

Results of One on One Evaluation

We have developed a self-instructional module that will provide guidance in the use of the Groupwise e-mail program. It has been developed in print format which will allow the learner to follow through the print material as they complete each task on the computer. The module is 52 pages and is divided into 11 sections. After each section, the learner is asked to demonstrate the skills taught in that section. Feedback is provided to the learner after each task through learner demonstration and a check list for further reinforcement.

Three learners were chosen for the one to one evaluation process, each possessing a different level of computer skills. Learner A admits that she does not want a computer at home as she has no idea how to use it. She does, however, need to check her e-mail at work, but admits her skills in this endeavor are very, very basic. Learner B has computer skills that are more advanced from Learner A, however, admits to having trouble with attachments and any other activities beyond basic e-mail. Learner C has excellent computer skills and uses e-mail at work and at home. All three learners are employees of New Hanover Regional Medical Center, which also uses the GroupWise e-mail system. A pre-test was administered to each learner. Learners B and C were able to complete the test with 100% accuracy. Learner A missed question 3, regarding the subject line of an e-mail, question 10, asking where to type in an e-mail address and question 13, regarding identification of the new mail message icon.

I met with each learner individually and reviewed the requirements of the module. All were given a pre-test, the self-instructional module, a post-test and an exit survey for comments. I was available for questions should they arise during the process. Learner A was a little intimidated by the entire process, but agreed to participate as she agreed that she might learn something new.

The learners had little questions regarding the instructions as presented in the module, although Learner A was confused by Step #6 in Section #1, stating she felt it wasn't clearly stated. The biggest difficulty was the clarity of some of the screen shots, making them blurry and difficult to read or too small. Learner C stated that the very narrow arrows on several of the screen shots, made the graphic representation somewhat confusing. She was able to work through it as her computer skills are good, but admitted that for a new learner this might pose a problem. A few typos were also noted. Throughout the process, questions were answered, notes were taken and feedback was very much appreciated.

The post-test involved the exact same questions, however, the learners were now requested to match the icons or screen shot with their descriptions. On the post-test, learners B and C once again attained 100%. Learner C again missed questions regarding the new mail message icon and address area. She also miss identified the desktop icon and reply and forward. She reported feeling a little overwhelmed with the material, stating that she would probably benefit from repeating the presentation. **(See Objective Analysis Table for One to One Evaluation, below)**

At the end of each session the students completed an exit survey. The results are summarized below:

1. What parts of the module did you like?

- A. Overall it was good. Even learned something.
- B. Steps were broken down well. Also liked the added boxes to the side.
- C. Easy to complete

2. What parts of the module did you not like?

- A. Some of the screen shots were too small.
- B. Some of the pictures were hard to see, either too small or fuzzy.
- C. Can't see some of the screen shots very well.

3. **What changes do you think need to be made?**
 - A. Enlarge the screen shots.
 - B. Make the screen shots more clear.
 - C. There were a couple of spelling errors, tiny arrows need to be enlarged and the pictures need to be changed so students can read/see them more clearly.
4. **Were the directions clear?**
 - A. Yes
 - B. Yes
 - C. For the most part all directions were clear and very easy to understand.
5. **Did you have enough time to complete the module?**
 - A. Yes
 - B. Yes
 - C. Yes
6. **Do you have any comments?**
 - A. Guess I need a computer at home as I see that there is so much I could learn.
 - B. This was very good. Just fix the pictures on the pre and post tests.
 - C. Besides the few mistakes, the module is very well put together.

Learners A and B felt they had learned more about Groupwise through this module that they could use in their job setting. Corrections were made as a result of their comments and include the following:

Pre-Test

1. A different screen shot of the desktop icon was found that was larger and more clear.
2. A different screen shot of the “Save as” button was also inserted.

