Scholarly Research Journal for Humanity Science & English Language,
Online ISSN 2348-3083, SJ IMPACT FACTOR 2016 = 4.44, www.srjis.com
UGC Approved Sr. No.48612, DEC-JAN 2018, VOL- 5/25

STUDENT RESEARCH CONVENTION: BEST PRACTICES FOR REARING YOUNG TALENTS

Prasamita Mohanty, Ph. D.

Deputy- Director, CSSEIP, B.B. Ambedkar University, Lucknow

Abstract

Education plays a significant role in the preparation of life including youths. It helps them to identify their interests and aptitude and gives them a sense of direction to higher form of education particularly research. Spirit of inquiry, creativity and innovativeness are some of the natural endowments bestowed upon human beings, which are the keys to transformation of life. These factors, when manifested in the form of research, open new frontiers of knowledge, which is instrumental for all forms of development. Perhaps, this is the reason for which research is recognized as one of the core functions of the universities/institutions of higher learning and the universities have been rendering this responsibility with utmost diligence.

INTRODUCTION

India is of largest youth population in the world today. The entire world is eyeing India as a source of technical manpower and looking at our youth as a source of talents at low costs for their future super profits. Indian youths have the power to transform our country from developing to developed nation. Therefore, role of youth mass is of utmost importance in current times. Youth mass has underplayed itself in the field of intellectual, social, political and economic development of our country. They should aspire to be entrepreneurs rather than mere workers. Young participation is important because youth are the country's power and youths recognize problems and have abilities to solve them. Youth are strong forces not only in social movements but also in political and intellectual movement of the country especially during knowledge economy.

Unfortunately, our youths are not bothered to dream any vision. Martin Luther has said, "I have a Dream" and the dream come largely true. If he had not thought of that dream he would have accomplished nothing in his life. But today's youth have indifferent attitude towards things, situation and politics .The new cool formula of "let the things be" is proving fatal to India's development. Lack of unity and spirit is the major setback. It's time that the youth, the students have to realize their power, their role, their duties and their responsibility and

stand up for their rights. Now it's the time that instead of brain drain we should act like magnets and attract world to India.

India will transform to a developed nation only if everyone contributes to the best of his or her capacity and ability. Youth is wholly experimental and with the full utilization of the talents of the Youth, India will become a complete Nation. But our youth are going through turbulent times. Ever since independence, the youth of the country has been going a drift. They feel alienated and frustrated. There are many reasons for this sense of frustration and aberration. Besides over population, political upheavals, unemployment, erosion in Indian values, influence of western civilization and too much commercialization has made life very complicated for the new generations. Ever since the country went in for massive industrialization, the old joint family system broke down and became obsolete. It has been replaced by nuclear family system especially in urban areas. As a result they start depending more on their peer groups and sometimes become deviated and handicapped

India, currently producing a solid core of knowledge workers at tertiary level in scientific and technical education and its economy and industrial sector set for an unparalleled growth is poised to become the future global knowledge hub. However, the onus lies largely on our Higher Education system and particularly on our universities. But, of late, research has become a subservient component in the university functioning. Resource constraints, lack of commitment, proper incentive etc., are the impediments that are affecting the quality of research in our institutions of higher education. Other important factors for the deterioration of the quality of research are the absence of adequate training and other capacity building endeavour in our system, which have restricted students' creativity only to rote memory. On the contrary, their potential should be nurtured and harnessed for the benefit of the society. The current boom in Indian economy signalling an era of transformation should provide ample opportunity for success to innovative young brains to become trend setters and role models of a vibrant India.

INDIA AS A RISING ECONOMIC POWER

The rise of India as an emerging economic power is increasingly in the global headlines. This is due in parts to its large population and impressive growth rates, not just in the past three years, but the past decade and a half. However, it is due to India's increasing scientific and technological capability. Knowledge markets have become global. Products and services are increasingly designed and developed for global market in order to recoup the research and development (R&D) investments. An increasing amount of R&D is now being done by

