Research is a quest for new knowledge, novel ideas and innovative practices. It raises questions and answers them. It identifies problems and attempts to find out the solution. It is a process of continuous scrutiny, evaluation and renewal, since today’s facts are tomorrow’s outdated information and yesterday’s myth may become tomorrow’s reality. Hence, research as a process, must engage itself in continuous renewal of knowledge and ideas. All around us we notice human advancement in a variety of ways. It can all be attributed to research. Indeed, modern achievements are the result of conscious well planned target oriented research. What we call advancement of civilization, is in reality made up of knowledge created by innumerable scientists of all branches and hue. All progress is definable in terms of quality research alone with all other considerations constituting the very core of that effort. The Higher education system of a country plays significant role in the creation of intelligent and skilled human resources. Higher education is all about a process of transformation of students from raw material to polished youth capable of meeting the challenges in their carriers as well as in their life. According to UGCs annual report (2011), at the time of independence of India, there were only 20 universities and 500 colleges in the country with 2.1 lakh students enrolled in higher education institutions. As on 31-03-11, the number of universities has gone upto 523 and 33,023 colleges in the higher education sector.

Present Scenario

Although our system is quantitatively large, yet, it is very small in the context that it caters to the need of only 17% of the total youth population in the age group of 18-24 years. While our gross enrolment ratio (GER) is 17%, the world average was 26% in 2008 and the figure for developed counties was 55%. According to the academic ranking of world universities, in the year 2011, out of 600 odd universities in India, none figured in the list of top 500, except a couple of IIT’s which made it to the lower ranks. Further analysis of results showed that research aspect of our universities is very weak and less than 1% of the students enrolled in our universities pursue doctoral research. The number of research degrees of Ph.D. and M.Phil awarded during 2009-10 was 11,161 and 10,583 respectively (a decrease of 18.9% as compared to 2008-09). India has 7.8 scientists per 1000 population compared to 180.66 in Canada, 53.13 in Korea and 21.15 in the US. While speaking at the 90th annual convocations of Banaras Hindu University of 15th March 2008, Prime Minister Dr. Manmohan Singh expressed his disappointment over the non-availability and quality of higher education in India. He stated that only 10% of India’s youth go to college as against 40-50% in the developed western countries. He also referred that the quality of education has been absolutely low, and mentioned that two-third of the Indian Universities are providing sub-standard education while 90% colleges are below average.

Shortcomings of Research in India

According to the theory of education, if there is no significant research in college then there is no significant quality in education. Quality of education does not grow where research is absent. Research and education are like two ends of a bow. The arrow does not move forward unless the two ends of the bow are tightly tied together by a string. An institution binds the two ends together, namely education and research, to provide quality education.

1. Lack of industry-institution interaction

In the universities abroad there are many research companies located on the periphery of the colleges. They draw ideas from research conducted by professors and students in college and student work in these companies on research projects. Company researchers also teach in colleges, thus, quality of both research and education goes up. Our universities, on the other hand, have rigid, inflexible outdated rules and regulations. Indian Universities are observed to be inward looking and not having adequate interaction with
the world outside. They do not have connections as much needed with their counterparts abroad. They teach irrelevant knowledge from the shelf, mostly yesterday’s knowledge is coming from abroad today. There is a mismatch between the research efforts and the usability of research findings.

2. Lack of awareness towards pursuing research

Awareness and acceptance towards pursuing teaching and research as a career is very less in India. The Indian society especially the younger generation is not well informed of the career opportunities, excitement and freedom that a research career offers. Furthermore, societal pressures affect career choice significantly. A multi-pronged approach needs to be adopted to bring a change in the national mindset towards recognition and acceptance of a career in research.

3. Plagiarism

The overall quality level of educational research in higher educational institution is below average level. The research outputs of the institutes of higher learning including universities are assuming alarming dimensions. Instances of dubious research studies are surfacing in the media. Leading physicists of Stanford University, including three noble laureates, wrote to President of India demanding action against a professor for his alleged acts of plagiarism. There are several other incidents in which theses of one university are copied in other universities. Whole chapters are taken to publish in someone else name.

4. Neglecting social problems

Apart from such instances of plagiarism, a criticism most often leveled against research in India is that it fails to report the problems of the society. There exists a wide gap between post graduate research on the one hand and the practitioners and policy makers on the other, thus resulting in a least role of research in contributing for public welfare. Thus, the years of work done by researcher, the cost paid by the universities and the UGC, find no use to the society since many Ph.D. thesis of our country serve the purpose of decorating the racks of university libraries. The new generation researchers are not bothered about the issues and concerns of the society, rather, they find an easy topic for which they can easily get the data and finish the business at any cost to get the degree as early as possible.

Scholarship offered nowadays to research scholars is attracting even the non-sincere and uninterested students towards research.

