Jamie Smith Linear Equations Course Instructional Evaluation Plan EDT 693 June 16, 200X

# Instructional Evaluation Plan

## I. Introduction

Instructional evaluation is the systematic determination of merit, worth, and significance of a learning or training process by using criteria against a set of standards (Clark, 2005). The evaluation phase is ongoing throughout the process. The primary purpose is to ensure that the stated goals of the learning process will actually meet a required need. It is important to evaluate the course early to ensure the effectiveness and usability of the course.

The product title is Linear Equations. The target learner is the eighth or ninth grader who needs additional instruction to master the concept of linear equations.

### II. Instructional Goal

Upon completion of the course the participant will be able to:

- Solve linear equations.
- Solve linear inequalities.
- Graph solutions to linear inequalities.
- Determine the slope and y-intercept of linear functions from tables, graphs and equations.
- Use the slope-intercept form to graph linear equations.
- Solve problems using linear equations.

## **III. Evaluators of instructional material**

Evaluators will be from different specialties to gain information of different viewpoints.

- – Math Teacher/ technology assistant Quitman County Middle School
- – Math Teacher Clay County Middle School
- – School Principal Quitman County Middle School
- – Technology coordinator Quitman County Middle School

## IV. The Evaluations (1 – 3 paragraphs)

- In 1975, Donald Kirkpatrick presented a four level model for summative evaluation. This model is to measure how effectively the program meets the stated goals (Kruse, 2005). Level 1 is the student's reaction after completing the program. It addresses relevance of the objectives, the ability of the course to maintain interest, the amount and appropriateness of interactive exercises, and ease of navigation. Level 2 of Kirkpatrick's model measures the learning results.
- The Linear Equations training will be evaluated in two ways. One way will be using a survey that gauges the participant's overall feeling about the course (See Appendix One). The second will be used to determine the effectiveness of the

course and its relevance to the objectives. The participants will be given a pretest and a post test to measure learning from the course.

• Evaluation of the course during design is ongoing from the beginning. A SME helps decide what topics should be included in the course. Once the course is completed, the evaluators will be testing and making recommendations for improvements to the course. Evaluators will complete a questionnaire after completing the instructional content.

## V. Study Limitations / Constraints

- **Technological** Participants will need access to a computer with internet access. There are no other technological concerns at this time.
- **Human** This is a very important part of the ISD process. Participants must be dedicated to participating in the course. They must persevere and be prepared for each lesson. Not only are the participants important but the SME and other evaluators have limited time and their time must be respected.
- **Financial** There is no budget for this project so the participants will be donating their time without expectation of compensation.
- **Time** The limitations of time are on the creation of the course. Since the evaluators are not teaching at the time, these issues may be not be a problem.

### References

- Clark, D. R. (1995). Instructional system development: Evaluation phase. In *Performance, learning, leadership, & knowledge* (chap. 6). Retrieved June 16, 2009, from http://www.nwlink.com/~donclark/hrd/sat6.html
- Kruse, K. (2005). Evaluating e-learning: introduction to the kirkpatrick mode. Retrieved on June 15, 2009 from http://www.e-learningguru.com/articles/art2\_8.htm

Piskurich, George (2006). Rapid Instructional Design. San Francisco: Pfieffer.

## Appendix One

Linear Equations: Reactionary Survey Circle the answer that best represents your opinion.

## **1.** Overall quality of the course.

Poor	Fair	Good	Excellent					
2. Course	e Content							
Poor	Fair	Good	Excellent					
3. Course Objectives								
Poor	Fair	Good	Excellent					
4. Course Navigation								
Poor	Fair	Good	Excellent					
5. Course design								
Poor	Fair	Good	Excellent					
6. Assignment appropriateness								
Poor	Fair	Good	Excellent					
7. Tutori	al effectivene	SS						
Poor	Fair	Good	Excellent					
8. Media	quality.							
Poor	Fair	Good	Excellent					
9. Time o	commitment							
Poor	Fair	Good	Excellent					
10. Cour	se met your n	eeds						
Poor	Fair	Good	Excellent					

Appendix Two

### **Linear Equations: Pretest/Post Test**

### Show your work to the following questions.

- 1. Solve: 2x 5 = 32
- 2. Solve:  $-4x + 11 \ge 42$
- 3. Determine the slope of a line that passes through (-3, 7), (5, -8).
- 4. Graph the solution on a number line.  $-5x \le 45$ .
- 5. Identify the slope and y –intercept: 3x + 2y = -8
- 6. Determine the slope, y-intercept, and the equations of the linear relationship.

х	у
1	7
2	10
3	13
4	16
5	19

7. Jane charges \$50 for a house call plus \$5 per hour for painting a room. If she was paid \$85 for a job, how many hours did she work?

## Appendix Three

#### **Evaluator's Questionnaire**

Thank you for your time and assistance. You will be submitting information about the usability and design of the course. Please use the scale below to evaluate the following.

ububi	inty and design	of the course. I lease	use the seule below	lo cvuluu
1	No problems denoted. Fixing is not necessary.			
2	Minor usability problems; fixing is low priority.			
3	Major usability problem; fixing is high priority.			
4	Usability problem; imperative to fix before this product is released.		s product is released.	
1. Tı	itorials: Less Less Less Less Less	on 1 on 2 on 3 on 4	Lesson 5 Lesson 6 Lesson 7 Lesson 8	
2. As	ssignments:	Lesson 1 Lesson 2 Lesson 3 Lesson 4	Lesson 5 _ Lesson 6 _ Lesson 7 _ Lesson 8 _	
3 0	uizzes Les	son 1	Lesson 5	

3. Quizzes:	Lesson 1	Lesson 5
	Lesson 2	Lesson 6
	Lesson 3	Lesson 7
	Lesson 4	Lesson 8

4. Instructional Goals and Objectives:

Lesson 1	
Lesson 2	
Lesson 3	
Lesson 4	

Lesson 5 \_\_\_\_\_ Lesson 6 \_\_\_\_\_ Lesson 7 \_\_\_\_\_ Lesson 8 \_\_\_\_\_

5. Other Problems or Comments: