
EDITORIAL

Ethics in the practice of science...

Higher educational institutions and research institutions with their vast intellectual capital are the energy sources that drive the creation of new knowledge. The new findings of the researchers in these institutions in most cases result in research publications or reports, and to a lesser extent, as inventions and innovations. In Sri Lanka, as in most other countries the world over, these outputs are considered as measures of performance of both the individual researcher as well as the institution where the research is conducted, and as important criteria for promotion of the researchers to higher grades. Most academics and researchers achieve their performance targets with respect to research output, through sheer hard work, conforming strictly to accepted values and ethical practices based on research ethics developed and agreed upon by scientific associations and professional bodies. This results in the credibility of the individual researchers and the institutions where the research is conducted.

However, there are instances when personal and other interests and competitiveness prevent researchers from strictly following the accepted professional and ethical codes of practice. Non-adherence to accepted codes of ethics could result from lack of awareness as well. It is therefore worthwhile to remind ourselves of the commonly shared values and ethical practices which should be followed in the conduct of scientific research and publication of the research findings.

The practice of science energized by man's curiosity and the challenge and pleasure of solving problems seeks to discover new knowledge using objective, repeatable methods to establish that the knowledge is not false or erroneous. The public in today's society looks to science investigators or researchers for the benefits of new knowledge. The society also demands that these investigations post no threat or risk to the society. The scientists therefore have a great responsibility towards society to conduct all their activities in an ethically acceptable manner. This leads to the development of attitudes, values and codes of ethics for the practice of science and scientific investigations.

Before you consider what the acceptable attitudes, values and codes of ethics for the practice of science are, it is appropriate and useful to briefly share with you the much thought provoking ideas of one of my respected teachers. Dr. W. W. D. Modder (1997) in his presentation on "Ethics in the practice of science and its application in the plantation industry" made at the Seminar on Ethics in the Practice of Science organized by the Ethics Committee of the Sri Lanka Association for the Advancement of Science, states the following: "The methods of science demands a special attitude in the practitioners of science. The scientific attitude has such a large ethical or moral element, that one might say that the scientific attitude is, in its entirety, predicated on ethics. That is why I say that science is an ethical or moral construct".

He also states that "In order to practice science, a scientist must have certain ethical characteristics or virtues. Science could not be practiced without these virtues in the practitioner. They do not merely form the ethos and set the tone to the practice of science; they are what science is quintessentially about. The scientists by definition accept and conform to these virtues. Based on these virtues, the scientist brings certain attitudes of mind to bear in his search for hypotheses which is the goal of science".

He goes on to elaborate further and states that "The virtues required for science can be grouped into three; firstly, hard headedness, pragmatism and common sense; secondly, honesty and integrity; and thirdly, a sense of purpose, application or diligence. Those characteristics have been described as hard, monastic virtues in contradiction to the so-called soft virtues of kindness, compassion and love. A scientist may or may not have the soft virtues. It does not matter. The possession of the soft virtues is redundant to the practice of the profession. However, success as a scientist is not determined by being kindly, compassionate and loving. On the other hand, if he does not have the monastic virtues, he is unlikely to be successful as a scientist".

You have just completed reading about the thinking of an experienced academic and researcher who is a respected scientist. I earnestly hope that what you have read will

act as a basis to stimulate your own thoughts on the subject and develop your own attitudes and values as a respected scientist.

Nalini Ratnasiri