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1 Instructional Goal & Rationale

The Instructional Goal for this project is as follows, Senior Citizens, using a Motorazr ™ mobile phone will perform the following functions: Enter the name and number of a contact into the address book; Retrieve a number of a contact and make a call and End a call.

In a cell phone usage survey (Keeter[1]) conducted in 2006, 74% of the surveyed population said that they used their cell phones in the case of an emergency; only 65% of senior citizens however reported the same usage. Whilst the research doesn't seek to explain why senior citizens use their cell phones less in the case of emergencies, the fact is that as group, senior citizens could arguably be more susceptible to emergencies. One potential participant of this training expressed frustration with her mobile phone, claiming that she "could do without it" She currently wears a life alert arm band and has an emergency alert system in her home.

But what about situations where there is no emergency, but the senior citizen needs to make an important call? Neither of these two systems will enable them to do so. The rationale of this training therefore, is to provide senior citizens with a level of confidence through the ability to make cell phone calls from a contact list, whilst maintaining a list of contacts on their cell phone.

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[1] Keeter, Scott. 2006. Pew Research Centre. Available online < http://www.pewinternet.org/pdfs/PIP_Cell_phone_study.pdf> Accessed on February 10, 2008.

2 Goal Analysis and Documentation

2.1 Domain of Learning

There is a significant challenge in classifying this goal activity as a purely psychomotor skill. Whilst it would be correct to apply this category as the learner "must execute muscular action…to achieve specific results" (Dick et al 42), the authors do highlight that for adult learning, trivial motor skills, such as pressing the select button on a phone, could be classified as an intellectual skill (43). This distinction is noteworthy, however in this learning context, because senior citizens tend to have reduced motor skills and in some cases reduced mental acuteness, there seems to be a great deal of "cognitive activity" which must accompany these motor skills. Therefore, for the purpose of achieving this goal, I will classify this domain of learning as both cognitive and psychomotor.

2.2 Performance Context

Once learnt, it is expected that the senior citizen will be able to perform these skills in any context – emergency or non emergency, in which they find themselves.

2.3 Instructional Goal, Substeps, and Skills

A visual representation of the steps, substeps and entry behaviour skills necessary to achieving this goal are represented in Figure 1. Listed below is the verbal description of these steps.

Instructional Goal: Senior citizens will be able to perform the following functions on a MotoRazr™ mobile phone: enter the phone number of a contact into the address book; retrieve a number of a contact and make a call and; end a call.

1. **Enter the phone number of a contact into the address book**
    1.1. Is the phone on?
        1.1.1. Turn on the phone
            1.1.1.1. Know how to turn on the phone
    1.2. Enter the number of the contact
    1.3. Is the number correct?
        1.3.1. If incorrect, correct the number
            1.3.1.1. know how to use the **Delete** function to correct the number
    1.4. Press the **Store** button to create a contact entry
        1.4.1. Know how to identify the **Store** button

1.5. Enter the name of the contact

    1.5.1. Know how to use the keypad to access letters, punctuation and to create spaces

1.6. Is the name correct?

    1.6.1. If incorrect, correct the name of the contact

1.7. Click **Done** to save the entry

    1.7.1. Know how to identify the **Done** button

2. **Retrieve the number of a contact and make a call**

2.1. Click once on the **Menu** Button

    2.1.1. know how to identify the **Menu** button

2.2. Scroll down to the Address book

    2.2.1. Know how to scroll through a menu

2.3. click "Select"

2.4. Type in the first letter of the Contact's name

2.5. Is the Contact's name highlighted?

    2.5.1. If no, type in the next letter of the contact's name

2.6. Click to select the contact's name

2.7. Click the **send** button to call the contact

    2.7.1. Know how to identify the **send** button

3. **End a call**

3.1. Click Once on the **End** button

    3.1.1. Know how to identify the **End** button

Figure 1: Visual Representation of Steps, Substeps and Entry Behaviour Skills

3 Learner Analysis

3.1 Description of Learners

The primary learners for this module will be three senior citizens who live at the Newport condominium in Lake Park. In all cases, they are considered to be "shut-ins" due to disability, leaving home in some cases only to go to the doctor or to the bank. They primarily are alone during working hours.

Table 1: Description of Learners

Information Categories	Data Sources	Learner Characteristics
1. **Entry behaviors**	Interview target learners; Pre-test and observation	Learners: 1. can turn on a phone 2. can read the display 3. can recognize basic features on the display, for example the time, the date etc. 4. Basic computer skills
1. **Prior knowledge**	Interview	In all cases learners have owned and/or used older model cell phones, as a result the basic concept of mobile phone technology is familiar to all learners. Learners have never been formally taught how to use a cell phone and past experience has been "learn-as-you-go"
2. **Attitudes toward content**	Interview	Learners show positive attitudes towards acquiring this skill. They believe that this skill is essential, especially in the case of making emergency calls.
3. **Attitude toward potential delivery system**	Interview	Learners have expressed that they prefer individual rather than group training. This environment they see as conducive to meeting their individual needs.
4. **Motivation**	Observation and Interview	Highly motivated. Learners have expressed that once taught, they believe could master the task and repeat it without assistance.
5. **Educational and**	Interview	All learners have at least a college education, some have post-graduate qualifications.

