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EDITORIAL

Nurturing research temper in educational institutions

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There is a famous adage "Seek knowledge from cradle to grave". The educational philosophers advocate us to be "lifelong learners". The basic role of a university or an educational institution is to create knowledge. The knowledge can be created through research. Research plays a pivotal role in the three modes of learning i.e., knowledge, skills, and attitude as shown below.

Thus, sensitization towards research to create a research temper or research culture is one of the objectives of an educational institution. Research is required in all walks of life like health, engineering, mathematics, languages, history, nutrition, psychology, social sciences, technologies, water resources, energy, and the like, The Oxford Dictionary's meanings of research depict, systematic investigations establishing facts and to discover new technologies. For beginners, the following steps may be followed in adopting research.

First Step: Thinking to Learn and Learning to think
Second Step: To ask Questions to be inquisitive (Seeking Knowledge)
Third Step: Choosing a topic (Research Question)
Fourth Step: Literature Review

Research Enquiry must give answers to these questions.

- What is happening?
- Why is it happening?
- How is it happening?
- What are the remedial measures for mis-happening?

We undertake research when we wish to explore an idea, solve a problem, or make an argument that compels us to turn to outside help. A good research question needs to make sense, address a relevant issue, be within a reasonable scope, and have not already been done (preferably). The types of research include exploratory or conclusive research, fundamental or pure or basic research, historical research, experimental (laboratory) research, clinical (on patient or disease process) research, and non-experimental research (field studies, ex-post facto research, survey, etc.). The forms of research comprise primary research and secondary research. The primary research generates original information and is driven by the scientist's curiosity for the expansion of knowledge.[1] For example, basic science investigations probe for answers to questions such as.

- How did the universe begin?
- What are protons, neutrons, and electrons composed of?
- What is the specific genetic code of the fruit fly?

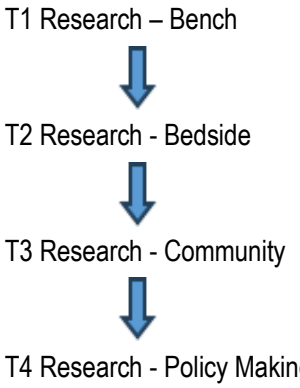
The secondary research gathers information that has already been generated. The secondary research sources comprise books, magazines, reference works (index, Journals, bibliography, dictionary, encyclopedia(s), biographies, yearbooks, atlases, gazettes, statistical data, sources, newspapers, periodicals, journals, multimedia (film, radio, DVD's, radio-tapes, cassettes, phones, WhatsApp, Twitter, Instagram, etc.), internet web pages (Google, Yahoo etc.) associations, organizations, business reviews, Government agencies, publications and museums.[2]

The steps of research are enumerated below.

- Identify research question
- Construct of hypothesis

- Proposal of action
- Collection of data
- Presentation of data
- Publication

The ultimate of research is not publication.[3] That's why the outcome of the research is divided into four facets.



Thus, the endpoint of research is the betterment of mankind and a research-based economy. We must pursue and motivate the buddings (students) to get involved in the research pursuits in any form to nurture a research temper or research culture in our educational institutions.

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