Instructional Module

1. Typos corrected.
2. Narrow arrows enlarged.
3. Instructions clarified on Section 1 Step #6.

Post Test

1. Desktop icon and “Save as” shots were changed as on the pre-test.

Objective Analysis Table for One on One Evaluation

Question #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	# of Obj. Mast	% Mast ered
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*T.O. #1		1.1	1.2	5.1					3.2.1	2.1	6.1.2		3.3.1	3.1	3.1		
*T.O. #2	2.1.1	1.1	1.2	3.1.1	3.3 4.4 5.4	4.1.1	5.1.1	6.1.1	6.3.1			5.2.1	5.4.1	6.2.1	6.1.1		
Learner A	√	X	√	√	√	√	X	X	√	X	√	√	√	X	√	10/15	67%
Learner B	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	15/15	100%
Learner C	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	15/15	100%
Total for Group	3	2	3	3	3	3	2	2	3	2	3	3	3	2	3		
%	100	67	100	100	100	100	67	67	100	67	100	100	100	67	100		

*T.O. refers to terminal objectives

This table shows the objectives each learner answered either correctly or incorrectly. Correct answers are marked with a √ and incorrect responses are marked with an X. Students B and C did not have any incorrect responses and Student A had 5 errors. Mastery is defined as correctly responding to the assessment items for the given objective.

Results of Small Group Evaluation

The small group evaluation took place within several classrooms at New Hanover High School. All of the learners completed the module using their personal desktop computers located within their classrooms. There were eight learners who participated. Due to teacher's hectic schedules, they were

allowed the entire school day to complete the module, but all said it took no more than 30 minutes. It's also important to know that all of the learners volunteered to test the module.

As they were given their materials, each learner was given a brief explanation of the intention and set up of the module. The materials given to them included a pre-assessment, the instructional booklet, a post-assessment, and an exit survey. The learners were asked to 1) complete the pre-assessment, 2) review the booklet, 3) take the post-assessment and 4) complete the exit survey, in that order. Everyone was motivated to participate in this learning module because they believed that this training would help them in the future to successfully show their ability to communicate via GroupWise email.

The small group includes five learners with relatively high fluency using GroupWise email and strong technological abilities. One learner has reasonable computer and GroupWise email skills, and the final two learners describe themselves as being less acquainted with computers and/or GroupWise email. Nevertheless, all the learners have used personal email accounts and use the computer at least several times a week.

The learners all understood the premise of the module and understood that interactions between themselves and other learners and with the instructor were prohibited. They were able to move through the module without any problems. They were able to complete the post-assessment without any questions.

Upon completion of their modules, the learners were asked to demonstrate their newfound knowledge of using basic functions of GroupWise by performing the tasks given and sending correspondence to a teacher in their department. After completing the tasks, they took the post-assessment and completed an exit survey. All materials were returned to the instructor.

After reviewing the pretest results, I found that students 1, 7, and 8 were able to answer all the entry behavior questions with no problem. Students 2 and 3 missed question 3, which asked them to identify the subject line. Student 5 missed question 9 which asked them to identify the forward icon. Students 2, 3, and 5 missed question 12 which asked them to identify the search list box contained within the address book. Students 3 and 6 also missed question 13 which asked for the identification of the New Mail Message Icon.

As for the assessment questions, most of the learners answered all questions correctly. The questions that were missed were due in part of the learner not fully reading and comprehending the question and some of the icons depicted were not very clear to see. In fact, 2 out of the 8 learners missed question number 2 (asking them to identify the desktop icon) because they could not see the icon clearly. Overall, all 8 learners mastered the module, receiving no less than 87% correct on the post-assessment. With some adjustments made to the questions and illustrations, all learners would be able to more successfully answer questions correctly. **(See Objective Analysis Table for Small Group Evaluation)**

After reviewing the assessment results, we feel that the learners may need more clarification within the post-assessment questions. It would also be very beneficial to review all illustrations and make sure that they can be clearly seen and understood. These changes would lower the amount of wrong answers due to misunderstanding of the questions or pictures.