Information Categories	Data Sources	Learner Characteristics
ability levels		
6. **Learning preferences**	Interview Observation	Learners prefer individual instruction rather than a group environment. They prefer not to be tested; rather they have asked the instructor to be available if they have problems in the post-training period.
7. **Group characteristics**	Secondary Research Sources; Observation	**Heterogeneity**: The target audience is categorized as elderly. They are all retired women who experience challenges with their eyesight and some motor skills are diminished. They all live in the same building complex. **Size**: 3 persons in total will participate in the training exercise. **Overall Impression**: For training to be effective, the trainer must display characteristics of patience and empathy with the learners. The trainer must expect to repeat tasks and instructions a number of times before the skill is learned. Training will only be effective if learners are subsequently assessed.

4 Description of Performance Context

4.1 Instructor Support

As this skill is expected to be used in any environment, learners will unlikely have access to the instructor past the initial training and assessment period. As they use this new skill, the provision of attractive and easy to use job aids have been identified as one way of providing continued support to the learners. It is also expected that learners could ask for help from anyone, as in some cases, inability to perform the task may be related to diminished physical or mental capacity over time, rather than some skill deficiency.

4.2 Social Aspects to the Environment

The environment is difficult to predict with any certainty. Based on the current situation of all learners, it is most likely that the skill will be used at home. In these cases, the learner may be alone for a long duration. In a public environment, such as a hospital, family gathering or a bank, the learners will be surrounded by people and with it may be the inherent distractions of noise, for example. These environments are not expected to reduce the ability of the learners to perform the task.

4.3 Physical Aspects to the Environment

Again, this is difficult to predict however the performance of the skill is relatively easy and can be replicated in almost any environment. At home, it is important that the learner be aware of how to charge the cell phone periodically so that the phone is functioning when needed. This skill however goes beyond the scope of the training, and should probably be incorporated at some point.

4.4 Relevance Of Skills To The Learning Environment

In all cases the targeted learners have identified that it is a necessary skill, further reducing the learner's dependence on others in a public environment.

5   Description of the Learning Context

All training will be conducted individually in the comfort of each learner's apartment. Because they all belong to the same complex, it can be assumed that the layout will be similar. The training should preferably be carried out in a sitting area, and individual access to the named model phone is essential. In the case of cognitive skills, the participant will be exposed to a PowerPoint learning module and post test and for the psychomotor skills, the instructor will deliver face to face instruction to the learners.

5.1   Compatibility of Site with Instructional Requirements

The site is compatible for two reasons: first, in all cases learners have states a preference for individual instruction, and second, their physical limitations dictate that the home environment is the best place to conduct training.

5.2   Adaptability of Site to Simulate Other Environments

The inherent nature of the task allows for the replication of learnt skills in any other environment. As a result, it is unforeseeable that the site would need to be adapted.

5.3   Adaptability of Site for Delivery Approaches

As mentioned above, a sitting area is preferable for the instruction, but any room in the apartment will be sufficient. Ultimately the learner's physical/mental capacity will determine where and how the instruction is delivered. This cannot be anticipated in advance.

5.4   Learning Site Constraints

All sites have been accessed While the site layout can be assumed to be similar, the environment cannot. There may be distractions of physical clutter, noise from a television or radio, poor lighting and the like. However, these distractions should be manageable in all circumstances.

6 Performance Objectives for Instructional Goal

Table 2: Performance Objectives for Step One

Step One	Matching Performance Objective
1.1 Ensure that the phone is on	1.1 Using a Razr ™ Mobile phone (CN), senior citizens will be able to correctly (CR) establish if the phone is on (B). If necessary, they will also successfully(CR) turn on the phone (B).
1.2 Enter the number of the contact	1.2 Using a Razr ™ Mobile phone (CN), senior citizens will be able to correctly (CR) enter the number of the contact (B).
1.3 Verify that the number is correct	1.3 Referring to the number of the contact which they have just entered (CN), senior citizens will be able to correctly (CR) verify if the contact's number is correct (B). If necessary, they will correctly(CR) use the delete button to correct the contact's number (B).
1.4 Press the Store button to enter a contact	1.4 Using a Razr ™ Mobile phone and referring to the correct number of the contact which they have entered (CN), senior citizens will correctly (CR)identify and press the store button to enter the contact's number into the address book (B)
1.5 Enter the Name of the contact	1.5 Using a Razr ™ Mobile phone and referring to the correct number of the contact which they have entered (CN), senior citizens will use the keypad to correctly (CR)enter the name of the contact using letters, punctuation and space functions (B).
1.6 Verify that the name is correct	1.6 Referring to the number and the name of the contact (CN), senior citizens will successfully (CR) verify if the information, both name and number of the contact is correct (B).
1.7 Click Done to save the entry	1.7 Using a Razr ™ Mobile phone and referring to the correctly entered name and number of the contact (CN), senior citizens will be able to correctly(CR) identify and press the done button to save the entry (B).
Goal: Enter the name and number of a contact into the address book.	**Terminal Objective:** Using a Razr™ Mobile phone in any given context (CN), senior citizens will be able to successfully(CR) enter the name and number of a contact into the address book (OB).

