

Summative Evaluation Plan

“Understanding GroupWise E-Mail”

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I. Abstract

The Summative Evaluation Plan in this report is designed to evaluate the effectiveness of the self-paced instructional module entitled “Understanding GroupWise E-Mail.” The module is designed to provide New Hanover County Personnel with a basic understanding of the GroupWise program.

This summative plan will investigate the value of the learning module through the analysis of data received from the post performance assessment test and the initial reaction survey. Additionally, data will be obtained from the learners at 3, 6 and 9 month intervals to assess whether learners are using the techniques taught in the module in their daily routine. Kirkpatrick’s Four-Level Summative Model will be used as a guide in designing the evaluation in order to determine learner’s reactions, transfer of learning and behavior changes.

The final report will include recommendations to the Professional Development Department of New Hanover County School which will serve as project facilitator. Results of the initial findings will determine whether any changes need to be made to the module and whether it will continue to be used by the County on a continual basis.

II. Introduction

A. Context

Overview of the Instructional Package

The instructional package is a print based self-instructional module for teachers in New Hanover County Schools. This module will assist teachers in learning basic information regarding the GroupWise e-mail system.

New Hanover County School Administration determined many teachers were not receiving or aware of memos and updates sent to them via e-mail. A needs assessment revealed that many teachers did not know how to properly work the e-mail system. Because teachers already have a full workload and do not desire to attend a workshop, it was decided that a self-instructional module would allow them to work on their own time and at their own pace. Support for the learners was provided by the program facilitator who could be contacted by phone or e-mail. Teachers were also encouraged to draw support from their fellow learners (teachers). Simplifying and organizing the workflow and the ability to stay current with information from the county office should provide the motivation needed to complete the module.

All learners are educators with at least a bachelor's degree in education or relevant field. All have passed the Praxis I and II and have completed the computer competencies for their school system, however, the many learners have little or no experience working with GroupWise e-mail. The learners realize the importance of completing the module and are anxious to implement their new skills in order to improve communication with other employees.

The goal for the New Hanover County Teachers is to experience a constructivist learning outcome, and experience both retention and transfer of the information presented. The instruction should be designed so they are able to select the relevant information, organize that information into mental representations and integrate those representations with existing knowledge they have regarding computers and how to use them to enhance and support their job.

Mayer's theory for Designing Instruction for Constructivist learning was the model used for developing this module. This model states that learning occurs when the learners "construct a knowledge representation in working memory." The task of learning to use e-mail properly, involves designing instructional material that is clear, concise and easily outlines to the teachers exactly how to go about completing each task.

The instructional goal for this module is:

- Teachers will demonstrate their ability to open, read and save an attachment using GroupWise. (Rule)

For the above objective, a task analysis was completed in order to effectively design the module and assessment items. (See Appendix A)

Formative Evaluation Summary

A formative evaluation was conducted through the use of one to one and small group evaluations. Three learners were chosen for the one to one evaluation, each possessing a different level of computer skills. All three learners were employees of New Hanover Regional Medical Center which also employs the GroupWise system. The three evaluators completed the instructional module, a post performance assessment via checklist and responded to an exit survey upon completion. An instructor was available to each learner for questions should they arise during the process.

A 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 is also important to know that all learners volunteered to test the module. Upon completing their modules and by using a checklist, the learners were asked to demonstrate their knowledge by performing the tasks and sending correspondence to a teacher in their department. These learners also provided feedback by use of an exit survey.

Changes were made as a result of the formative evaluation and mainly involved improving the quality and clarity of the screen shots. For the most part, the learners reported that they enjoyed the module and learned a great deal regarding the basic functions of GroupWise e-mail.

Implementation Site Description

The print based instructional module is designed for teachers in New Hanover County Schools to use without supervision. Teachers will need the instructional module and their classroom computers to complete this unit. Therefore the implementation site will be any computer connected to the New Hanover County Schools network.

B. Summative Evaluation Objectives

The summative evaluation for this module is based on Donald Kirkpatrick's Four-Level Summative Model and includes the following:

1. **Reaction:** A measure of customer satisfaction; measures the learners' acceptance level regarding materials, process, environment, etc. through the use of a reaction survey post module completion.
2. **Learning:** A measure of knowledge and skills gained after training. Accomplishment of the training objectives will be measured by using a performance assessment.
3. **Behavior:** A measure of the long term improvement of performance after training. Determine whether learners were able to use the skills learned to improve their workflow and organization of materials from the County office.

