De La Salle University-Dasmariñas

The Development of Online Computer Aided Instruction (CAI) In Analytic Geometry for Fourth Year High school of Saint Francis of Assisi College

An Undergraduate Research Proposal

Presented to the Computer Studies Department

College Of Science

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In Partial Fulfillment Of the Requirements

For the Degree of Bachelor in

Information Technology

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ABSTRACT

Title: The Development of Online Computer Aided Instruction (CAI) In Analytic Geometry for Fourth Year High school of Saint Francis of Assisi College

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There is no question that computers are important technical tools in today's society. In education, computers can assist the student in learning. CAI (Computer Aided Instruction) is systems which utilize the techniques of expert systems and artificial intelligence to help a person learn interactively. The basic view of these systems is that they serve as the student's private tutor, responding to the student's individual needs. Such systems have changed the structure of the classroom; the teacher is no longer the focal point of classroom activity. Rather, he serves as a guide for the student as he learns the material. Current trends also tend to support using such systems as an instructional aid in teaching mathematics. This has meant reorganizing the structure of the classroom. Each student and instructor has access to a terminal, and the time

periods are restructured to allow for the use of this technology. Most of the systems developed were designed to teach mathematics or technical subjects. Current research indicates that such systems are successful in that the student learns the logic behind a particular concept. It is hoped that these logical thinking skills that are developed can be transferred to other subject areas. It should be noted that most of the studies were conducted with highly motivated students; many systems were designed for this type of student. In concept, this type of individualized instruction is well suited for the unmotivated and slow learner. To use this system for these types of students, ICAI systems will require modifications of the interface of the tutoring system and will require improved graphics interfaces to hold their interest. These systems will require close monitoring by the teacher.