

Unit 10: Instructional Strategies and Lesson Design

Criteria For Evaluation

Criteria	Points
Valid set of instructional events for the learning objective. (The necessary events are provided for the type of learning and performance implied in the objective.)	5
Instructional events and activities are sufficient.	5
Activities implements the stated event. (Non example: Event listed as “provide examples” and the activity states: “Have students discuss the definition”. The activity is not implementing the stated event.)	5
Activities specified in enough detail to enable another person to teach the lesson. Exercises, examples and other material are provided.	5
Ingenuity and creativity.	5
Total:	25

Instructional Strategies and Lesson Design

The learner objectives from Unit 8 are:

Given a set of sample data and/or sample business scenario student will open, create, and save a new MS Excel workbook including, but not limited to inputting data, constructing basic formulas, filling in data cells, and renaming individual worksheets.

Given an existing worksheet student will organize data cells using a variety of Excel features, including but not limited to sorting and filtering.

Given an existing worksheet student will analyze data cells using a variety of Excel features, including but not limited to creating pivot tables and charts.

In all three learning objectives, the learner is assumed to be: an undergraduate, introduction to information technologies student, with none or little experience using MS Excel. Students will need each of the following to complete this lesson: (1) Microsoft Excel 2000 or higher., (2) a place to save the finished Excel File like their campus computing account space, for example., and (3) a copy of the sample data, provided during the class/ lab period.

Lesson Plan

<u>Events</u>	<u>Activities</u>
1. Gain Attention	Start with a lecture style introduction to MS Excel. Ask student for examples of how they think a spreadsheet application could be used in their own contexts. Call their attention to the front presentation where Excel is to be demonstrated. Show all the functions and features that the students will be expected to use on their own. Use a different example or business scenario than the one offered for the assignment to give the student several different perspectives of how Excel could be used (try using one of their suggested contexts).
2. Inform Learner of Objectives	This is an introduction to using MS Excel in a business setting, to enter, retrieve, organize, and analyze information, such as employee sales figures, to make business, management decisions. Inform the students what they will be expected to do (see learning objectives above). Ask if they understand everything that you have shown them so far, or if they need further demonstration

before starting out on their own. Then introduce the assignment explaining the specific context and what will be expected outcome (determining the paid commissions for the staff).

3. Stimulate Recall
of Prior Learning

This lesson assumes that the student can already: (1) use a computer, including manipulate a mouse and keyboard to perform basic Windows tasks, (2) has familiarity with basic Windows functions, such as cut, copy, and paste, though they will be shown how to specifically do these tasks in Excel, several different ways, and (3) compute basic math problems such as multiplying quantity by unit price to obtain a sales figure and how to calculate an average of a set of numbers, though they will be shown how to specifically do these tasks in Excel. Before using Excel, instructor can review with students the basic goal of the assignment; to determine the total sales for each employee and calculate the commission paid using Excel. Instructor will explain that commission is paid 10% of total sales but only if the employee sells over their quota. Instructor will work out on the white board how to calculate this amount so that students have the math concepts down before tackling the software application.

4. Present Stimulus Material Students will then be given the sample data and start working individually on the problem. Instructor will, at this time, walk around offering guidance without giving answers. If there are common questions of the group, the instructor should direct their attention to the front presentation and instruct the task for the entire group.
5. Provide Learner Guidance Instructor should guide the discovery at this point, allowing the students to learn from any mistakes they make while completing the assignment in class.
6. Elicit Performance Students are required to finish the assignment either in class or on their own. It is due back to the instructor within 1 week's time. A successful student will submit a completed Excel workbook with a minimum of 3 properly named worksheets containing specified data tables, pivot tables, and charts. Any additional answers to the *Check Yourself!* questions should be included on a Word document and submitted with the Excel file. These files will be attached to an email sent to the instructor by the due date stated in the syllabus and on the assignment.
7. Provide Feedback Throughout the class time, the instructor should provide the individual students with feedback of their

performance. Additional feedback will be provided with the assessment.

8. Assess

Performance

Students will receive a grade based upon successful completion of the lesson: 5 points for all questions answered correctly and Excel file submitted properly through per instructions in the course syllabus, 4 points for questions answered mostly correct and submitted properly, 3 points for questions answered mostly incorrect and/or not submitted properly, 0 points for questions not answered correctly or no assignment received. Instructor will also provide individual feedback as to the completeness of the assignment and how it was presented.

9. Enhance

Retention and

Transfer

Following this in-class assignment, students would later be expected to complete an additional Excel assignment individually. This assignment will be due 2 weeks following the due date of the in-class assignment. This additional assignment will require them to create a Excel file with a limited sample data set on a different context. This assignment offers additional challenge to further assess performance and retention.