

## PROMOTING RESEARCH AND INNOVATION IN TEACHER EDUCATION

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### ABSTRACT

*Innovation does not delineate synthesising something from nothing but it anticipates on research to suggest novel hypothesis to test. Research which is an amalgamation of both experience and reasoning is regarded as the most successful loom to the discovery of truth. The chief mileage of research and innovation is to get deep into the topic so that something helpful can be drawn out for everybody and can be utilized in that particular sector. It uses all the essential tools to determine different way of looking at problems and resolving them. These also equip people with the wider knowledge, skills and abilities in order to participate in today's economy and society, and lead consummate and meaningful lives. In today's innovation economy, diverse fields of professional education become more important for developing the next generation of innovators and divergent thinkers. So, teachers need to be equipped with the concept and strategies of the innovative research work of their fields. In this paper the author highlights upon the significance of research and innovation in any professional education as well as enumerates the initiatives been taken by various educational governing bodies such as CSIR, AICTE, UGC, NCERT, SCERT, in promoting and enhancing their innovative research work either with the assistance of technology, finance, e-resources, organizing conferences at National and International levels, Training on Research Methodology with special reference to Action Research, development of Institutional Mechanism for conducting research study by teacher educators, publishing various educational research journals or implementation of various innovative programmes.*

**Key words:** Research, Innovation, Educational Significance, Promotion, Educational Bodies

### INTRODUCTION

Research is structured inquiry that evokes collection of data, documentation of critical information, analysis and interpretation of that

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data, in accordance with appropriate methodologies laid by specific professional fields. It is conducted to stretch the stock of knowledge, to appraise the validity of hypothesis or an interpretive framework, to assemble a body of solid knowledge and findings for sharing them in appropriate manners and to develop questions

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for further inquiries of that field. So, in order to accomplish these, innovations play a prime role. Innovation does not have a single meaning but consists of divergent thoughts, novel ideas new imaginations. Research and the production of knowledge converts into innovation once the knowledge is applied in a novel manner to synthesize a new denouement, and the intellectual property that accompanies such innovations. Institutions in professional education, research and innovation play a key role in the extension of societies and economies. They bring up economic growth, strengthen technological progress, and enhance job creation. In addition, professional education institutions contribute to the personal development of individuals and help educate proactive citizens in societies. Encourages teachers and students of a particular field to explore research and discover different way of looking at problems and resolving them. Innovation improves education of any professional field because it compels learners to use a higher level of thinking to solve problems. In nutshell, Professional practice will enhance if professional workers in their training

will learn how to base their work on research and innovation based knowledge which is called research-based practice

### **CONCEPT OF RESEARCH**

Research defines searching it again and again. It is human activity based on cognitive enactment in the investigation of matter. The prime motive for any type of research is discovering, expounding and the evolution for the advancement of human knowledge on a broad variety of scientific matters of our world and the universe. It is an art of scientific investigation and is regarded as a organized effort to pursue novel knowledge. Another way of understanding research is as careful investigation or enquiry especially through search of new facts in any branch of knowledge. The phenomena of research are organized and systematic way of finding answers to questions. Systematic because there are fixed set of procedures which we have to follow. Further, there are certain things in the research process which are inevitably done in order to get the most accurate results whether it is qualitative or quantitative. Basically, education in a professional field which is actually a

formalized approach to specific training in a professional school of any field through which participants acquire content knowledge and learn to apply techniques and it has common which include incorporating the knowledge and values basic to a professional discipline, comprehending the central themes, concepts, principles, and techniques applied in practice, attaining a level of competency mandatory for responsible entry into professional practice and accepting responsibility for the continued development of competence. And for accomplishment of these aims 'research' plays a very significant role for discovering something new innovative with the help of previous knowledge, experiences, practical hand which are required while researching something new in a particular profession.

## **INNOVATION**

Innovation is creativity and development of a new product or service, with the aim of improving efficiency and effectiveness. It is not incepting and implementing new ideas or methods but is also defined as innovation can be defined as a process that includes manifold

activities to uncover new ways to do things. However, new innovations can be realized with creativity. People need to think outside the box in order to create innovative ideas. Innovations create substantial opportunities and are critical for the survival, economic growth, and success of any profession. Innovation in any professional education is stepping outside of the box, challenging the existing methods and strategies in order to support the success of any target which has to be achieved in a particular profession. This transformation may be trivial or a complete overhaul, but it is done with some motive. Innovation in professional education defines which is permitting imagination to flourish and not be afraid to try new things and be curious also to find out new things. Sporadically, these new things fail but it's awesome when they are a success. Without the right attitude, innovation would just be a word and the art of professional education would miss out on some great accomplishments. As any professional education is the foundation of our economy, growth of our status which enumerates numerous things such as how we approach and

resolve problems in different angles, discover novel things, how we work and collaborate with others, and how we look at the world around us. Therefore In today's innovation economy, professional education becomes even more important for developing the next generation of innovators and divergent thinkers.

