

Report III

Section 1: Results of Evaluation

Part 1: One-on-One

The three students that participated in the one-on-one evaluation were all eighth grade students. Students were selected learners based on their ability level. They represented a cross section of ability levels ranging from high to low. There were two female and one male student participating in the formative evaluation. The setting was informal to create an atmosphere where the students felt comfortable participating in this print module. Students were encouraged to ask questions, share comments, and point out errors in the module. All three one-on-one's were conducted individually of each other. All three students signed off on the entry-level questions without any difficulty. The learners were given basic information on how to proceed with a self-instructional module. Each student asked what a module was. They were directed to the first page of the module where a definition was given. The overall format of the module was explained to the students. As the students proceeded through the module whenever they came to a part where the instructions were not clear they asked questions. If the students found errors they pointed them out. Students were timed on the pretest and posttest. As the students went through the module the monitor had a copy and followed along with them. The monitor recorded in their copy when the students asked questions, found errors, or seemed confused.

Student one took 7 minutes to complete the pretest and 8 minutes to complete the posttest. Student two took 10 minutes to complete the pretest and 12 minutes to complete the posttest. Student three took 10 minutes to complete the pretest and 15 minutes to complete the posttest. The overall time for student one was 2 hour and 48 minutes while student two was 2 hours and 20 minutes and student three was 2 hour and 50 minutes.

Student 1 found several spelling errors as well as missing navigation tools located at the bottom of every page. Student 1 stated that the chart entitled "Can You Think of Foods for Each Food Group" was too long. He had a difficult time coming up with 10 foods for each food group. Student 2 found several spelling errors. The directions on the "Diet Diary" were confusing and unclear for her. The directions on the "Does Your Menu Measure up to the Food Guide Pyramid Recommendations?" were difficult to follow. Student 3 found several spelling errors as well as missing navigation tools located at the bottom of every page. The pretest directions on constructing a daily menu were unclear. Based on the feedback from the one-on-ones revisions were made in the areas of spelling, directions, navigational tools, and length of food chart.

One the pretest student 1 answered 8 of the 16 questions correctly, which is 50% mastery while mastering 2 of the 6 objectives. Posttest results stated that student 1 answered 8 of the 13 questions correctly, for 62% mastery and mastered 2 of the 6 objectives. Student 2 answered 12 of the 16 questions correctly on the pretest, which is 75% mastery while mastering 2 of the 6 objectives. Posttest results stated that student 2 answered 8 of the 13 questions correctly, which is 62% mastery and mastered 3 of the 6 objectives. Student 3

answered 9 of the 16 questions correctly on the pretest for 56% mastery and mastered 2 of the 6 objectives. Posttest results stated that student 3 answered 9 of the 13 questions correctly, which is 69% mastery and mastered 3 of the 6 objectives.

Part 2

Small Group

Students who participated in the small group evaluation were eighth graders in a local Middle School. The course they are enrolled in is entitled “Exploring Life Skills II.” The unit of study is Foods and Nutrition. The group consisted of four academically gifted learners, three students who are learning disabled, and six average learners. Entry behaviors consisted of simple addition and subtraction of one digit numbers, which all students were capable of performing. Students were also able to discriminate between foods and non-foods. The thirteen students that participated were enrolled in “Exploring Life Skills I” in seventh grade. In this course they were introduced to the Food Pyramid Guide on a much lesser scale.

The self-instruction module was in print form. The beginning page defined what a module is. The performance objective of the module was given to the students by informational text. A picture of the Food Guide Pyramid was located on this page to help the visual learners and for recall of prior knowledge. Students then were directed to questions that asked about the prerequisite skills necessary to complete the module. The module was divided into five sections that were clearly labeled. The answer key was located at the back of the module along with an attitude survey and material to enhance students learning. Part 4 directed students to the Nutrition Information Center located at the back of the classroom. The center consisted of two computers with Internet access, a large Food Guide Pyramid chart, cookbooks, nutritional pamphlets, and the course textbook. Colored pencils were located on each table for the students to use.

The small group evaluation was administered in the Family and Consumer Science classroom during normal class time, 10:30 – 11:55 AM, on Monday December 10, 2001. Students were seated at four large tables. There were three students to a table except for one table, which held four students. Oral directions were given to guide the students before the module was distributed. The directions stated the purpose for the evaluation as well as an overview of what the students would be learning in the module. Students were directed to record the amount of time it took them to complete the module. Pre and post test times were recorded also. The location of the Nutritional Information center was shown to the students. Students were told to raise their hand to ask questions only if they were unsure about the information that was presented. After the directions were given, there was a time for questions and answers before the module was distributed. Students were closely monitored during the duration of the small group evaluation.

Data was analyzed from the pre and posttest. The following charts were created which can be found in the appendix: Item-by-Objective Analysis Tables, Student Performance on the Pretest and Posttest by Objective, and a graph showing the average performance by objective. The average module completion time was 1 hour and 20 minutes. The

average pretest time was 8 minutes while the average posttest time was 10 minutes. An attitude survey was administered after the completion of the module. Students were asked to be completely honest while filling out the survey. The results of the survey can be found in the appendix. The Item-by-Objective Analysis Table shows that objective 2 was the only objective mastered on the pretest. Out of 16 items on the pretest the number of items correctly answered by the students range from 6 to 14. Objective 4 on the pretest had a wide array of “percentage of students correct”, ranging from 15% to 85%. After analysis, of the questions, it was determined that students’ prior knowledge of serving size was minimal. The Item-by-Objective Analysis Table on the posttest shows that objective 2 and 5 were mastered. Students correctly answered 7 to 13 questions on the posttest. Analysis of objective 4 indicates that two test items assessed volume and weight and two assessed serving size. Students’ performance was better on the volume and weight test items. The analysis of Student Performance on the Pretest and Posttest by Objective chart indicates that students’ performance increased on every objective. Student performance on objective 2 was 100% for the pre and posttest. This indicates that this objective could very well be an entry-level skill.

The information gathered during the small group formative evaluation points out that objective 4 (show the number of servings form each food group for every meal and snack (R)) was the weakest area in the module. To strengthen the instruction of this objective additional practice on serving sizes, broken up by the levels of the Food Pyramid Guide will be added. This will allow for more practice in specific serving sizes for each food group. Further evaluation of objective 4 requires that the area on volume and weight needs revision. The revision will include a clearer detailed description between size and volume, guided practice, and pictures of specific food items identifying volume or weight. Analysis of objective 5 (Compare the number of servings for each food group on your menu with the Recommendations by the Food Guide Pyramid (R)) reveals that additional practice is necessary for mastery. In the revision of the module students will be asked to create a pictorial representation of the Food Guide Pyramid by drawing the appropriate number of servings of foods in each individual food group as well as labeling the number of servings. Based on the above revisions it is hopeful that students’ performance on objective 6 will increase.

By reviewing the assessment instruments it was evident that the number of questions on the pretest and posttest were different. The pretest had 16 questions while posttest had 13. Both the pre and posttest measured all 6 of the objectives. The revision will include the same number of questions for each objective in the pre and posttest.

Data shows that all students mastered objective 2. Students were directed, after taking the pretest, to skip section one (Food Identification) if they answered items 2, 5, 6, 7, 9, and 11 correctly on the pretest. Fifty-percent of the students who participated in the small group activity did achieve this requirement. However all student were informed to complete the entire module. During the implementation phase students’ will specifically follow the directions on the pretest.

**Attitude Survey Results
Small Group**

	1	2	3	4	5
1. Did the module hold your interest?	4		5	3	1
2. Did you understand what you were asked to do in each section?		1		7	5
3. Were the directions clearly stated?		1	2	4	6
4. Were the instructions easy to follow?			3	4	6
5. Did you feel you had enough practice exercises to learn the new material?		1	1	10	1
6. Did the test measure your knowledge of the material you covered in each section?		1	2	4	6
7. Did you feel confident when answering the questions on the test?		1	2	5	5
8. Did you receive enough feedback throughout the module?		1	1	4	7
9. Were the graphics and illustrations appropriate?			1	3	8
10. Was the use of color helpful?	1		1	2	9