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सरकारी एवं निजी विद्यालयों में कार्यरत शिक्षकों की व्यवसायिक सन्तुष्टि का तुलनात्मक अध्ययन - डा० राहुल गुप्ता	55

RESEARCH AND QUALITY HIGHER EDUCATION: WHERE WE STAND

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Abstract

Indian higher education system is the third largest in the world, but its standard is very poor at international level. None of the Universities of India has found a place in top 100 universities of the world. Indian higher education confronts a number of issues and challenges; lack of physical facilities, limited use of technology and poor quality of research severely affect overall quality of higher education. Quality of research is deteriorating mainly due to lack of resources, restricted access, and plagiarism. Research is a scholarly activity. Researcher needs certain skills, capacities, and competencies to carry out his research work. To enhance quality of research following measures may be taken into consideration such as (i) allocation of sufficient funds for research (ii) complete freedom and accountability of teacher for his research work (iii) development of research parks to acquire new knowledge and innovative ideas (iv) avoiding plagiarism in research papers (v) establishment of well equipped library, laboratory, computer lab and other essential facilities to provide better access to researcher. All colleges and universities of India should take strong initiatives for quality research output to acquire best position at global level.

Introduction

Presently, at the global level of education, the west is much more advanced and thus there is hegemony of the universities and institutes of America, England and other western countries in the world. Undoubtedly, India is the third largest in the world in terms of the system of higher education and it ranks after America and China. However, the other Asian countries are slightly behind in the education scenario, although Singapore, South Korea, Japan and China are trying hard to move ahead with stability. Ensuring quality in higher education is amongst the

foremost challenges that India face today. No single university of India finds a place in global rankings of universities. Except few, all most all institutions do not meet the international standards. The quality of teaching and research has come down. Non-availability of qualified and dedicated teachers and absence of adequate research opportunities further worsens the quality of higher education. Research has now become an integral part, not only in academic pursuits but also for practical achievements in several facets of modern society. Our universities and colleges are not able to produce quality research by its faculties. Now it is essential that each higher education institution should try to do good research and compete with international standard. The vision & missions of the institution, policies and practices, systems and procedures should be made responsive to the changing global environment.

Importance of Research in Higher Education

Research plays important role in improving the quality of education in general and higher education in particular. Research is a very high sounding word today. This word is very popular in scholars, teachers, academicians etc. It is done in MPhil, PhD, programmes or while writing our dissertation, projects in higher education courses or even small class projects at school level. Research is a systematic activity directed towards the discovery and development of an organised body of knowledge. Research should extend the boundaries of education and education in turn nurture creativity and innovative outlook among researchers. Strengthening of the relation between research and education may help to improve the academic health of the nation.

Research is a journey from known to unknown. It refers to search for knowledge. The Advanced Learners Dictionary of Current English defines, research as, “careful investigation or inquiry specially through search for new facts in any branch of knowledge”. Research is scholarly activity. Researcher requires certain skills, capacities, competencies etc, to investigate a new thing. Research has now become an integral part, not only in academic pursuits but also for practical achievements in several facets of modern society. Administrators, managers, businessman, industrialists, sociologist, econometrists, physical

scientists, natural scientists and nuclear scientists would all advocate an extensive use of research for academic advancement.

D. Slesinger and M. Stephenson in the Encyclopedia of Social Sciences lays down research as “the manipulation of things, concepts or symbols for the purpose of generalizing to extend, correct or verify knowledge, whether that knowledge aids in construction of theory or in the practice of an art. In this context Swami Vivekananda said, ‘take risk and do what you want for the development of society, if you succeed you will be emerged as a role model and if fail you will create a mile stone for the society to further path of development. “

RUSA also envisages corporate participation by enhancing research focus and faculty development in higher education. It has called for dedicated funding for research sponsored doctoral programme and part time masters and PhD programmes as well as fellowships for faculty development. RUSA has also called for setting up of new facilities by the corporate sector in existing universities and higher education institutions as centres of excellence or technology park as well as for developing new knowledge clusters, hubs and creation of new universities, higher education institutions by public, private and PPP mode.

Present Position of Indian Higher Education

India is projecting itself as an emerging global economy and global education hub. This assertion seems to be exaggerated and far from ground realities. “Neither have we qualitative education in India nor our educational system is free from arbitrariness and corruption. Our educational system is academic in nature that is far from developing skills and practical aspects in our educated masses. The truth is that research culture in India is disappearing notwithstanding our boastful claims. Higher education in India needs to be liberated from arbitrariness, lack of transparency, corruption and other vices.” (Report on Corruption in the Indian Education System, 2011).

