

COVER SHEET

MODELS OF INNOVATION & BEST PRACTICES IN TEACHING & LEARNING AT UND

NAME : *Dave Yearwood*

DEPARTMENT: *Technology Department*

STRATEGY: *Development of an alternative final test that will allow me to assess students' critical thinking skills, their understanding of course content, their problem solving ability and design skills on matters related to an Electronic emphasis course. It was also my hope that students would not only embrace the test format but that they would, as a result, work on and commit to expending the necessary effort to demonstrate to their peers and me what they truly understood and how they could successfully utilize the acquired semester knowledge to solve problems of a technical nature.*

CLASS(ES) AND CLASS(ES) SIZE WHERE UTILIZED SUCCESSFULLY: *IT 211: Electronic Circuits and Devices with a student population of 24-27 students.*

STRATEGY'S APPLICABILITY: WHAT KINDS OF STUDENTS (FRESHMEN/ MAJORS/ GRADS, ETC.), COURSES, LEARNING ENVIRONMENTS, ETC.?
Sophomores and Juniors from the Technology and Civil Engineering departments who registered for a lecture/laboratory course in electronics.

ABSTRACT OR SYNOPSIS OF STRATEGY YOU ARE SUBMITTING:

Throughout the semester, students taking Electronic Emphasis courses are presented with fundamental electronic concepts and theories grounded in mathematics and physics which I hoped would become more real to them through application exercises, project designs, and laboratory activities. Traditional tests, the staple of many in academe, did not appeal to me very much possibly because I believe I lacked the necessary skills to create really good multiple choice or true/false questions and also because student responses to some of my longer essay questions were not answered in sufficient detail—I wanted some clear indication of students' critical thinking skills and problem solving abilities and this was not forthcoming at the expected level especially at the end of a semester worth of academic work. Additionally, I had come to the conclusion that the final test, as currently designed, had become nothing more than another traditional test that failed to provide any added proof of students' understanding of the semester's material. Thus, it seemed that I was at a crossroads. A need existed for a more authentic method of evaluating what students truly knew or understood and could do at the end of the semester that they could not at the beginning. This ultimately led to the development of an alternative final test which appealed to students, a test that was comprehensive in nature, assessed their analytical, design and problem solving abilities, and one that they ultimately embraced and performed exceptionally well on