multinationals in countries other than their respective home countries, and not just among developed countries. India and China in particular are also benefiting from this trend as they are becoming hosts to many R&D centres set up by multinational companies, as well. The result of these trends is that innovation and high level skills are becoming the most important determinants of competitiveness. India's key strengths are its large domestic market, its young and growing population, a strong private sector with experience in market institutions, and and a well-developed legal and financial system. In addition, from the perspective of the knowledge economy, another source of strength is a large critical mass of highly trained English-speaking engineers, business people, scientists, and other professionals, who have been the dynamo behind the growth of the high-value service sector. However, India is still a poor developing country. Moreover, 60% of its population lives in rural areas and engaged in agriculture. One of its key challenges is its rapid growth of young population. It's population is expected to continue to grow at a rate of 1.7 percent per year until 2020 and to overtake China as the most populous country in the world. Part of the challenge is that low rate of educational attainment. In addition, illiteracy is 40% among women and 20% among men. Another challenges is poor infrastructure- power supply, roads, ports and airports. All these challenges constrain the ability of the Indian economy to react to changing opportunities. Low education reduces the flexibility to respond to new challenges. Poor infrastructure and high cost private education constrain the development. The high cost of getting trained and skilled personnel in and out of India also constrain to compete internationally. To attract the young talents it is mandate to develop the country technologically and digitally.

SIGNIFCANCE OF RESEARCH

Research follows development and vice versa and thereby research has become absolute for students who are young adults or in early stage of adulthood. Research supports in extension of existing knowledge in all disciplines and enhances utility and efficiency of concerned subject. Research in action enables academia to bring out amicable solution to existing problem and serve humanity in all possible ways. Research as a career is preferred by many scholars at tertiary level of learning. It is believed that while teaching and learning are both eyes of academia, research is the third eye which is invisible.

KEY ISSUES IN RESEARCH AND TRAINING

Key elements of knowledge economy include the level and quality of individual for which the development of a country revolves around. Some of the basic issues that India needs to address in research and training include-

1. Expanding quality basic and secondary education to empower India's rapidly gowing young population.
2. Raising the quality and supply of higher education institutions, not just the Indian Institutes of Technology and the Indian Institutes of Management.
3. Increasing university-industry partnerships to ensure consistency between education, research and the needs of economy.
4. Establishing partnership between Indian and Foreign universities to provide internationally recognized credentials.
5. Using ICT to meet the double goals of expanding access and improving the quality of education
6. Investing in flexible, cost-effective job training programmes that are able to adapt quickly to new and challenging skill demands.

PRACTICES FOR REARING TALENTS:

- **Conduct Formal Research in School and college**

In India, the formal research and development effort is quite small. Total expenditure on education is 6 percent of GDP where higher education and research grant is very less. There are lack of infrastructure, equipments, trained man powers and government effort for initiating research and training. The bulk of effort is carried out by the public sector and most of them is target oriented particularly in the areas of science, technology and defence. Though researches are carried out in the field of general education, law, agriculture but the output are not visible. In order to encourage research in young brains, it is essential to start innovations in the school and college level in the form of project. The output of the projects must be displayed and discussed and encourage towards higher form.

- **Grass root Innovation**

Informal innovation efforts are quite large. This consists not only of the experimentation and learning by doing that is done in the formal and informal sectors. There is very likely a grassroots innovation effort. Several NGOs have sprung up to support such grassroots innovation. They include Honeybee network, the Society for Research and Initiatives for Sustainable Development (SRISTI), and the Grassroots Innovation Augmentation Network (GIAN). In addition, the government has set up the National Innovation Foundation (NIF) to help document and finance grassroots innovations. The NIF has created a database of over 50,000 grassroots innovations. These consist of improvements in simple agricultural instruments, and agricultural techniques as well as indigenous knowledge. However, despite

all these efforts, it has been difficult to develop appropriate funding and mechanisms to support the improvement, scale-up, and broad dissemination of grassroots innovations because of very high transaction costs and limited resources.

- **Quality School Education**

Without strong foundation, the quality and quantity of research is questionable. School education is the base of higher education on which the research and development of a country lies. In spite of Constitutional Amendment, the attainment of Education for All is not achieved yet. The reasons are many but it needs individual attention to make country progressive. Lack of knowledge in core curriculum, i.e, language, mathematics and science and without achieving minimum levels of learning the development of country is impossible. Though we have achieved universal enrolment and to some extent retention but universal achievement of minimum level of learning is in soup. Efforts are made in the areas of curriculum construction, ICT intervention in school education and community development, etc.

- **Career option**

India is a country of diversity where no of people of different occupations exist. But all occupations are not merged with official career option. Among all careers, research is one of the most tough careers ever since. Very few students have opted for research as a lots of challenges like admission, facility, finance, time, employment, supervisor, patience and parental cooperation so on. Since India is competing with developed nations thus it is essential to strengthen research by identifying young talents with research aptitude and interest to take up research as career option.