Now the condition of higher education is very panic. There are major issues plaguing the higher education sector and which affect the quality. These are inadequacy in infrastructure facilities, vacant post of faculty, teaching methods,

unmotivated students, etc. Indian higher education is suffering most from the deficiency of research. Education does not grow where research is absent.

There were only 20 universities and 500 colleges at the time of India's independence. After independence tremendous changes have taken place in Indian higher education. Now we are standing at the 3rd position in the global arena of higher education after the china and United States. Presently we have 49 central universities, 123 deemed universities, 367 State Universities, 282 Private Universities (UGC, 2017). Nation has progressed a lot in quantity and far behind in quality.

Yash Pal Committee Report (2009) on Renovation and Rejuvenation of Higher Education states, "A university is a place where new ideas germinate. The intellectual and political autonomy of the university system states, the principle of moral and intellectual autonomy from political authority and economic power is ingrained in the very idea of the university. This autonomy ensures freedom in research and training and it is expected that the governments and the society would respect this fundamental principle. Teaching and research have to be inseparable, because the task of the university is not only to impart knowledge to young people but also to give them opportunities to create their own knowledge".

Annie Besant said, "The destiny of a nation is folded within the university buildings as the flowers within the close embrace of petals. What our students think today the nation will think tomorrow" National knowledge Commission recommended that, "higher education needs a systematic overhaul, so that India can educate much larger numbers without diluting academic standards".

Declining Research Standards and India's Position in Global Arena

According to the report of OECD (2019), in the field of science and social science the universities of UK and USA have top ranks among world class universities, with highest research impact. These universities are producing publications in world class journals with highest impact factor. Though we have 789 universities (UGC, 2017) but none of our universities is included in top universities of the world. Now there are more than 800 universities in India, still it

is not being able to produce the required number of PhD scholars to the requirements of the markets. Infrastructural or financial crunch of our nation cannot be blamed any more the reason for lagging behind in the race. In the race of increasing the number of institutions we had sacrificed quality. America has created a research ecosystem. Its universities have opened their boundaries to attract young talented youths around the world. Students and intellectual migrants from all over the world come and study here. It provides sufficient infrastructure and other resources to attract young talented youths. Ours is the developing country and due to limited resources we cannot provide world level infrastructural facilities to attract talents from other countries to carry out research work here.

India's research output on the global share of scientific publication is very low, it is about 3.5%. The publications of the state Agriculture Universities of India are very poor and lacking good quality. Its rating in the scientific cited journal and the contribution of scientific research papers in biotechnology research is very low. On the other hand, our neighbouring countries like china is fighting on the global map with a publication more than 20% and also producing good quality and large numbers of PhDs with quality research outputs.

From mid 1980s, China has made tremendous success in the field of education by bringing powerful reformation in funds of education. On the other hand the financial management of Indian universities are managed by the rules of working finance. In comparison to other countries of the world our expenditure for higher education is very low. Most of the prominent universities of India have no basic data base and even they are not the members of different journals which are essential for research and educational development of institutions. In central government 34% and state government higher education institutions 27% teaching posts are laying vacant. Temporary faculties have been appointed in the vacant post for teaching. In the last budget of central government, out of total expenditure only 1.3% has been allocated for higher education which is very less in this decade. In the year 2014-15 government of India has spent only 0.69% of GDP in research and education where as BRICS group countries like Brazil, Russia, China and South Africa have spent respectively 1.24, 1.19, 2.05 and 0.73% towards their research and education. The top ranking universities of world are teaching

tomorrow's knowledge today while Indian universities are teaching yesterday's knowledge today. They are ahead of time and we are behind.