#### **SIGNIFICANCE OF RESEARCH AND INNOVATION IN PROFESSIONAL EDUCATION**

When we do research in any profession or professional education with the help of our previous knowledge, experiences we go deep into the subject, explore more, ponder divergently and find out something new in that field which then becomes innovative in nature and is then widely used in that profession or professional education for development. For instance, if we take a teaching profession where a teacher or trainee teacher tries its level best to research on the possible ways for enhancing the teaching learning process or making it more effective so that the learning outcome is fruitful which in result leads to overall development of learners. And this is accomplished by going

intense into the various aspects of teaching phenomena in whichever they want to research for which includes the plausible teaching methods which can be lecture, project, demonstration methods etc, handling students which includes classroom management, counseling, evaluation methods of the learners in order to measure the learning outcomes of the educational objectives that can be written test either in the form of formative or summative assessments, oral test which can be quiz, debate etc. not only this even they can research on the design of curriculum which are framed based on the educational objectives. So, if we consider project method of teaching where the teacher knows only what it is all about and wants to research on this more then the educator has to go one step beyond this known knowledge by searching more like when it should be applied which is actually done where the students has to find out about the deeper meaning of a topic in order to synthesize something novel. Once the teacher or trainee teacher get to know about this then he/she can develop the innovative idea of this research by practically applying in the class

where he/she finds that it is more effective while students work in groups. Based on this innovative research findings of project method of teaching the teacher or trainee teacher can now apply in the classroom in future.

#### **ROLE OF GOVERNING BODIES IN PROMOTION OF RESEARCH AND INNOVATION IN PROFESSIONAL EDUCATION**

The progress of the nation depends on its sustained growth of professional education and for this it needs the help of research and innovation based practice. Therefore, various educational governing bodies has taken initiatives in promoting research and innovations in professional education such as AICTE promotes by providing financial assistance to institutions for organizing Conferences at National and International level in diverse fields of Technical Education. Also, launched research promotion scheme (rps) which promotes research in identified thrust areas in technical education. It targets to synthesize research aura in the institutes by promoting it in engineering sciences and innovations in established and

newer technologies and to develop Master's and Doctoral degree candidates to enhance the quality of research and faculty. NCERT consume specific projects in educational research and nurtures through monetary investments and providing academic support to professionals working in the field. Educational Research and Innovations Committee (ERIC) a committee that has been set up by NCERT which acts as a catalyst to promote and support research in priority areas of school and teacher education. Eminent researchers in education, allied disciplines from universities and research institutions and representatives of SIEs/SCERTs are included in the ERIC. (DERPP) which is the Department of Educational Research and Policy Perspectives acts as the Secretariat of ERIC and coordinates other activities for promoting educational research. CSIR which furnishes scientific industrial research and development that escalates the economic, environmental and societal benefits for the people of India with the help of technology. NCTE's projects and research programs support, publish, and share current scholarship that focuses to meliorate the quality

of English language arts instruction at all professional educational levels. Department of research and evaluation of SCERT, Assam has conducted numerous activities for improvement of the professional educational scenario of the State where some of the major research related activities conducted recently are Published Educational Research Journal 3rd Volume with ISSN 2454-4949 in October, 2018 were 15 research papers were contributed by different educational practitioners. Four research papers developed by faculty members of SCERT, Assam during 2018-2019 were published in research journals. Initiative for building capacity of teacher educators and teachers in conducting educational research especially action research where they published Guide Book on Research Methodology with focus on Action Research in October, 2018. Orientation programmes are conducted on action research for teacher educators of Assam enumerating them the possible areas where they have to do this process. Further, there is a provision of radio talk on Action Research broadcasted by All India Radio, Guwahati regarding the detailed explanation of

performance of action research Institutional Mechanism is developed for conducting research study by teacher educators and under this mechanism a trial is being made to publicize research and action research among teacher educators of the state in a structured way and to assure quality of research studies conducted by them.

## CONCLUSION

Research and innovation is an imperative area in the field of professional education and the chief mileage of research and innovation is to get deep into the topic so that something helpful can be drawn out for everybody and can be utilized in that particular sector. Basically, it emphasizes on the search of more knowledge based on systematic approach and to uncover something novel in a particular profession for further utilization which as a consequence purifies the workings and the lives of individual's educational research. Because of contributing knowledge development, practical improvement, and policy information therefore, it becomes very significant for its promotions in diverse fields of profession whether related to

teacher, doctor, lawyer or in any other field. Also, it will be helpful for the professionals in viewing the different problems that may emerge during their research process as well as with the help of their innovative ideas resolve them.

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