

Lesson Plan for Mathese Meeting Sept. 9, 2006

Name: Chuck Curry

Subject: MicroSoft Office 2003, Applications, This class is for Juniors and Seniors in High School.

Topic: Use of Excel

A. Objectives: Objectives (P.A.S.S.): *Instructional Technology* objective I

The Student will:

- I. Operate a computer system in order to use software efficiently and effectively.
- II. Demonstrate skill in using technology for educational and personal use, including, but not limited to word processing, database, spreadsheet and/or print/graphic utilities.
- III. Use computer-based resources and/or telecommunications to gather, synthesize and apply information into all curriculum areas.
- IV. Demonstrate knowledge of computer usage for problem solving, data collection, information management, communications, presentations and/or decision-making utilizing legal and ethical principles.

B. Instruction

a. Introduction

–Students: You have been offered three jobs, each paying a different salary. You have been told the gross pay (the amount before taxes), but have not been told the your net pay (the amount after tax has been taken out).

Assume that you will have to pay 10% income tax and 7% Social Security tax. Develop a spreadsheet with formulas that will determent the amount of net pay.

Your Worksheet should include the following:

- Formulas in **C3:C5** that multiply the gross pay in column **B** times .10
- Formulas in **D3:D5** that multiply the gross pay in column **B** times .07

- Formulas in **E3:E5** that subtract the amounts in columns **C** and **D** from the amount in column **B**.

When you finish, save the file as *Job Offer*, followed by your initials. Then, print and close the file.

b. **Instructional Process - Spreadsheets** provide opportunity for students to work with real, authentic problems. It is possible for students to gain a variety of experiences while using this approach. They can learn to use the spreadsheet, and once learned, they can create graphs and interpret data displayed on spreadsheets. In order to understand new terms used during the course of this lesson, students will use the Frayer Model on several of the listed vocabulary terms, specifically, the terms: **Operator**, **Order of Evaluation**, and **Formula** will be used. Also, we have the students use a Verbal & Visual Word Association Model on the same three terms. The student will then open the Excel file, IE Step4-1, and follow a set of instructions that include formulas. Working with the "what if?" questions that are inherent in the use of spreadsheets helps students use their knowledge of the problem and prior knowledge of similar situations and content meaningfully.

c. **Closure** – Ending the lesson with a demonstration to the students of the practical application of that day's lesson should forestall the question "when are we going to use this in real life?" Students will end the lesson by printing up and turning in a completed worksheet.

C. Assessment - The worksheet that the students turned in will be examined by the instructor for errors or omissions and graded. The errors and omissions can be redirected to the students and corrections can be made. At the end of the chapter, another assignment can be given to the student that calls for the same objectives, but in another context. This will allow the teacher to see if the skills called for in the previous exercises were retained by the student for use in similar situations.

D. Modifications/Accommodations - An IEP Student will do the same work as the other students, but at a slower pace, to facilitate understanding.

E. Reflection – The Lesson went well with all students performing well on the assignment with some help and prompting from me. This lesson, however, did not take as long to complete as estimated.