Research Crises

The obstacles in the way of research are many and varied. These are discussed below;

- The Indian academia is not attractive to talented youth. Shortage of basic technology and infrastructure in the universities are major cause. The faculty and the scholars entering into the PhD programs are not so much talented. Most of the theses produced by researcher approved for doctoral degrees does not set fit on international standards of quality. Few doctoral theses from India earn scholarly reputations for their authors, or publication in prestigious research journals.
- No uniformity is maintained in the rules for selection criteria for enrolment of students and also in the entrance tests conducted by different universities.
- Another serious drawback of university is commercialization. For entrance examination universities collect fees from Rs.500-1500. The charge is more in private universities. Huge disparity is observed in the fee structure of autonomous university and government granted universities. It does not have enough infrastructural facilities as well as resources to achieve its long cherished dream. Privatization of higher education has some serious limitations of its own.
- Universities do not conduct examination at the same time and also make delay in publication of results. Thus, candidates develop disappointment among themselves.
- According to the recent amendment in the Act of UGC, the course work of at least one semester has to be done by the research scholars. Those students who are already on jobs and come on casual leaves get discouraged and de-motivated. Some universities are often criticised for awarding PhD degrees to the students even without their attending course

work. Without doing any research work and simply by paying excess amount of money scholars are awarded degrees.

- One important drawback of the present research is concerned with publication of research papers of PhD scholars. Most of the research papers/articles are not published in UGC listed peer reviewed journals bearing ISSN number, impact factor etc. and these journals have not national and international reputation.
- Paucity of supervisors is another problem in this field. Every year the number of PhD aspirants is increasing but on the other hand the number of supervisor is not increasing in same proportion. As a result, students are disappointed and waste their valuable time even after completing the course work.
- The evaluation pattern is not free from defects. The evaluators for theses are known beforehand to the supervisor. Generally known and friendly evaluators are reluctant to give negative remarks on theses. Further, they do not evaluate the authenticity of the work done by the scholar. There are very few instances of thesis being rejected. Although there are UGC guidelines to maintain secrecy of the list of evaluators, still it is not done. Even the student is aware of the name and identity before the examination.
- Though we have a large numbers of theses in university libraries, many of these do not have practical utility and not innovative. These theses do not help for enhancing the quality of higher education. Lack of motivation and awareness towards the importance of research, lower career aspiration levels of students.
- Another serious issue is that the education system in India lacks freedom for teachers to do independent research. Absolute control over academics by administration is not desirable. Absolute administrative control over the academics assignments will be an impediment in the advancement of a competent teacher. Prof. Yash Pal Committee on RRHE, 2009, has also reiterated that authoritarian control has affected the quality of education and research in India. The report highlights that “universities remain one of the most under-managed organizations in our society.

- Plagiarism is a serious threat to quality research. It refers to the use of another person's work for personal advantage without proper acknowledgement of the original work with the intention of passing it off as his own. Plagiarism is one of the main hindrances in compromising the quality of research work. It can take many forms; such as copying materials from a book, copying and pasting information from the World Wide Web, etc. It is also very difficult to find out as to who is the inventor/originator of the original works. Majority of the students believe in Cut, Copy and Paste formula to frame any research project, which is a matter of grave concern for all stake holders in the fields of education and research.

Strategies for Enhancing Quality in Research

The following suggestions may be followed for enhancing quality in research. These are;

Appointment of Competent and Qualified Faculties

Selection of competent teacher is a pre-requisite for promotion of research. Appointment of qualified and efficient teacher is a sine-qua-non for maintaining high standards of teaching in any educational institution. Teacher is a driving force of any education system. It is also important to note that no mode of supplementary tools can substitute the requirement of a competent and proficient teacher. Teaching techniques and good infrastructure will provide a congenial and conducive ambience to a faculty member to impart quality education and produce quality research.

Development of Resources

Every higher education institutions should have well equipped library, laboratory, computer lab and other essential facilities to provide better access to researcher for excellent research output.

Library

Dr. Shankar Dayal Sharma, the then President of India, in world book fair of New Delhi, 1988 told, “a library is more important than that of a university because library can function without a university whereas a university can not do without library”. A well equipped library is necessary for good teaching and research. Library with good collection of printed and e- resources can serves as a great source for the faculty, students and researcher, and enable them to achieve better results in their academic endeavour. A good library is indispensable for achieving academic excellence. Sadler, the chairman of Calcutta university commission said, “Great libraries and great laboratories are needed to make great universities. Dr. S Radhakrishnan realizing the importance of library in the fulfilment of the objectives of higher education had stated that, “the library is the heart of all university’s work.”

