

Liberal education component to Sri Lankan engineering curricula

An analysis of engineering curricula in Sri Lanka would show that there is an excessive bias towards mathematical analysis and little of liberal studies. We believe that it is liberal studies which contribute largely to making a wholesome person and not pure engineering education. Foreign universities recognize this and their curricula are tilted with 20 to 33% of courses outside engineering and particularly in the humanities.

Although the need for broad-based studies, flexibility and student choice in designing their curriculum has been recognized in the Presidential Reforms, the flexible system as implemented is found wanting. This paper makes a plea for true flexibility and presents the authors' attempts to teach professional ethics to engineering students within the limitations of the present system.

Since our intent was to enhance the liberal component of the education our engineering students receive, we have searched for a basis for professional ethics that is free of religion so that it is acceptable to all parties. The traditional utilitarian, duty, virtue and rights bases of professional ethics are examined so that professional ethics may not draw on any religion or culture. Conflicts with Asian Values and the concept of whistle blowing encouraged by professional organizations like the IEEE are dealt with.

Finally, the growing body of international human rights law and humanitarian law is proposed as a non-religious, culturally neutral and effective basis for professional ethics. Conflicts between rights are resolved through invoking a hierarchy of rights. Various professional ethics issues in everyday life are examined in the light of human rights law to show how students can be made to be better citizens when they are conscious of the rights of others as the basis for ethical behaviour within their professions.