

One-to-One Formative Evaluation

Learner Characteristics

Three learners were chosen from the target population. They consisted of Broward College undergraduate students (two ages 18, one aged early twenties) with somewhat varying levels of skills and experience. Two expressed confidence that they had the pre-requisite skills necessary to be successful where the other expressed a high degree of anxiety, especially towards graphing skills. All had exposure to economics concepts in high school courses, but none had yet taken college-level economics. They showed interest in the topic and were eager to help with the evaluation.

Procedures

The instructional unit was administered in person, to each learner separately at various times. It was administered in print format, and correct assessment answers marked directly on the pages. The learners were also encouraged to make notes on the pages as they proceeded. As the administrator, I began with a brief introduction describing the scope and purpose of the evaluation, and the data I was trying to collect. The instruction was administered a section at a time (including pre-and post-tests, and attitude survey). Little to no instructions were given at the start of or during each section. At the end of each section, I elicited their feedback and I took notes. Occasionally I asked a clarifying or follow-up question.

Special effort was made to establish a positive rapport with each learner in keep them interested and to reduce anxiety. The tone was conversational, and I left ample space for them to provide their own

thoughts and feedback, wherever they led. Most of all I tried to make it fun and encouraged them not to overthink it – I was mainly interested in their initial thoughts and reactions.

Data

The objectives in gathering and analyzing the data were (1) To determine the quality and validity of the test items, and (2) To determine the effectiveness of the instruction in promoting mastery. In addition, the attitude survey was used to identify any themes or anecdotes regarding the usability and appropriateness of the instruction.

The data collected included pre- and post-test results, an attitude survey, and practice exercise results (graphing solution). In addition, I captured learner comments and questions after they completed each module, and recorded debriefing comments at the conclusion of the instruction.

Summary of Comments

Introduction

- Not clear as to the intended audience.
- Cute cartoon!
- Liked the story and cartoon

Prerequisite skills

- Term: Interpolation. Too high level?
- Had been a while with graphing but thinks they will remember

Lesson 1:

- Level of difficulty: easy
- Key term feature helpful in understanding concepts

Lesson 2:

- Would it help to bold key terms in text?

Lesson 3

- Giveaway clues in practice questions: Correct response always longer.
- Likes Looking Ahead feature

Lesson 4

- A little bored with the content

Post-test

- Felt confident they were prepared

The comments suggest an overall positive view of the instruction. The Introduction and cartoon seemed to catch their attention and draw them in to the material. There was some trepidation over the prerequisite skills (graphing) but they seemed to build confidence as they proceeded, especially as they completed the practice exercises. There was no concern over the instructions or objectives: All learners seemed to think it was clear what was being asked and the desired outcome.

Most of the comments came during the first two or so lessons. They rated the lessons as anywhere from easy to very easy to complete. They felt it got progressively easier, as they became familiar with the concepts and terminology. The instruction text contained several typos which they flagged and made suggested corrections. There were many copyedits suggested to provide added clarity. The view of the worked examples and practice activities were very positive: They all got perfect scores on the practice questions and graphing exercise, and they felt these did a good job of preparing them for and boosting their confidence for the post-test.

Table 1: One-to-One Item by Objective Analysis Table captures test scores on the post-test organized by objective. All three learners achieved a perfect score and 100% mastery. This lead me to think perhaps the questions were too easy, but I knew this to be a very bright and competent group of students, and was not sure if this would extend to a larger sample of students. The difficulty level would be further evaluated in the small group sessions.

Table 2: One-to-One Group Pre-test and Post-test by Objective shows an above-average performance on the pre-test. Again, this may be a characteristic of the group only: The small group evaluation may provide more insight as to whether or not the questions are too easy.

Table 3: Small Group Attitude Survey Results shows an overall positive view of the instruction. There is some concern regarding the average of 4.3 for question 1 (Did the material hold your interest or attention), and I made a note to keep an eye on this metric for the small group evaluation.

Revisions (completed)

1. Reword objectives. My original terminal objective and sub-level objectives made reference to a particular good: Pizza. I deemed this inappropriate as the objective does not apply to any particular good, and the concepts must be understood and applied to *any* good.
2. Clues in the practice questions. Two learners pointed out that the correct responses in the answer choices were always longer and more descriptive than the distractor responses. This was somewhat intentional: I did not want these to be too difficult as to lose the learners interest. I determined to leave these as is and evaluate during the small group sessions.
3. Typos. The evaluating revealed several spelling and grammar errors. These were corrected for the small group evaluation.

4. Edited for clarity. One of the learners was an honors English major. I followed hers and the other students' copyediting suggestions to enhance clarity and impact.
5. Formatting enhancements. Several odd page breaks and spacing inconsistencies created some confusion, and I fine-tuned this by applying more consistent text styles and content groupings.

Summary

My concern was mainly whether the instruction was too easy and thus inappropriate for the target group. I decided not to make significant revisions prior to the small group evaluations in order to determine whether this was unique to this group of learners and not representative of a larger population. Overall I was pleased with the reception and results, although these students may have thought the topic somewhat "dry". This too, was something to evaluate in the small group sessions.

Appendix