Development of Research Parks

Universities and colleges ought to have research parks to carry new knowledge. All universities abroad have research parks, but in India except IIT Chennai, other institutions do not have this facility. Research is an asset and brings increased returns on investment to the university/college. Research Park generates income for university and college. It is a source of income for universities in developed countries. Stanford university of America has given birth to Yahoo & Google companies. Universities produce seeds for industrial growth. This is very essential in competitive world. Indian Universities must try to develop in this direction. Imagination, creativity of students grows only when they work in Research Park. China recently has established 500 parks. Centres of Excellence should be developed in every university. India is required to adopt globally competitive strategies to enhance the quality of higher education.

Research Skills for Researcher

Research Skill is the ability and capacity acquired through deliberate, systematic and sustained effort to carryout complex activities. To perform the role of a researcher, certain research capacities such as ability to work hard, operate

devices, equipments related to the research study etc. have to be developed. It is the ability to do something well arising from talent, training or practice. Today's research skills are information literacy skills, ability to think critically, media literacy skills, comprehension of information based text, generating patents, making the research product or outcome useful for society.

Freedom to Researcher

Independence for academic development is of the pre-requisites for good education and research. Teachers should have complete freedom to experiment without any administrative control. There are many national and international agencies which are motivated to do the research and invest for the development. In the globalization era, researcher can harness resources and services without any bar. This is a good opportunity for researcher to harness globalised resources and services to conduct quality research and produce the concrete result. Universities and colleges should create scope for faculties to be more research oriented and innovative to become globally competitive. Professors of our country should be allowed to travel the reputed universities of abroad for acquiring better ideas about teaching and research. They should also encourage writing books and published articles in reputed national and international journals.

Accountability

Accountability plays a strategic role for the sustainable development of human being in the emerging epoch of globalization. Webster Dictionary define that the accountability has four pillars i.e. Responsibility, Answerability, Trustworthiness and Liabilities. The four pillars of accountability explain that what and where we are, we have to perform our role for what society are paying us whether it is in form of money , time, or manpower. Accountability of research creates a revolution of sustainable development in every sphere of human living. According to Shelby Martin “accountability requires mindfulness, acceptance, honesty and courage for what we are working or performing”. Yash Pal Committee on RRHE, 2009 said, ‘every teacher is sovereign and accountable for his performances to the students and to himself’.

Maintaining Uniformity & Secrecy

Universities should maintain uniformity in the course work duration, syllabus, and time of entrance examination for the benefit of students. UGC guidelines need to be strictly followed for these activities. Secrecy should be maintained in the preparation of the list of examiners. It should be kept confidential from supervisors. As a result, both scholar and supervisor will be serious about their research work and best output will come out. If we want to get a quality research work, it is essential to conceal the name of students and supervisors identity to the experts. This will help for genuineness/ originality of evaluation reports.

Avoiding Plagiarism in Research

Plagiarism is an act of intellectual dishonesty needs to be avoided. It is essential to cite the source of whenever one quotes the ideas of others. When the sources are cited, there should be uniformity and consistency in rendering references, citing bibliographical details of the original publication etc. Every researcher should try their level best to focus on originality and innovation in his research work. It is suggested that some software, which are available in market, should be used to monitor and control the menace of plagiarism. Due recognition to the original work should be given by making proper reference to the author of the original work.

The Bar Council of India (BCI) has recognised the syndrome of plagiarism as a serious threat to quality research. BCI has suggested that anti-plagiarism software should be used to counter plagiarism in publications and student assignments (Vision Document of Bar Council of India, 2011). Although there are some anti-plagiarism software programmes developed to check the menace of plagiarism, these software have not yielded any desirable results. The success of these supplementary tools depends upon the expertise of a teacher to evaluate any plagiarism activity. A competent teacher is in a better position to differentiate between the similarity index and plagiarism. Research safeguards the physical, psychological and emotional well-being of subjects and samples. Researchers must avoid unethical reporting and plagiarism and fabrication of data.

Conclusion

Research is an attitude, a culture. Thus researcher should develop self interest for this. As technology is growing at an exponential rate, we cannot isolate research and academics. The quality of research should be measured by research output. Research nourishes both intellectual and academic development which leads to improve the standard of institution. More students should be encouraged towards research activities. Otherwise we can not justify our invested time, money and manpower etc. A blend of research and academics is an indicator of academic quality in higher education. If quality improvement is the goal, it can be accomplished by making research mandatory for all faculty members, by improving the infrastructure necessary for research. PhD rules and regulations recommended by UGC should be strictly followed to improve the quality of higher education. More efforts need to be made by Indian Universities in the field of research to be enlisted in the top universities of the world.

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