III. Process

A. Methodology

Model

Kirkpatrick's Four-Level Model will be the guide to designing the summative evaluation for this instructional module. **Reactions** to the instructional module will be gathered through the use of a post reaction survey. Learners will be given the survey upon completion of the module and will be asked to respond to questions regarding the materials, the process, the ease of use, clarity of instructions, understandings of the materials and their confidence levels in applying the information into their workday routine. The survey will contain both open-ended and close-ended questions. (Appendix D)

All learners begin this module with some basic prerequisite computer skills, which may include other e-mail systems, however, they are unfamiliar with GroupWise. All learners will be required to complete a performance assessment test upon conclusion of the module, to determine the effectiveness of the **learning** and the accomplishment level of the training objectives. Learners will be given a checklist and asked to complete each task on the list to evaluate their level of learning.

The goal for the New Hanover County Teachers is to experience both retention and transfer of the information presented. Were the learners able to transfer the skills learned in the module into the work place environment? Prior to the instructional module, teachers were continually reporting they were not aware of many memos and up-dates sent to them via e-mail from the county office. One indirect measurement of an effective **behavior** change will be a reduction in those stating they are not aware of sent information. Section chairs may find teachers arrive at meetings with the information at hand, prepared to discuss a topic sent via e-mail. Names of teachers who enroll in the learning module will be kept in a data base and brief follow-up questionnaires will be sent at 3, 6 and 9 months to track reported changes in behavior. (Appendix E)

Implementation Plan

Teachers will be notified of the up-coming instructional module for several months in advance via the school newsletter and mailbox flyers. Those that wish to participate will be given the self-paced instructional module for use in their classrooms or other school locations. Upon completion of the unit, teachers will contact their facilitator and will then be given the post assessment performance evaluation and reaction survey. Teachers completing the assessment and returning the survey will be given certificates to be used for professional development. As the module is self-paced and self-instructional, teachers may enroll at any time after the initial implementation date and, if ultimately determined to be successful, the unit can be an ongoing professional development module for new hires.

B. Data Collection Plan

A task analysis was completed for the instructional goal of this module. The Assessment Plan (Appendix A) lists each critical task and identifies the domains or types of learning outcomes, assessment types and strategies. The Data Assessment Plan (Appendix B) identifies the number and type of questions required for each critical task to properly assess student learning.

An informal performance assessment will be given upon completion of the module to measure the student's transfer of knowledge and skill. Each learner will be given a checklist of tasks to complete using GroupWise (Appendix C).

A reaction survey (Appendix D) will be given to each participant upon completion of the performance assessment. This survey includes both open-ended and close-ended items to elicit teacher (learner) responses regarding the materials, the process, the ease of use, clarity of instructions, understandings of the materials and their confidence levels in applying the information into their workday routine. Data received will be used to make improvements to the module.

A post reaction survey (Appendix E) has been developed for use at 3, 6 and 9 month intervals to determine whether behavior changes in regard to GroupWise have been implemented in the workplace. This survey contains both closed-ended and open-ended questions and will be sent via e-mail to all participants who completed the module. Data received will be used to determine the overall effectiveness of improving teacher skills in using GroupWise.

C. Data Analysis Plan

The performance assessment will be completed by each participant using the checklist and an 80% passage rate is required for successful completion of the learning module. Analysis of the scores will assist in identifying problem areas within the checklist that may require changes in the module.

Responses from the reaction survey will be measured using a 5-point rating scale (5 = Strongly Agree; 4 = Agree; 3 = Neutral; 2 = Somewhat Disagree; 1 = Disagree). The responses to the closed-ended questions will be tabulated and analyzed quantitatively. Open-ended responses will be categorized on a qualitative and quantitative basis. As surveys will be arriving in the facilitator's office on an ongoing basis, frequencies will be run using SPSS at time intervals depending on the number of surveys returned.

Responses to surveys given at 3, 6 and 9 months will be tabulated using the same system as the initial reaction survey. This data will need to be continually updated by the facilitator's office as surveys arrive.

