## INTRODUCTION

The faculty of the Extended Campus of Embry Riddle Aeronautical University are pleased to present these papers from the College's Third Annual Symposium on Teaching Effectiveness. This symposium is conducted annually to share information and stimulate interest in research about teaching more effectively. The papers presented herein are the product of faculty members from throughout the extensive network of teaching sites in the United States and Europe.

This symposium and the next several will focus on various aspects of the utilization of technology to improve the effectiveness of the learning process. We hope that this will give the faculty the opportunity to explore, experiment with, and evaluate different technologies and methods for their employment in improving all aspects of the learning process.

The development of the personal computer coupled with high speed data transmission has opened vast new opportunities for improving the effectiveness of the learning process. This combination has been widely touted as the greatest boon to education since the invention of the printing press. Yet we find ourselves, after some five centuries of experience with print technology, still looking for optimum methods for presenting printed material for a particular learning situation.

While emerging technology presents wonderful new opportunities, the technology alone will not necessarily improve education. Like past new technologies such as moving pictures, radio and television, which at the time of their emergence were to revolutionize teaching and learning, the technology of today requires skillful employment to be most effectively used and live up to its promise. Employment for the "gee whiz" factor soon becomes hollow and lacking of true content. What is required is experimentation and exploration by skilled educational professionals, coupled with accurate assessment measures to see if we are accomplishing what we desire to accomplish. It is also necessary to share knowledge of that which works well and that which works less well with each other.

A torque wrench is a wonderful tool and well suited for tightening nuts to a given tightness. It can also drive nails, but less well than a hammer which is also much more economical to obtain and maintain. The same may be true for computer based educational technology. There may be roles for which it is superbly suited and will greatly aid the learning process, and there may be other roles for which it will work, but less well than other means. Much of the new technology available to the educator is expensive and takes some skill to use. The pace with which new technology is emerging makes it difficult and expensive for educators to keep up with what's currently available and the mechanics of how to use it. Consideration for when, where, and in what situation and combination to optimally employ that technology for most effective learning easily fails to take primacy. What we wish to encourage is a concerted effort to seek answers to the questions of what, when, how, and in what combinations to employ the tools of teaching for effective learning.

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