Table 3: Performance Objectives for Step Two

Step Two	Matching Performance Objective
2.1 Click once on the Menu Button	2.1 Using the Razr ™ Mobile phone (CN) senior citizens will be able to correctly (CR) identify and press the Menu button to access the phone's menu items (B).
2.2 Scroll down to the Address Book	2.2 Having accessed the menu items (CN) senior citizens will successfully (CR) scroll through the menu to the address book item (B).
2.3 Click Select	2.3 Having located the address book item (CN) senior citizens will successfully (CR) click the select button (B).
2.4 Type in the first letter of the Contact's Name	2.4 Using the Razr ™ Mobile phone (CN) senior citizens will successfully(CR) type in the first letter of the contact's name (B).
2.5 Ascertain if the contact's name is highlighted	2.5 Referring to the information on the screen (CN) senior citizens will successful (CR) ascertain if the correct contact's name is highlighted (B). If necessary, they will successfully (CR) type each successive letter of the contact's name until the correct name is highlighted (B).
2.6 Click to select the contact's name	2.6 Using the Razr ™ Mobile phone and using the correctly highlighted name on the screen (CN) senior citizens will correctly (CR) click the select button to select the contact's name (B).
2.7 Click the send button to call the contact	2.7 Using the Razr ™ Mobile phone (CN) senior citizens will correctly (CR) identify and press the send button to call the contact (B).
Goal: Retrieve a number of a contact and make a call.	**Terminal Objective**: Using a Razr™ Mobile phone(CN) in any given context (CN), senior citizens will be able to successfully(CR) retrieve a number of a contact and make a call (OB).

Table 4: Performance Objectives for Step Three

Step Three	Matching Performance Objective
3.1 Click once on the End Button	3.1 Using the Razr ™ Mobile phone (CN) senior citizens will correctly (CR) identify and press the End button to end a call (B)
Goal: End a call	**Terminal Objective**: Using a Razr™ Mobile phone(CN) in any given context (CN), senior citizens will be able to successfully(CR) end a call (OB).

7 Description of CRT Assessment Instruments

7.1   Rationale

The practice of testing seniors is particularly challenging, as issues of cognitive recall and psychomotor challenges may arise. Another issue may be the motivation of the senior to get through the assessment, after instruction is completed. Therefore the timing of these assessments in relation to instruction has to be considered. Additionally, the idea of being tested may also pose a motivational challenge as they probably have not been assessed for any skill in a particularly long time.   Therefore a conflict arises, because assessment is the only way to know if seniors have developed this essential skill. The compromise therefore requires that the tests be fun and creative, drawing the attention away from the fact that the participant is being assessed and focused on the goal of completing the exercise.

Figure 1 seeks to match the pre-test, practice and post test to the instructional goals outlined in the previous exercise.
1. **Pre-test:** One pretest will be administered to ensure that seniors are performing at the entry level behavior. They will be required to successfully demonstrate how to turn on the phone.
2. **Practice Test:**
   a. **Practice test – Cognitive Skills:** Seniors will be expected to successfully identify the following buttons on the phone: delete; store; menu; send and end. This is to be in the form of a self assessment and administered at the end of cluster 1 instruction (see table 9)
   b. **Practice test - Psychomotor Skills:** Seniors will be expected to successfully demonstrate the following skills: use the delete button; use the keypad to type characters and spaces and use controls to scroll through a menu. This test should be administered at the end of cluster 2 instruction (see table 9)
3. **Post test – Psychomotor Skills** (**Task related):** Seniors will be expected to successfully demonstrate the following skills and their requisite sub-skills: to enter the phone number of a contact into the address book; retrieve the number of a contact and make a call and end a call. This test should be administered at the end of cluster 3 & 4 instruction. (see table 9)

7.2   Mastery levels

Seniors are expected to show mastery of these skills 100% of the times they perform it, as a result the participants are expected to receive a YES for each of the steps and sub steps listed on the checklists shown in tables 5-7.   Due to the nature of the exercise there will be no grade administered for successful completion of the test, however for motivation, seniors will help determine how they are rewarded on successful completion of the exercises.