- **Initiate Intensive Research Culture**

With a view to inculcating research culture in our higher education institutions, the Research Division of Association of Indian Universities has taken a pioneering initiative to organize Student Research Conventions for the aspiring researchers throughout the country. These Conventions aim at identifying the young and rising talents who would be promoted through proper encouragement and incentives. Also an attempt shall be made to commercialize their research projects with industrial collaboration. The endeavour may accelerate scientific research and innovation and their application towards community development percolating to the grass root level. Initiatives are also taken to inculcate and strengthen a culture of research in the universities and other institutions of Higher Learning to promote the talent in research throughout the country.

- **Specialised Research Institution**

To nurture the talent some of the nationally and internationally reputed premier institutions of higher learning in the country should take initiatives through specialized training, education and research. The selection of the talents shohld be unbiased and transparent. Research institutions should have proper infrastructure with trained faculty like IITs and IIMs.

- **Sponsorship/Collaboration**

In India there are few funding bodies like UGC, ICSSR, DST, and ICMR and so on for funding institutional research. But there are very few organizations which provide financial assistance to student research, private institutions, unemployed qualified youth and individual research. There is the need for increasing the funding agencies with better options and invite young talents towards research and innovations.

- **Proper Incentives**

Proper incentives should be given to enhance the skill of potential students. There are also no. of national and state level talent search scholarship schemes in the country both in public and private sector which enhancing young inquisitive minds. But efforts for more and more scholarship schemes at all level of education including arts, science, commerce, technology, agriculture, medicine and business & marketing can help to get more talents in all areas of development.

- **Increase Publication in terms of Output**

India's share o scientists and engineers in research and development is much lower than its share of population. Though India is stronger in its basic scientific inputs but not in output. In local level research is carried out but its output in terms of publication is less. For example, in the field of agriculture each farmer is trying and also doing new method of production but these varied strategies in agriculture is not published anywhere. It is delimited in local level. The reason behind is lack of education and illiteracy. Experience of farmer helps innovations. There is mismatch between education and experience for which the out put is not upto the level. As per Indian system those are educated they don't have practical experience as practice is not attached with theory and those have experience in grass root level, they don't have formal education which makes difficult in publication. Thus there is the need of reconstruction of curriculum to enhance the knowledge of young talents like developed countries.

- **Enhance ICT literacy and skills**

Advances in information processing, storage and dissemination are making it possible to improve efficiency of virtually all information- intensive activities and also reduce transaction costs of many research activities. Some of the key elements to make effective use of the ICT in research are- skilled manpower, suitable infrastructure, skills to use the technologies, software, application in local language, strengthen partnership between government agencies, research and academic institutions, private companies, non-governmental organizations(NGOs), encouraging joint public-private partnerships, ICT applications, community radio, smart cards, internet, satellite communications etc.

- **Formal Acquisition of Foreign Knowledge**

India is rich in natural resources and has a strong opening up to foreign investment. But lack of foreign knowledge, the research and development status is as low as under developed countries. In addition, part of the reluctance of foreigners to invest in India, even after the sectors have been opened up, is the high degree of corruption, lack of communication, interference of bureaucracy as well as very poor physical infrastructure services. Until the acquisition of foreign languages and good communications, the exchange programme cannot be fruitful. Many a universities have the programmes of foreign languages but its role in the field of research is scant. Young researchers need to have multi-skilled, multi-lingual and multidiscipline to cater the need of present world.

CONCLUSION

While concluding it may be stated that India has made great progress but faces daunting challenges. India has much strength, particularly a young and growing population, experience and institution of a market economy, a critical mass of entrepreneurs and highly professionals. It has the potential to leverage its strength to improve its competitiveness and welfare. It faces many internal challenges as well as much more demanding and competitive national and international environment. Since research and development is interrelated component, thus efforts are to be made to open more research institutions and encourage youths to develop interest in research and innovation. More skill oriented programmes need to be started to enhance the interest and aptitude of the young learners to compete in world market.

References

Best, John W and James, V.Kahn(2008) Research in Education, New Delhi, Prentice Hall of India Pvt. Ltd.

Dahlman,Carl .J;Research Paper, India's Knowledge Economy in the Global Context, India's Changing Innovation System: Achievements,Challenges and Opportunities for Cooperations, Report of a Symposium,2007

Good, Carter V.(1966) Essentials of Educational Research: Methodology and Design. New York,Appleton-Century Crofts.

John, W.Creswell(2012) Educational Research, New Delhi, Pearson Education Inc.Kerlinger, Fred N.(2008) Foundations of Behavioural Research, New Delhi, Surjeet Publication

Koul, Lokesh(2013).Methodology of Educational Research, Noida, Vikas Publishing House Pvt.Ltd