5. Remuneration and Brain Drain

In India, research is an obvious last choice even for interested and talented people, due to financial unattractiveness, and substantial investment of the prime years in the lives. Students opt for better paying career options. Good students often leave India for a better environment that offers a variety of choices, opportunities and intellectual freedom. According to an article in The Hindu (Jan 19, 2013) "First set up labs, then dream the Nobel". Only a few Indians are willing to pursue a career in research in their own country as the enabling environment for it is missing. A recent survey by National Bureau of Economic Research in United State revealed that Switzerland has the highest rate of immigrant scientists and the United State unsurprisingly, is the most popular academic destination. For India 40% of its researchers are emigrating to pursue their research abroad.

6. Funding

Funding remains a key issue in facilitating quality research in most universities. The low quantum of funds, the cumbersome process of acquiring them and lack of fund raising capabilities in the university have severely hampered the growth of research.

7. Infrastructure

An important part of research in some social science subjects like psychology is the laboratory. Laboratories play an important role in creating research attitudes, arousing interest and curiosity. The present status of the research laboratories of many Indian universities is alarming. They are not equipped with proper tools and are not technologically advanced. Furthermore, the researchers are not provided with laboratory training.

Computers and internet are inseparable part of research. A researcher has to update his knowledge at every level of his research and such facilities are not provided to every researcher by most of the universities since they are not technically progressive.

Libraries are the heart, the soul and the pivot around which all activities of any institution revolve. In
this electronic era many libraries are still working in the old traditional way and the information provided by them has become obsolete.

**Suggestions for Improvement**

Universities must look forward not just to quantify their researches but to enhance the quality of their researches and use them for the betterment of society and in policy making some of the factors may be taken into account to improve the quality of researches in our universities, in the area of social sciences.

- Media should be encouraged and incentivized towards highlighting, publicizing and promotion of research related programs and various achievements of academics and scientists.
- Annual R&D shows can be held, where leading research institutes and educationists interact with undergraduate students, thereby providing wide exposure.
- Career awareness workshops and seminars highlighting research careers should be regularly organized by universities.
- The researchers must be guided to select a research theme that is relevant, contemporary, that has high social utility value and that can help in the development and refinement of theory or policy formulation.
- The entry level examination should be conducted to ensure good quality intake of doctoral students. Strict criteria need to be devised so that only serious meritorious students with specific interest in research are allowed to go for Ph.D.
- A mechanism should be developed for monitoring for possibilities of plagiarism. To enable an overall healthy research environment, Ph.D. students should be taught ethics and standards of academic research as part of curriculum.
- Students must be continuously monitored and mentored to ensure that the research output of requisite quality. Internal quality assurance cells (IQAC) must be set up in every university to maintain the quality.\(^1\)
- Regular seminars by students would ensure that the students adhere to their research work plan and show progress. Independent committees can also be set up before which the students make regular presentations. Such committees should provide feedback and counsel the research scholars and should check plagiarism.
- All educational research papers should be carefully assessed before acceptance for publications in journals. Publisher and funding agencies can take help of anti-plagiarism software for quality control in educational research.
- There should be regular upgradation of the amount of fellowships offered for Ph.D students and in general for the entire academic profession.
- Teaching assistantship to bright Ph.D. students should be provided to add to their earnings. This would in turn, train and prepare them for an academic career.
- Subsidized insurance, loans etc could be looked for.
- Generous travel grants should be ensured.
- Greater autonomy and a congenial environment to foster independent thinking and working should be given to researchers.
- Adjunct positions in research institutes should be created for inviting NRIs interested in serving in their own country.
- Recruiting companies should contribute towards university research funds. Industries should be encouraged to sponsor and collaborate on research projects.
- Universities should formulate strategies to convert research findings into commercial applications, thus generating funds.
- Government funding agencies should proactively encourage and guide faculty members from universities to submit research proposals. A system of open competition for research grants should be developed.
- Collaborative funding between countries and universities should be encouraged.
- To increase research funding in the longer term, alumni/ corporate fellowship should be looked for.
Given the current state of affairs there is an urgent need to begin an intervention aimed at addressing the quality issue in laboratory training. It is important that even schools are provided with good laboratories and specific attention should be paid to laboratory training at all levels.

The campuses should be made wi-fi and computer facilities should be provided to every researcher so as to keep pace with the researches done abroad.

Library and electronic journals should be updated regularly and provided free of cost to the Ph.D. students by the universities. Latest books of both Indian and foreign writers should be provided to every researcher related to his/her research topic.

In the current environment, in order to adapt successfully to the technological changes traditional libraries should be transformed into digital libraries that encompass both electronic and paper materials.12

Conclusion

Although the Indian education system has expanded manifold since independence yet there are serious shortcomings in this system as discussed above due to which the students of our country are not able to compete with the students of other advanced countries in the employment marker at the global level. India’s dream of becoming a developed nation by the year 2020 can be fulfilled only if able human resources are produced and innovative knowledge is gained. It is only possible through qualitative teaching and research.

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