

# EDTC 6325 Educational Communications

## E-Learning Project Part 1: E-Learning Module Proposal

### Lynda Cannedy

#### Title: Access to Data Made Simple

#### Introduction

Secondary computer teachers often find teaching database applications to be a challenge. Secondary students rarely have prior experience with database use and are not always motivated to learn it. Access to Data Made Simple uses an e-learning format and relevant examples to simplify Microsoft Office 2007 Access and motivate students to learn it. This e-learning solution will provide students a jumpstart into database education and will encourage them to want more.

#### Instructional Goal

Using Microsoft Access 2007, the learner will be able to create a relational database and set up database tables, establish relationships between tables, create database forms, and use a database query.

#### Sub Goal 1

After completing this module, the learner will be able to create a relational database with tables.

- **Objective 1.1**  
Given Access 2007 software, the learner will be able to create and name a database without assistance.
- **Objective 1.2**  
Given a database, the learner will be able to design a database table in design view with proper use of field determination and data types.
- **Objective 1.3**  
Given a database table, the learner will be able to enter records in a table in datasheet view without assistance.

#### Sub Goal 2

After completing this module, the learner will be able to establish and manage relationships between tables in a relational database.

- **Objective 2.1**  
Given a database table, the learner will be able to designate a primary key without error.
- **Objective 2.2**  
Given several database tables, the learner will be able to establish a one-to-many relationship between two tables without error.

- **Objective 2.3**

Given several database tables, the learner will be able to modify a relationship between two tables without error.

### **Sub Goal 3**

After completing this module, the learner will be able to create and design a database form for data entry.

- **Objective 3.1**

Given a database and tables, the learner will be able to design a form using design view without error.

- **Objective 3.2**

Given a database and tables, the learner will be able to design a form using the wizard without error.

- **Objective 3.3**

Given a database form, the learner will be able to enter data into a database form without error.

### **Sub Goal 4**

After completing this module, the learner will be able to extract specific data from the database using a query.

- **Objective 4.1**

Given a relational database, the learner will be able to design a query without assistance.

- **Objective 4.2**

Given a relational database, the learner will be able to run a query without error.

- **Objective 4.3**

Given the results of a query, the learner will be able to interpret the results without assistance.

## **Intended Audience**

The intended audience for this learning module will be secondary high school students in Business Computer Information classes. The students are both male and female and range in age from 14 to 18. The students have prior knowledge of Microsoft Office 2007 having worked with Word, Power Point, and Excel. None of the students have used Microsoft Access or any type of database software in the past so the instruction will need to be basic. Around 15% of the students have required modifications including help with reading and allowances for extra time to complete assignments. All of the students have the social skills needed to collaborate with others and are generally respectful in their interactions.

## Learning Context

Learners will engage in the instruction using Moodle, an open-source learning management system while in a teacher-supervised classroom environment. Approximately 120 students in five different class periods will be offered the instruction. Each student is provided with a desktop PC with Office 2007 software loaded on it. Students are able to save work to their personal space on the school network and are able to access the Internet, although a firewall blocks access to many sites. The computer lab is provided technical support through the school district technology staff.

## Summary

Through online lessons in Microsoft Office Access 2007, students will be taught the basics of database construction and management. They will learn to set up a database by creating tables within a database, establish relationships between tables, develop data-entry forms, and design and run queries. By creating and using a simple and relevant database, students will receive a quick start into database technology. Moodle, a learning management system, will be used to deliver the instruction.