Overall, the exit survey data seems to be very optimistic. Changes that were requested were mainly focused on the clarity of the illustrations. But for the most part, the learners really enjoyed completing the module and learned a lot about the basic functions of GroupWise email. In the future, it would be wonderful if we could work on the more difficult functions within GroupWise email such as creating and saving groups. All learners feel they will benefit from a module teaching the more difficult functions.

Exit Survey Questions and Responses

What parts of the module did you like?

1. Details, user friendliness.
2. The "congratulations" and "good job."
3. All-very clear and easy to understand. Visuals are very helpful.

4. The screen shots were helpful with the pointers in them.
5. Easy and informal explanations.
6. The pictures were easy to follow.
7. Verbal praise at the end of each section.
8. Everything, it was very easy to use.

What parts of the module did you not like?

1. None.
2. Some icons are hard to see.
3. Nothing.
4. None.
5. Some icons.
6. Nothing that I did not like.
7. None.
8. Some icons are blurry.

What changes do you think need to be made?

1. None.
2. Bigger icons.
3. No answer given.
4. Some of the screen shots were blurry.
5. Minor typos. Change the table of contents.
6. I would have liked to see more advanced functions of GroupWise.
7. None.
8. Larger icons.

Were the directions clear?

1. Yes.
2. Yes, I think the directions were very basic and easy to follow.
3. Very.
4. Yes.
5. Yes.
6. Yes, very.
7. Yes.
8. They were very clear.

Did you have enough time to complete the module?

1. Yes.
2. More than enough.
3. Yes.
4. Yes.
5. Yes.
6. Yes.
7. Definitely.
8. Yes.

Do you have any comments?

1. Nice work.
2. The module was very helpful and easy to follow once I figured out which icons were which.
3. Excellent.
4. You obviously put a lot of time into this module.

5. Good job. I think the format is really easy to follow.
6. No answer given.
7. Great job.
8. This module really helped me with performing basic functions of the GroupWise email system.

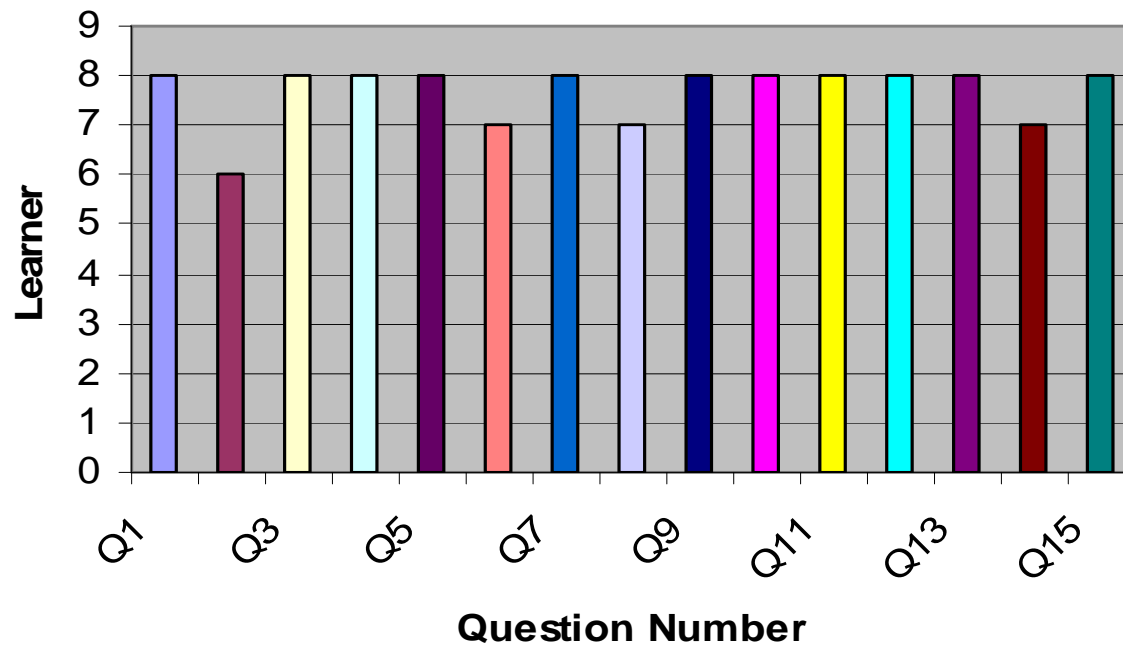
Objective Analysis Table for Small Group Evaluation