IV. Conclusions

The initial findings of the data analysis will be presented to the program facilitator within the Professional Development Department of New Hanover County Schools. The report will contain scores and responses from the initial training group. This information will be used make modifications to the instructional module if needed and will provide feedback on whether the program should be implemented on an ongoing basis or discontinued. This report will also contain directions for implementing the post reaction survey at 3, 6 and 9 months.

V. Appendices:

Appendix A: Assessment Plan

Objectives	Type of Learning Outcomes	Types of Assessment	Assessment Strategy
Terminal Objective #2: Teachers will demonstrate their ability to open, read and save an attachment using GroupWise	Rule		
1.0: Given a personal computer containing the GroupWise email program, students will demonstrate locating and opening the program by clicking on the GroupWise Icon, using the mouse.	Rule		
1.1: Given the screen of a personal computer and the task of finding the desktop icon, students will identify the desktop icon by finding it and clicking on it.	Concrete Concept	Checklist Demonstration Informal Observation	Identify the desktop icon by pointing and clicking on the icon using the cursor. (The computer desktop should appear if completed correctly.)
1.2: Given the screen of a personal computer and the task of finding the GroupWise icon, students will identify the GroupWise icon by finding it and clicking on it.	Concrete Concept	Checklist Demonstration Informal Observation	With the computer screen displaying the desktop, identify the GroupWise icon by pointing and clicking on the icon. (This should open the GroupWise program if completed correctly.)
2.0: Given a personal computer containing the GroupWise e-mail program, students will demonstrate opening an e-mail message containing an attachment by double clicking on the subject line of a message containing a paperclip.	Rule		
2.1: Given the screen of a personal computer monitor, a mouse and an open GroupWise program, students will be able to locate the subject line by noting the "Subject" heading at the top of the screen. The list of one line items below are each individual e-mails and each line listed is considered a subject line. Click on one to highlight the typed subject line.	Concrete Concept	Checklist Demonstration Informal Observation	With the screen of a personal computer monitor, a mouse and an open GroupWise program, highlight the subject line of an e-mail. (A previously sent e-mail should be highlighted if completed correctly.)
3.0: Given a personal computer containing the GroupWise e-mail program, students will demonstrate	Rule		

opening an attachment by double clicking on the attachment icon in the lower half of the e-mail message.			
3.1: Given a personal computer containing the GroupWise e-mail program, students will demonstrate locating the attachment icon (paperclip) by moving the mouse to the right side of the screen to find the paperclip.	Concrete Concept	Checklist Demonstration Informal Observation	With a personal computer and the GroupWise e-mail program open, locate those e-mails containing an attachments by using the cursor. (E-mails with a paperclip will be identified if completed correctly.)
3.2: Given a personal computer and the task of finding the attachment icon, students will identify the icon by finding it and opening it.	Concrete Concept	Checklist Demonstration Informal Observation	With a personal computer and the GroupWise e-mail program open, locate an e-mail containing an attachment and open it. (An e-mail will be displayed showing an attachment at the bottom if completed correctly.)
3.3: Given a personal computer and the task of closing a program, students will identify the button by finding it and clicking on it.	Concrete Concept	Checklist Demonstration Informal Observation	With a personal computer open to any program, locate the correct button and close the program by using the house. (The program should close if completed correctly.)
4.0: Given a personal computer containing the GroupWise e-mail program and a mouse, students will demonstrate saving an attachment by clicking the mouse in the following sequence: (1) "File," (2) Save as," then giving the file a name and location to be saved.	Rule		
4.1: Given a personal computer containing the Groupwise e-mail program and a mouse, students will click once on "File" on the far upper left toolbar, then click once on "Save as"	Concrete Concept	Checklist Demonstration Informal Observation	With a personal computer and the GroupWise e-mail program open to an e-mail containing an attachment, complete the following task: <ol style="list-style-type: none"> 1. With the attachment open, use the cursor to locate and open the button required to store and name the file. (The "save as" box should display if completed correctly.)
4.2: Given a personal computer containing the GroupWise e-mail program and a mouse, students will click once on the arrow to the right of the "Save in" box at the top of the window. A list of drives should appear, including one which reads your personal name.	Concrete Concept	Checklist Demonstration Informal Observation	With the GroupWise program and the attachment both open and the "save as" window displayed, locate the drive containing your name using the mouse. (The personal drive will be displayed it