7.3   Evaluation Methods

It is important that seniors not feel that they are being evaluated, so that although a checklist is the most efficient way of keeping track of their progress this must be done discretely. A checklist will not be used for the pre-test. Table 5 is the checklist for the cognitive skills practice test. Although the test encourages self assessment, the instructor may fill this out separately to keep track of the participant's progress; Table 6 shows the checklist for the psychomotor skills practice test and Table 7 shows the checklist for the post test for the task related, psychomotor skills.

Figure 2: Pre-test, Practice Tests and Post Tests Assessment Strategies

Practice Test 1 – Cognitive Skills

Objective: Seniors should successfully identify the delete, store, menu, send and end buttons on the phone.

Checklist

Criteria	Yes	No
1. Did the senior correctly identify the Delete button?	☐	☐
2. Did the senior correctly identify the Store button?	☐	☐
3. Did the senior correctly identify the Menu button?	☐	☐
4. Did the senior correctly identify the Send button?	☐	☐
5. Did the senior correctly identify the End button?	☐	☐

Table 5: Checklist for Practice Test for Cognitive Skills

Practice Test 2 – Psychomotor Skills

Objective: Seniors will be expected to successfully demonstrate the following skills: use the delete button; use the keypad to type characters and spaces and use controls to scroll through a menu.

Checklist

Criteria	Yes	No
1. Did the senior correctly use the delete button?	☐	☐
2. Did the senior correctly use the keypad to do the following:		
a. type letters?	☐	☐
b. type numbers?	☐	☐
c. create spaces?	☐	☐
3. Did the senior correctly use the Menu button to scroll through the menu?	☐	☐

Table 6: Checklist for Practice Test for Psychomotor Skills

Post test 1 – Psychomotor Skills – Task Related

Objective: Seniors will be expected to successfully demonstrate how to enter the phone number of a contact into the address book; retrieve the number of a contact and make a call and end a call.

Checklist

Criteria	Yes	No
1. **Enter the phone number of a contact into the address book**		
3.2. Did the senior ensure that the phone is on?	☐	☐
3.3. Did the senior correctly enter the number of the contact?	☐	☐
3.3.1. If incorrect, did the senior use the delete button to correct the number?	☐	☐
3.4. Did the senior correctly press the **Store** button to create a contact entry?	☐	☐
3.5. Did the senior correctly enter the name of the contact?		
3.5.1. Did the senior correctly use the keypad to type characters and create spaces?	☐	☐
3.5.2. If incorrect, did the senior correct the name of the contact?	☐	☐
3.6. Did the senior click **Done** to save the entry?	☐	☐
4. **Retrieve the number of a contact and make a call**		
4.1. Did the senior correctly click once on the **Menu** Button?	☐	☐
4.2. Did the senior correctly scroll down to the Address book?	☐	☐
4.3. Did the senior correctly click "Select"?	☐	☐
4.4. Did the senior correctly type in the first letter of the Contact's name?	☐	☐
4.5. If the contact's name was not highlighted, did the senior correctly type in subsequent letters of the contact's name?	☐	☐
4.6. Did the senior correctly click to select the contact's name?	☐	☐
4.7. Did the senior correctly click the **send** button to call the contact?	☐	☐
5. **End a call**		
5.1. Did the senior correctly click the end button to end the call?	☐	☐

Table 7: Checklist for the Post Test for Task Related Psychomotor Skills

8 Delivery System Description and Justification

The instructional material will take two main forms. There are two main types of skills which are being taught to the participants: cognitive and psychomotor skills. The psychomotor skills are further broken down into function and task related skills. The cognitive skills require recall of the phone's buttons and main features, this instruction is going to primarily take the form of computer based instruction using Microsoft PowerPoint.. It is not web-enabled as it has not been assessed if all participants have internet access or internet skills. However, all participants do have a computer at home. The rationale for using computer based training for cognitive skills is supported by work done by Rebok, Rasmusson and Brandt [2] whose research with seniors and computerized memory training showed significant improvements in recall of memory tasks over traditional forms of instruction. This in the main has been attributed to a range of audio-visual features which computer based training provides over traditional face to face instruction. With this in mind, computer based instruction has been included as part of the cognitive skills training. The teaching of the psychomotor skills will be handled in face to face instruction, giving participants the opportunity for hands on interaction with the phone.

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[2] Rebok, G.W., Rasmusson, D.X., and Brandt J. Prospects for Computerized Memory Training in Normal Elderly: Effects of Practice on Explicit and Implicit Memory Tasks. *Applied Cognitive Psychology*, 10. 211-223. 1996