Question #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	# of Obj. Mast	% Mastered
*T.O. #1		1.1	1.2	5.1					3.2.1	2.1	6.1.2		3.3.1	3.1	3.1		
*T.O. #2	2.1.1	1.1	1.2	3.1.1	3.3 4.4 5.4	4.1.1	5.1.1	6.1.1	6.3.1			5.2.1	5.4.1	6.2.1	6.1.1		
Learner #1	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	15/15	100%
Learner #2	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	15/15	100%
Learner #3	√	X	√	√	√	X	√	√	√	√	√	√	√	√	√	13/15	87%
Learner #4	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	15/15	100%
Learner #5	√	√	√	√	√	√	√	X	√	√	√	√	√	X	√	13/15	87%
Learner #6	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	15/15	100%
Learner #7	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	15/15	100%
Learner #8	√	X	√	√	√	√	√	√	√	√	√	√	√	√	√	14/15	93%
Total for Group	8	6	8	8	8	7	8	7	8	8	8	8	8	7	8		
%	100	75	100	100	100	88	100	88	100	100	100	100	100	88	100		

*T.O. refers to terminal objectives

This table shows the objectives each learner answered either correctly or incorrectly. Correct answers are marked with a √ and incorrect responses are marked with an X. Mastery is defined as correctly responding to the assessment items for the given objective.

Objectives Mastered Graph



Each line represents the number of students who answered each question with the correct response. To see which objectives match which questions, refer to Objective Analysis Table for Small Group Evaluation.

Time Log for Each Section of the Project

1. Needs Assessment: 3 hours
We met with Karen Greene who works with the technology department of New Hanover County Schools. She initially interviewed several teachers within the math and science departments after discovering that teachers were unaware of information that she had sent to them via email. We also corresponded with her via email. Learner analysis and context analysis are also included in this time allotment.
2. Task Analysis: 7 hours
Creating the task analysis was very interesting, especially with the opportunity to use Inspiration. It was however, surprisingly difficult to break down each task into its simplest form. The organization of the task analysis graphic was also complex but provided an excellent learning opportunity.
3. Performance Objectives: 8 hours
We found this aspect of the project the most challenging. Initially converting the task analysis steps into a table format was confusing, however as we worked our way through the process, it became less daunting. Adding the extra step of parallel test questions allowed us to visualize how the project would finally come together.
4. Instructional Module Development: 15 hours
We thoroughly enjoyed this aspect of the module, because by the time we got to this point in the process, the groundwork had already been completed. Another positive feature of designing the module was the exposure to programs such as Snag-It. We also learned how to create screen shots using MS Paint. We initially created a preliminary outline for the module and added new information, clip art and graphics to it daily.
5. One to One Evaluation: 4 hours
Fran met with her co-workers on an individual basis. With each person she reviewed the packet of information including the pre-assessment, the module, and the post-assessment. She reviewed the directions for the completion of the module and also noted that part of the rationale of the small group evaluation was to obtain feedback. Results were compiled and reviewed.
6. Small Group Evaluation: 8 hours
Tina met with eight teachers at New Hanover High School. With each teacher, she explained the purpose of the module, provided instructions as to how to complete the module, and provided an exit survey to obtain feedback. Assessment and survey results were compiled and reviewed.