

## **Conditional Formatting in Excel 2007**

### **Summative Evaluation**

The purpose of the evaluation session is to determine the effectiveness and quality of the learning object. Effectiveness is determined by how well the learners mastered the objectives of the lesson. Students used a data file entitled "Hamburger Comparison" to perform what was taught and demonstrate mastery of each of the six objectives. A short assessment using the data file followed the demonstration of each objective. Each assessment built on the prior assessment with the final assessment asking for an analysis using the conditional formatting applied in all of the earlier assessments. The students printed out the data file upon completion and these were graded using a pre-designed rubric. The results were used to measure the effectiveness of the learning object.

Quality of the learning object is determined by its professional appearance and lack of spelling or grammatical errors. An art teacher, a journalism teacher, and a technology teacher reviewed the lesson object before it was released to the learners. A few minor errors were found and corrected during this evaluation process.

The audience for the instruction consisted of twelve BCIS II students at Wichita Falls Rider High School. All of the students had experience using Excel which was a prerequisite skill for the lesson. None of the students had used conditional formatting before the lesson. The students had a positive attitude toward the learning object and were interested in working from the web page. The educational background of the students included a strong foundation in general computer knowledge and Internet use as well as a basic understanding of Microsoft Excel. Learning preferences included visual learners and kinesthetic learners and this lesson seemed to appeal to both. Most of the students preferred working alone to working in a group but communication was encouraged. One student had special needs that required reading help and extra time to complete the assignment. All of the students had the social skills necessary to cooperate with others and were respectful in their interactions. Eight of the students were Caucasian, two were Hispanic, one was Asian, and one was African-American. No racial issues were evident within the group.

The session took place in a classroom (Room 244) at Rider High School. Every student had his own computer with Internet access and Microsoft Office 2007. The students were able to work independently on the lesson with few interruptions even though the room had to be shared

with a first-year class. Arrangements were made to unblock the needed websites before the session began.

The results of the session were encouraging. Nine students scored 100 on the rubric used to measure achievement. Two students scored 95 and one student scored a 90. All of the students answered the final analysis question correctly. Two of the students used red shading with red text instead of red text without shading when applying conditional formatting in Assessment #1. One student used the wrong color in Assessment #3 and also used shading where it did not go. All students finished the lesson within the class period and all of the students applied the color scales, data bars, and the icon sets correctly.

I was pleased with the results. The achievement of the objectives was demonstrated. I did notice that students sometimes clicked ahead while the assessment screens were up and this caused the embedded quizzes to cover up the instructions. This could be a reason why several of the students used the wrong shading or color font. I was pleased that the data files were opened without any difficulty. The embedded quizzes after Assessments #1-#5 were not in my original design but worked as effective checkpoints and gave the students confidence to move ahead.

As a result of the session, I have made a page with all of the assessments typed out and linked it to the home page so that students have an additional option for reading the assessments. I clarified the instructions on the home page so that students would understand when to use the links. I look forward to providing the lesson to other students in other classes.