			completed correctly.)
4.3: Given a personal computer containing the GroupWise e-mail program and a mouse, students will click once on the arrow to the right of the “Save in” box at the top of the window. A list of drives should appear, including one which reads “3.5 Floppy A”	Concrete Concept	Checklist Demonstration Informal Observation	With the GroupWise program and the attachment both open and the “save as” window displayed, locate the “A” drive using the mouse. (The “A” drive will be displayed it completed correctly.)
4.4: Given a personal computer and the task of finding the “X” button, students will identify the button by finding it and clicking on it.	Concrete Concept	Checklist Demonstration Informal Observation	With the computer screen displaying the selected drive, identify the button needed to close a program. (The file should close if completed properly.)
5.0: Given an personal computer containing the GroupWise e-mail program and a mouse, students will demonstrate replying to an e-mail by clicking “Reply,” typing in a message and clicking on “Send”	Rule		
5.1: Given a personal computer containing the GroupWise e-mail program, students will demonstrate locating the “Reply” button by moving the mouse to the right hand side of the screen and clicking on it.	Concrete Concept	Checklist Demonstration Informal Observation	With the computer open to the GroupWise program and an e-mail message displayed, locate the button required to answer an e-mail. (The “reply” window should open if completed correctly.)
5.2: Given a personal computer containing the GroupWise e-mail program, students will demonstrate typing a message in the text box by typing on the keyboard.	Concrete Concept	Checklist Demonstration Informal Observation	With the computer open to the GroupWise program, type a message in the box required to reply to a previously sent e-mail. (A message should appear if completed correctly.)
5.3: Given a mouse, execute click by pushing down on the left mouse button one time over the “Send” button..	Concrete Concept	Checklist Demonstration Informal Observation	With the computer open to the GroupWise program, an e-mail displayed and a message ready to return in response to the e-mail, locate the proper button using the mouse that will deliver the response the task.
5.4: Given a personal computer and the task of finding the “X” button, students will identify the button by finding it and clicking on it.	Concrete Concept	Checklist Demonstration Informal Observation	With the computer screen displaying an e-mail response, identify the button needed to change your mind and close the response window. (The file should close if completed properly.)
6.0: Given an personal computer containing the GroupWise e-mail program and a mouse, students will	Rule		

demonstrate forwarding an e-mail by clicking “Forward,” typing in an address and clicking on “Send”			
6.1: Given a personal computer containing the GroupWise e-mail program and a mouse, students will demonstrate locating the “Forward” button by moving the mouse to the right side of the screen until the “Forward” button is visible.	Concrete Concept	Checklist Demonstration Informal Observation	With a computer screen open to the GroupWise program and an e-mail message displayed, locate and click on the button required to share this message with a co-worker. (The “forward” window will be displayed if completed correctly.)
6.2: Given a personal computer containing the Groupwise e-mail program, students will type in a known address in the text box.	Concrete Concept	Checklist Demonstration Informal Observation	With a computer open to the GroupWise program, locate the correct box and type in the e-mail address of someone you know. (The address should appear in the “To” box if completed correctly.)
6.3: Given a personal computer containing the GroupWise e-mail program, students will demonstrate locating the Address Book by moving the mouse to the right hand side of the screen until the Address Book button is visible.	Concrete Concept	Checklist Demonstration Informal Observation	With a New Mail Message displayed on the screen, locate and click on the icon that would display stored addresses of co-workers within your institution. (This should open the Address Book if successfully completed.)
6.4: Given a personal computer containing the GroupWise e-mail program, students will demonstrate typing the last name of the person they are searching for in the “Search List” box	Concrete Concept	Checklist Demonstration Informal Observation	With the Address Book open, locate the proper text field and complete the actions needed to search for the address of one of your co-workers. (The desired name should display if completed correctly.)
6.5: Given a mouse, execute double click by pushing down twice on the left mouse button on the highlighted name.	Concrete Concept	Checklist Demonstration Informal Observation	With the mouse, perform the action which places the searched name in the proper box to send the e-mail.
6.6: Given a personal computer containing the GroupWise e-mail program, students will demonstrate pressing “Send” by moving the mouse over the “Send” button and pressing the left mouse button once.	Concrete Concept	Checklist Demonstration Informal Observation	With an e-mail message completed, locate and click on the icon that will complete the task. (The message should disappear if completed correctly.)

