

## **Development and Validation of e-Content on “Thermodynamics” to Instruct Engineering Physics to Undergraduates**

Shamitha Pathiratne<sup>1</sup>

The present era is an era of academic globalization. Engineers of today and tomorrow are expected to be far more ingenious and innovative. Now a day with the tremendous developments in technology, possibilities are emerging to provide technical edification in an innovative way to meet ecumenical demands. With the avail of incipient kind of scholastic programmers, we can provide multidimensional and multi-disciplinary edifying experiences to the learners e-Contents are the puissant implement of inculcation. e-Content is the latest method of tutoring, which has magnetized more attention of educationists.

Hence there is less possibility of incorporating technology to edify Engineering Subjects. And additionally there is no quality e-Contents were developed for Engineering Physics Subject. Hence the main objectives of this study is to A) To develop an e-Content on “Thermodynamics”. B) To validate the developed e-Content. C) To ascertain the efficacy of developed e-Content in edifying “Thermodynamics” to first year Engineering Undergraduates.

A pre-test, post-test two group experimental design was adopted. Sample of 60 First Year Engineering Undergraduates were exposed to different treatments such as edifying through e-Content and conventional method of edifying. The study was additionally fixated on ascertaining the consequential distinctions between control and experimental group of First Year Engineering Undergraduates in their academic achievement while learning “Thermodynamics” with reference to gain scores. The achievement scores were analyzed utilizing different statistical techniques. It was found that the experimental group Undergraduates who were edified through e-Content material had better achievement scores than the control group Undergraduates in learning “Thermodynamics”. In conclusion, this present study pellucidly denotes that the developed e- content on “Thermodynamics” is more efficacious and as recommendation can verbally express that Chalk and verbalize method of edifying Engineering Physics Subject should be reduced. More incipient instructional technologies utilizing e-Contents shall be introduced in Engineering Faculties.

*Key words: e-Content, Engineering Physics, Thermodynamics, Undergraduates*

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<sup>1</sup>Faculty of Computing, ESOF Metro Campus, Sri Lanka. samitha8@yahoo.com