions during industry institution collaboration.

Through a variety of methods like experimentation, surveys, questionnaires, etc. a lot of data are collected. These data need to be analysed systematically to make sense out of it. Hence, the Data analysis facility is the need of the day. If you look at the higher educational institutions in India you will find that many institutions do not have this facility. Modern gadgets used for data handling along with personnel trained to undertake the task must be made available in all higher educational institutions. Otherwise, researchers will not dare to base their findings on hard facts.

## **Training of Teachers**

Faculty is the backbone of any educational institution. In order that they become research oriented there is a need to train the teaching fraternity. They are the products of a system that has hardly given importance to innovation. They, naturally, continue doing the same in their teaching profession too. To break this vicious circle an in-service training courses should be

conducted for the faculty members. The course should be planned to equip the teachers firstly to conduct research themselves and then to guide the young graduate students in this field. An experience gained in the institutions managed by the Vidya Prasarak Mandal, Thane is worth sharing here.

The author is directly associated with Dr. V. N. Bedekar Institute of Management Studies (VNBRIMS) managed to the Vidya Prasarak Mandal, Thane. Realising the fact that the research output of the institution is low he initiated a course on conducting research in business and management. The topics like importance of research, identification of research problems, data collection, analysis of qualitative and quantitative data, oral as well as written presentation of the findings were discussed. The impact of this course had been quite positive. A substantial number of teachers from the management institute has now undertaken their own research projects.

Encouraged by the success with management institute a similar course for the faculty of B. N. Bandodkar College of Science was initiated. Apart from various parameters of research focus was placed on effective use of laboratory facilities in this course. It too was received very well by the teaching fraternity. Encouraged by the success of two courses a third course on conducting research in social sciences is planned for the faculty of Joshi-Bedekar College of Arts and Commerce in the campus.

## **Setting up Research Culture**

Colleges associated with the universities of Cambridge and Oxford have produced a large number of Nobel Prize winners. It is because of a strong research output from their faculty members and students. They give enough attention to maintaining a research culture in the campus. This fact is evident at all steps in the campus. A short visit to an Indian research institute like the Tata Institute of Fundamental Research in Mumbai will reveal a culture of research prevalent in the institution. Such a culture needs to be developed in all higher educational institutions in India.

Research in any field needs an investigative mind. It starts with the identification of problems worth investigating. For that a strong teacher pupil interaction is necessary. Although such an

environment is available in Indian Schools it is hardly available in Indian colleges and universities. The teacher completes his/her teaching of the textual content mostly within the four walls of the classroom. This classroom bound teaching does not expose the students with the outside world. At the same time the teaching remains syllabus bound. There is a need to go beyond the classroom and beyond the syllabus. Teachers need to refer to modern work in the field and expose student to research articles published in the journal. With the availability of J Store facility this task has become simple.

Exposure to the outside world also provides a good learning opportunity to the students. Visits to research institutions and interaction with practising researchers prove useful. Field trips can be arranged regularly with a discussion on social relevance of a knowledge and its use in dealing with social problems. Industrial visits can expose the students to techniques and methods used in modern industries. Such visits are organised for the students pursuing management studies for the past few years. These visits are proving useful in expanding the horizon of students' knowledge and thinking.

It is well known that students learn a lot from their peers. Hence, attempts need to be made to enhance child-child interactions both formally as well as informally. It can be achieved by arranging discussion sessions for the students within the college campus. Interaction with students from other countries help students to know the way they think and work. Such opportunities can be made available by participating in international contests and meetings. An attempt in this direction is being made by the Vidya Prasarak Mandal, Thane. On one hand it hosts the visit of students from other countries and enable campus students to interact with them. For example, students from Kyoto Sangyo University in Japan visit Thane every year. Students from various colleges managed by VPM interact with them formally as well as informally. In addition, students from institutions in Thane are sent to participate in international contests in held China, Denmark, Brazil, etc. Direct interactions with students from other countries enable them to gain new research ideas and methods to explore them.

## **Presentations and Publications**

Both the students and teachers be provided opportunities to present their work before their colleagues. In order to provide presentation opportunities within the college seminars and

conferences are to be organised regularly. Symposia where students get an opportunity to meet practising researcher prove useful. At the same time seminars where students critically discuss the work conducted by their friends also prove beneficial. Organisation of a research seminars where well known personalities in the field are invited provide an opportunity to get acquainted with current trends in the field. At the same time sending students and teachers to outside conferences enable them to establish a long term contacts with practicing researchers. Continuous interaction with these personalities broaden the thinking of teachers as well as students in the institutions.

Publication in the journal is a special skill. It gets developed through practice. Some guidelines in this regard can be given. However, the most useful way to learn it is to start writing and sending the article to a peer reviewed journals. The feedback received from the reviewer provides a lot of inputs on writing research articles. There is a saying "Success breeds success". This is true for research publications. In the initial phases it might be boring exercise but as one matures in writing more and more articles gets published. It brings name and fame in the academic circle.

## **Conclusions**

I this short article have tried to suggest what can be done to couple research with teaching in a higher educational institutions in India. After independence a few institutions were set up in India with a focus on research. These institutions were given good amount of funding. On the other hand the universities which had the major role of teaching were deprived of research funds. It is now realised that teaching and research flourish hand in hand. Therefore, a new wave has been generated to incorporate teaching in research institutions and research in teaching institutions. It is hoped that these changes would enable to amalgamate research with teaching in Indian educational as well as research institutions.