9 Description of Learning Components to be Included in Instruction

Table 8: Learning Components for Instruction

Pre-Instructional Activities	
▪ **Motivation**	It has already been established that participants have initiated the need for this training. It must be acknowledged however that motivation levels may vary because of external conditions such as a participant not feeling well at the time of instruction. The responsibility lies with the instructor in consultation with the participant to assess the situation and determine whether to continue with the instruction or assessment.
▪ **Objectives**	Participants will be reminded of the importance of mastering this skill and the objectives of the training will be discussed. It is expected that motivation levels will be high, as in all cases participants initiated the need to develop this skill.
▪ **Entry Behaviors**	It is expected that participants will know how to turn on the phone and correctly identify the button to do so. This will be tested by a pre-instructional test. If it is assessed that these entry behaviors are not known by a participant, both the cognitive and psychomotor skill will be taught as part of the main instruction.
▪ **Student Grouping and Media Selections**	Training will be conducted in individual sessions, as each participant experiences some level of physical challenge or disability. Participants will be informed that instruction will use both face to face instruction for psychomotor skills and multimedia instruction using MS PowerPoint for all cognitive skills. There will be no need to master MS PowerPoint as the design of both the instruction and the test requires minimal computer skills. The computer based training will use both visual and audio instruction. In the case of face to face instruction for the psychomotor skills, the participants will use their phone for instruction, practice exercises and assessments.
Content Presentation	
▪ **Content**	Content will be clustered in the format shown on table 9 below and illustrated in Figure 3.
▪ **Examples**	Built into the instruction are questions which allow the participant to assess if they are doing the steps correctly and to make adjustments as they go through the instruction. See sub-steps: 1.1; 1.3; 1.6; 2.5. in Figure 3. These steps will be

	used in lieu of examples.
Learner Participation	
▪ **Practice Items**	Screen captures of the practice test for cluster 1 is shown in Figure 4, in appendix 1 Other practice exercises related to Psychomotor skills (Clusters 2-4) will be done at the end of face to face instruction and cannot be shown here.
▪ **Feedback**	In the case of the computer based instruction and assessment, participants will receive feedback as they proceed. For example, in the exercise in Figure 4, Appendix 1, participants will only be able to move from frame to frame if they click on the correct button. In the case of face to face instruction, participants will be verbally encouraged by the instructor. It must be noted that the nature of psychomotor skills has feedback inherently built into the instruction as the successful completion of one task is a pre-requisite for another.
Assessment	
▪ **Pre-test**	One pretest will be administered to ensure that seniors are performing at the entry level behavior. They will be required to successfully demonstrate how to turn on the phone.
▪ **Practice tests**	Cognitive Skills: Seniors will be expected to successfully identify the following buttons on the phone: delete; store; menu; send and end. Psychomotor Skills (Function related): Seniors will be expected to successfully demonstrate the following functions: use the delete button; use the keypad to type characters and spaces and use controls to scroll through a menu.
▪ **Post-test**	Psychomotor Skills (Task related): Seniors will be expected to successfully demonstrate the following skills and their requisite sub-skills: to enter the phone number of a contact into the address book; retrieve the number of a contact and make a call and end a call.
Follow-Through Activities	
▪ **Memory Aid**	An 8 ½" x 11" handout of an image of a **labeled** MotorRazr™ Mobile Phone interface A one page memory jog for Psychomotor task-related steps. See Appendix 7
▪ **Transfer**	Participants will be expected to perform all steps and sub-steps successfully at the end of instruction and assessment and most importantly, in the post-instruction period. Their ability to do so will not only demonstrate their ability to master both cognitive and psychomotor skills related to the task, but assess the overall effectiveness of the instruction.

Table 9: Performance Objectives Cluster

Cluster	Category	Instructional Goal Steps
1	Cognitive	Know how to identify the following buttons: Delete; Store; Done; Menu and End. 1.3.1.1.1; 1.4.1; 1.7.1; 2.1.1; 2.7.1
2	Psychomotor: Function-Related	Know how to use buttons to clear text; enter characters and spaces and to scroll through menus. 1.3.1.1; 1.5.1; 2.2.1
3	Psychomotor: Task Related[3]	Enter the phone number of a contact into the address book: 1.2; 1.3.1; 1.4; 1.5; 1.1.6.1; 1.7
4		Retrieve a number of a contact and make a call and end a call. 2.1; 2.2; 2.3; 2.4; 2.5.1; 2.6; 2.7; 3.1

[3] Instruction has been separated to accommodate the participants and how much instruction they may be able to handle at one time. If it assessed that everything can be covered together, clusters 3 and 4 can be easily combined.

10 Sample Instructional Content

Table 10: Sample Instructional Content for Cluster 1

Cluster	1
Category	Cognitive

Student Grouping and Media Selections: Participants will be taught as individuals. This instruction will be delivered using a PowerPoint show. The show is an auto start show, but the pace of the delivery is controlled by the participant, who has to press enter every time they wish to move on to the next slide. The show also contains options for the participant to review the instruction or take an exercise (See Figure 5, in appendix 1 for sample screen captures)

Sub Steps	Tasks
1.3.1.1.1.	Know how to identify the Delete Button
1.4.1	Know how to identify the Store Button
1.7.1.	Know how to identify the Done Button
2.1.1	Know how to identify the Menu Button
2.7.1	Know how to identify the End Button

Content Presentation	▪ Participants will be shown using audio and visual media, where to locate the above named buttons on their phone. They will be asked to look at their own phone and make sure they can find the same buttons. ▪ Participants will be taught conceptually what each button will allow them to do.
Student Participation	▪ Participants will be required to insert the CD into the CDRom Drive. They will be prompted to press the Enter Key on their keyboard whenever they are ready to move ahead with their instruction. ▪ Participants will be allowed to review the instruction or perform a short quiz. Finishing the quiz will also serve as a self-assessment for cluster 1. ▪ Participants will indicate to the instructor when they are ready to move on to Cluster 2 instruction.