Appendix B: Data Assessment Plan

Domain Terminal Objective #2	Verbal Information	Intellectual Skills				Cognitive Strategy	Motor Skill	Attitude	Total
		Discrimination	Concepts	Rules	Problem Solving				
1.1			1						1
1.2			1						1
2.1			1						1
3.1			1						1
3.2			1						1
3.3			1						1
4.1			1						1
4.2			1						1
4.3			1						1
4.4			1						1
5.1			1						1
5.2			1						1
5.3			1						1
5.4			1						1
6.1			1						1
6.2			1						1
6.3			1						1
6.4			1						1
6.5			1						1
6.6			1						1
% of the Test	0%	0%	100%	0%	0%	0%	0%	0%	20 (100%)

Appendix C:

Observation Checklist

Task	Yes	No	Comments
Open an e-mail with an attachment			
1. Log on using the Desktop icon			
2. Open GroupWise			
3. Log onto GroupWise			
4. Double click on a subject line with an attachment			
5. Double click on the attachment			
6. Click "X" to close			
Save an attachment			
1. Single click on "File"			
2. Single click on "Save As"			
3. Single click on "pull down arrow"			
4. Select the drive where you wish to save your document			
5. Select your personal drive OR			
6. Select the floppy "A" drive			
7. Click "Save"			
8. Click "X" to close if you do not wish to save the attachment			
Reply to an e-mail			
1. Click on the "Reply" button			
2. Click "OK"			
3. Type your message in the message area			
4. Click "Send"			
5. Click "X" to close if you do not wish to reply			
Forward an e-mail			
1. Click on the "Forward" button			
2. Type in the e-mail address, if you know it			
3. Click "Send"			
4. Single click on the Address book icon, if you do not know the address of the person you are forwarding the e-mail to.			
5. Type the last name of the person you are searching for in the "Search" box			
6. Double click on the highlighted name			
7. Type in message if needed			
8. Press "Send"			

Appendix D:

Reaction Survey

Please help us to make improvements to the materials by completing the survey below. Please respond to the following questions as accurately and honestly as possible. Thank you.

Please use the following rating scale for your responses to questions 1-9:

5 = Strongly Agree
4 = Agree
3 = Neutral
2 = Somewhat Disagree
1 = Disagree

Questions		5	4	3	2	1
Place a check in the box to the right of each statement which accurately represents your opinion.						
1.	Completing this module improved my understanding of GroupWise.					
2	Using GroupWise effectively will help me keep track of information sent to me from the County Office.					
3	The material presented was relevant to my needs and interest as an employee within the New Hanover County School System.					
4	The concepts presented will help improve my daily routine.					
5	The material was presented in a way that maintained my interest.					
6	I am able to apply the skills I have learned in this module to my job.					
7	I found it helpful to work at my own pace in completing this module.					
8	The directions and screen shots were clear and easy to follow.					
9	Even though this module was self-instructional, directions were clear as to available resources for questions and help.					
Please respond to the following questions as honestly and accurately as possible. Your comments are appreciated.						
10	Which topics did you find most beneficial?					
11	Do you have any suggestions for improving this module?					

Appendix E:

Understanding GroupWise E-Mail
Post Reaction Survey

Thank you for participating in the learning module entitled “Understanding GroupWise E-Mail.” Please take a moment to complete the following brief survey. Your comments will help us evaluate the long term effectiveness of this module.

5 = Strongly Agree
4 = Agree
3 = Neutral
2 = Somewhat Disagree
1 = Disagree

Please use the following rating scale for your responses.

	Questions	5	4	3	2	1
Place a check in the box to the right of each statement which accurately represents your opinion.						
1.	Completing this module improved my understanding of GroupWise.					
2	I am able to save attachments sent to me by the County office.					
3	Using GroupWise and the concepts taught in the module have helped to organize my workflow.					
4	I have been able to find follow-up resources for needed help.					
5	I would be interested in participating in future instructional modules regarding other aspects of GroupWise.					

Thank you for your comments!