

Formative evaluation

1. **Which button on the mouse would you use to highlight?** Left or Right
 Right
 Left
2. **To highlight a sentence which step would you choose?**
 - a) Place curser at beginning of sentence, hold right button, drag until end of sentence
 - b) Place curser at end of sentence, hold right button
 - c) Place curser at beginning of sentence, hold right button, drag over first word
3. **To open a new computer program, you:**
 - a) Double click the left button on a mouse
 - b) Double click the right button on a mouse
 - c) Single click the right button on a mouse

The entry behaviors were not an issue for our tutorial; from there each student was then asked to complete the tutorial. During this observation the teacher listened more than spoke. The students' comments were very interesting to hear during the tutorial. The majority of the comments were positive and the instant feedback really added to the motivational level of the students. Each student moved through the tutorial with ease. Once they were used to the UR voice and the basic idea of being led by the computer things went very well. The only major problems were glitches within the Captivate program. For example, at the end of section two the tutorial asked the student to click on the stop icon. There was a two to three second pause between the instructions and when the button could be activated. This was an easy problem to fix and once the students realized they had to wait a second before clicking the stop icon they moved on without any problems. There were a few other minor technical problems within the tutorial, after the one-on-one evaluations these problems were fixed.

After the initial run through with the three students an exit survey was given, that is also part of the tutorial.

The small group evaluation was conducted the same way as the one-on-one evaluations. The only difference was that the instructor was walking around the computer lab instead of sitting with each student. The computers had the Universal Reader tutorial pre-set. This was done to save time and to be sure the tutorial could be used on the computers before the students got there. The students were chosen by availability. There were twelve students total and the observations were conducted during their elective period. All students were from the Life Skills 1 course of study and all are about the same cognitively.

The Universal Reader program and basic functions were explained to the students. It was also explained that this program would be used in place of a person the next time text needed to be read to them. Amongst the group there were varying comfort levels when using computers but each student seemed genuinely interested and excited about this new program.

Each student began with the formative evaluation, since it is only three questions it did not take them very long and only two students missed a question. Again it was *Which button on the mouse would you use to highlight? Left or Right*

It is believed the answer was wrong because the students mixed up left and right, then actually knowing the right answer to the question.

From there the students began the tutorial. The procedure went well considering the students were learning a brand new program. Once the students understood the concept behind the tutorial they all went through it without much trouble. Evaluation was kept through observations and e-mail. The Captivate tutorial allows the instructor the chance to gather the data by e-mail. All of the information collected through the formative evaluation, assessment and exit surveys can be sent to the instructor.

Level IV on the tutorial is the assessment of the student. Each student is given a set of instructions through the Captivate tutorial and cannot move onto the next question without completing the predecessor. Each student is give two opportunities to complete the question correctly if after the second time the question is answered incorrectly the student is moved back to level II for further instruction. This data is collect by the Captivate program and e-mailed to the instructor.

Examples of the questions asked in level IV are:

1. Double click the Universal Reader Icon.
2. Open Microsoft Word.
3. Type the following sentence and then highlight it.
4. Click the Read Icon.
5. Click the Stop Icon.

Each of these tasks is completed within the tutorial.

Here is the breakdown of the Level IV assessment and how the twelve students did using the tutorial:

Level IV Tasks	# Of students Right on first try	# Of students Right on second try	# Of students that had to Redo Level II
Double Click UR Icon	10	2	0
Double Click Word Icon	11	1	0
Type sentence	12	0	0
Highlight the sentence	8	4	0
Single click Read Icon	12	0	0
Single click Stop Icon	9	3	0

The data we collected during our Level IV assessment was compiled into this chart. The first column of the chart list each question the student was asked. The second column gives the number of students that answered the question correctly on the first try. The third column gives

the number of students that answered the question correctly on the second try and the third column gives the number of students that had to go back and redo Level II of the tutorial.

Exit survey

Please circle the number that best reflects your experience using this tutorial, and explain why or why not you agreed or disagreed.

4: Strongly Agree

3: Agree

2: Disagree

1. Strongly Disagree

Question	SA	A	D	SD	Comments
Was the Universal Reader voice easy to understand?	4	3	2	1	
Did you understand all of the vocabulary used? Please write any words you were unsure of in the comments section.	4	3	2	1	
Did you like working alone with the computer?	4	3	2	1	
Were the directions easy to understand?	4	3	2	1	
Did you like to listen to the Universal Reader voice?	4	3	2	1	
Were the tasks too difficult?	4	3	2	1	
Will you use the Universal Reader program on your own?	4	3	2	1	
Would you like to have other self-instructional lessons on the computer?	4	3	2	1	

Would you rather have had your teacher explain the Universal Reader program to you or did you like just using the computer?

Based on the feedback from this evaluation there were not many changes that needed to be made with the instruction end of the tutorial. But as mentioned earlier there were a few minor technical issues that needed to be resolved. Their biggest concern was with Level I (the introduction was not very clear). Adding an audio clip to the introduction explaining what the Universal Reader program is and what it can do solved this problem. The technical issues mostly revolved around timing. Using Captivate is a great way of introducing a self-instructional module but a lot of work goes into the design of the tutorial. There is a lot of back and forth type of working using this program. One of the changes that were made concerned our first round of assessment questions, some of the questions we could not use because we could not get them to work properly in Captivate. Another problem that arose was fitting the tutorial on the computer monitor. Each monitor is a little different so there was some minor edits that had to be done to ensure consistent use among a variety of monitors. The exit survey results were great the students clearly enjoyed using this program. Only two questions had answers that were not strongly agree. Additionally, the results had to be recorded manually since the feedback is sent to the instructor via e-mail. If this product was to be adopted by a system, they would either have to allow the students to e-mail or purchase additional software such as Breeze.

Questions:

Did you like working alone with the computer? Only two students did not respond with a strongly agree: they responded with an agree.

Were the directions easy to understand? Only two students did not respond with a strongly agree: they responded with a disagree.

Would you rather have had your teacher explain the Universal Reader program to you or did you like just using the computer? Only two said they would rather have a person read to them.

From the beginning to the end this was a time consuming process. The majority of our group was basically familiar with the Universal Reader program so that was not too big of an issue. Making this assessable for mentally handicap students was a bit of a struggle. By far the most time consuming aspect of the whole process was creating the Captivate tutorial. Since this was the first time the two of the three of us had used Captivate it took a lot of time to get anything done. Like other Macromedia products Captivate has a high learning curve, once that curve is beat things move a lot faster.