Figure 3: Performance Objective Clusters for Instructional Strategy

Table 11: Sample Instructional Content for Cluster 2

Cluster 2	
Category Psychomotor – Function-Related	
Student Grouping and Media Selections: Participants will be taught as individuals. This instruction will be delivered using face to face interaction. The MotoRazr™ Phone will be used as an aid in these sessions.	

Sub Steps	Tasks
1.3.1.1.	Know how to use the Delete Function
Content Presentation	▪ Building on sub-step 1.3.1.1.1, participants will be shown that each successive click of the delete key will remove a character, punctuation mark or space on the phone's interface. It will be demonstrated that the delete key removes each successive character to the left.
Student Participation	▪ The instructor will enter random numbers on the phone and the participant will use the delete key to erase the number on the screen. This exercise can be practiced until the has mastered the Delete function.

Sub Step	Task
1.5.1	Know how to use the keypad to type characters and create spaces
Content Presentation	▪ Building on Steps 1.3.1.1. and 1.3.1.1.1, participants will be introduced to the phone's key pad. It will be demonstrated that each successive click of a button will produce a different character or number on the key pad. For example on the number "2" key, the first click will enter "a", the second, "b" and the third, "c" and the fourth, "2". ▪ The instructor will demonstrate the use of the number "0" key to enter spaces between character. It will be shown that each successive click of the 0 key adds a space. ▪ The instructor will remind the participant that they can use the delete key to correct any errors in text and numbers.
Student Participation	▪ Participants will be expected to successfully enter basic words and numbers and spaces to demonstrate mastery of the psychomotor skill. If they make a mistake, Participants will be expected to use the delete key to remove the incorrect character and enter the correct character instead. This exercise can be practiced until the participant has mastered this psychomotor function.

Sub Step	Task
2.2.1	Know how to scroll through a Menu
Content Presentation	▪ Building on sub step 2.1.1, participants will be shown how to click the menu button to access the phone's menu items. ▪ The instructor will demonstrate how to use the up and down arrows on the Menu button to move through the menu until the address option is available.
Student Participation	▪ Participants will be expected to master using the up and down arrows on the menu button to scroll through the menu selections. This exercise can be practiced until the participant has mastered this psychomotor function

Table 12: Sample Instructional Content for Clusters 3&4

Cluster	3 & 4
Category	Psychomotor – Task-Related

Student Grouping and Media Selections: Participants will be taught as individuals. This instruction will be delivered using face to face interaction. The MotoRazr™ Phone will be used as an aid in these sessions.

Sub Steps	Tasks
1.1	Using a Razr ™ Mobile phone (CN), senior citizens will be able to correctly (CR) establish if the phone is on (B). If necessary, they will also successfully(CR) turn on the phone (B).
Content Presentation	▪ This has been established as an entry level behavior and is pre-tested. If the participant cannot perform this function **then** this skill is to be taught at this point. ▪ Building on sub step 3.1.1 delivered in cluster 1, it will be demonstrated that Participants can hold the End Key for 3 seconds to turn the phone on and off.
Student Participation[4]	▪ Participants will be expected to successfully demonstrate this skill either on previous entry level knowledge or based on the instruction delivered above.

Sub Step	Task
1.2	Using a Razr ™ Mobile phone (CN), senior citizens will be able to correctly (CR) enter the number of the contact (B).
Content Presentation	▪ Participants will be shown how to enter the number of a contact. ▪ Participants will be shown that there is no need to leave spaces in between numbers, as the phone formats numbers automatically.
Student Participation	▪ Participants will be asked to enter the name of a contact into the phone.

Sub Step	Task
1.3	Referring to the number of the contact which they have just entered (CN), senior citizens will be able to correctly (CR) verify if the contact's number is correct (B). If necessary, they will correctly(CR) use the delete button to

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[4] It is expected that participants will repeat these exercises until they have mastered the psychomotor skill.

correct the contact's number (B).

Content Presentation	▪ Building on sub steps 1.3.1.1.1; 1.3.1.1 and 1.3.1, participants will be shown both a good and bad example. In the case of the latter, participants will be shown the use of the delete key in correcting the phone number.
Student Participation	▪ Participants are expected to verify the number and if it is incorrect, they will be expected to use the delete button to correct the number.

Sub Step	Task
1.4	Using a Razr ™ Mobile phone and referring to the correct number of the contact which they have entered (CN), senior citizens will correctly (CR) identify and press the store button to enter the contact's number into the address book (B)
Content Presentation	Building on sub steps 1.3 and 1.4.1, the instructor will demonstrate how to click on the Store button to enter the contact's number into the address book.
Student Participation	▪ Participants will use the number they entered in the previous step and click on the store button to enter the contact's number into the address book.

Sub Steps	Tasks
1.5	Using a Razr ™ Mobile phone and referring to the correct number of the contact which they have entered (CN), senior citizens will use the keypad to correctly (CR)enter the name of the contact using letters and space functions (B).
Content Presentation	▪ Building on sub steps 1.4, 1.5.1 and 1.3.1.1.1, the instructor will demonstrate how to enter the name of the contact using letters and the space function. ▪ The instructor will show both a good and bad example. In the case of the latter, the instructor will reiterate the use of the delete key in correcting the contact's name.
Student Participation	▪ Participants will use the keypad to correctly type in the name of their contact. If an error is made, participants are expected to use the delete key to erase the incorrect characters and make the necessary corrections.

Sub Step	Task
1.6	Referring to the number and the name of the contact (CN), senior citizens will successfully (CR) verify if the

information, both name and number of the contact is correct (B).

Content Presentation	▪ There is no need to demonstrate anything during this step of instruction. The instructor will ask the participant to verify the information.
Student Participation	▪ Participants will be asked and expected to verify the name and the number of the contact. It is expected that will be verified against information which is already written down.

Sub Step	Task
1.7	Using a Razr ™ Mobile phone and referring to the correctly entered name and number of the contact (CN), senior citizens will be able to correctly(CR) identify and press the done button to save the entry (B).
Content Presentation	▪ Building on sub step 1.7 and 1.7.1, the instructor will demonstrate how to click the Done button to save the contact's entry.
Student Participation	▪ Participants are expected to correctly identify the Done button and click it once to save the contact's entry.

Sub Step[5]	Task
2.1	Using the Razr ™ Mobile phone (CN) senior citizens will be able to correctly (CR) identify and press the Menu button to access the phone's menu items (B).
Content Presentation	▪ Building on Sub step 2.1.1, the demonstrator will remind the participant how to use the Menu button to access the phone's menu items
Student Participation	▪ Participants will be expected to click once on the menu button to access the phone's menu items.

Sub Steps	Tasks
2.2	Having accessed the menu items (CN) senior citizens will successfully (CR) scroll through the menu to the address book item (B).
Content Presentation	▪ Building on Sub step 2.2.1, the instructor will remind the participant how to scroll through the menu items until they come to the address book item.
Student Participation	▪ The participant will be expected to successfully scroll through the menu and stop at the address book item.

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[5] This is the start of cluster 4. The instructor in consultation with the participant may decide if to continue at this time or to continue instruction at another time.

Sub Step	Task
2.3	Having located the address book item (CN) senior citizens will successfully (CR) click the select button (B).
Content Presentation	▪ Building on sub step 2.1.1, the instructor will demonstrate how to use the menu button to select a menu item by clicking once on the button.
Student Participation	▪ The participant is expected to successfully click on the menu button once to select the address book option.

Sub Step	Task
2.4	Using the Razr ™ Mobile phone (CN) senior citizens will successfully(CR) type in the first letter of the contact's name (B).
Content Presentation	▪ Building on Sub step 1.5.1, the instructor will remind the participant of how to use the key pad to type in characters.
Student Participation	▪ The participant is expected to successfully type in the first character of the contact's name created in sub step 1.7

Sub Step	Task
2.5	Referring to the information on the screen (CN) senior citizens will successful (CR) ascertain if the correct contact's name is highlighted (B). If necessary, they will successfully (CR) type each successive letter of the contact's name until the correct name is highlighted (B).
Content Presentation	▪ The Instructor will ask the participant to verify if the name is the same as the one created in sub step 1.7. If it is not, the instructor will demonstrate how to type in each successive letter until the contact's name created in step 1.7 is highlighted on the screen.
Student Participation	▪ Participants will be expected to verify if the name is the same as the one created in sub step 1.7. ▪ If not, participants will be expected to use the key pad to type in successive letters of the contact's name until they can verify that the name is highlighted on the screen.

Sub Steps	Tasks
2.6	Using the Razr ™ Mobile phone and using the correctly highlighted name on the screen (CN) senior citizens will correctly (CR) click the menu button to select the contact's name (B).
Content Presentation	▪ Building on sub step 2.1.1, the instructor will demonstrate how to use the menu button to select the name

of the contact, by clicking on the menu button once.

Student Participation	▪ Participants will be expected to successfully click the menu button once to select the name of the contact created in sub step 1.7

Sub Step	**Task**
2.7	Using the Razr ™ Mobile phone (CN) senior citizens will correctly (CR) identify and press the send button to call the contact (B).
Content Presentation	▪ Building on sub step 2.7.1, the instructor will demonstrate how to use the send button to call the contact, selected in sub step 2.6.
Student Participation	▪ Participants will successfully click once on the send button to call the contact selected in sub step 2.6

Sub Step	**Task**
3.1	Using the Razr ™ Mobile phone (CN) senior citizens will correctly (CR) identify and press the End button to end a call (B)
Content Presentation	▪ Building on Sub step 3.1.1, the instructor will demonstrate how to use the End button to end the call.
Student Participation	▪ Participants will successfully click once on the end button to end the call.

11 Description and Justification of the Selection of Subject Matter Expert and Learner Population

11.1 The Subject Matter Expert

By definition, a Subject Matter Expert (SME) is a professional whose expertise is in a particular field of application, but may be without technical project knowledge. Dick et al (2005) explicitly suggest the role of the SME in the formative evaluation process. They state that an SME can be drawn from a pool of experts who are either highly skilled in the content area of the instruction **OR** a specialist in the type of learning outcome involved (p. 282). The former, they state can comment of the accuracy and currency of instruction whilst the latter can assess the instructional strategy.

Decisions about an appropriate SME for this project were driven by the Instructional Designer's own limitations in this project. **Whilst she** has had considerable training and experience in the area of technical training, she has had no experience in teaching the target senior population, **Therefore finding an SME with this experience was an imperative.** As a result, little consideration was given to finding someone who was an expert with mobile phones. The decision about the SME was as much about the assessment of the relevance content of the material, as the assessment of the format and presentation of the material to the target populace.

Training consultant, Don Clark suggests four areas[6] which SMEs can be consulted on or held responsible:
- Providing the performance objectives for the given audience
- Ordering of tasks which include the order of performance steps, are to be performed
- The appropriate use of technical-jargon,
- The rating of what is acceptable performance

This list was useful both in assisting in the decision of choosing the SME but also in the decision of what they will assess for this training module. Two Subject Matter Experts were chosen to review this material, the first was chosen because of her experience in the area of training the elderly in technical content, and could best advise on the appropriateness of the materials developed for both cognitive and psychomotor instruction. The second SME has had significant experience in editing written material and designing material for online media. Her role was to review the material for logical flow, format and grammar issues that may be problematic. Profiles of both SMEs are provided below.

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[6] http://www.nwlink.com/~donclark/hrd/sme.html

11.1.1 Profile: Jane Washburne

Jane Washburne is assistant to the Dean of Graduate Studies at IIT. With qualifications and experience in Computer Science, Jane has had end user training experience which spans two decades. She has conducted software training with senior citizens in classes upward of 15 participants.   However, she prefers one on one training however as it gives her an opportunity to find out what they really want to learn. She has done extensive research in back end development for online training programmes, and is currently a Master's degree candidate in Technical Communication at IIT.

11.1.2 Profile: Morgan Frederick

Morgan Frederick is enrolled in the certificate programme in the Technical Communication Programme at IIT. As Assistant Director of Graduate Admissions at IIT, she is responsible for the redesign of the IIT Graduate Admissions website. She has a Masters degree in Multicultural Communications and has had considerable exposure to dealing with new learners who range in age, culture, language and the like.

11.2 The Target Learner Population

Dick et al (2005) suggest that the target learner population best represent the range of ability in the group. One person was chosen to represent the target learner population. She falls within in the age range of the target population and displays similar cognitive and psychomotor abilities.   Her profile is given below.

11.2.1   Profile: Betty Jefferson

Betty Jefferson is a 70 year old retired school teacher who lives in a senior citizen retirement home. She has two daughters, one of whom lives out of state. At the home she has her own land line but one of her daughters also purchased her a mobile phone as well. Betty rarely uses the phone as she complains it is difficult for her to see the numbers on the interface and she never remembers what to do. In case of an emergency, she has been trained to use the on-call button in her room. She has rarely used her phone since she got it last Christmas. Her motivation to learn how to use the phone is excellent. Betty was diagnosed arthritis since the age of 55. Betty has access to a computer which is not in her room and she says that she fairly accustomed to using the machine to send emails to her family.

12 Description of the Materials to be Assessed

A summary of the materials to be assessed by the SME and Target Population is given below in Table 13. The instructional clusters which these materials are related to are shown in Table 9. Samples of all materials are given in the appendices 1-7.

Table 13: Materials to be assessed by SMEs and Target Learner

Materials	Cluster	See Appendix	Subject Matter Experts		Target Learner
			Jane Washburne	Morgan Frederick	Betty Jefferson
PowerPoint Cognitive Training Module	1	1	✓	✓	✓
Cognitive Practice Test Assessment Form	1	2	✓		
Sample Script for Psychomotor Task Related Module	2	3	✓		✓
Psychomotor Practice Test Assessment Form	2	4	✓		
Sample Script for Psychomotor Function Related Module	3	3	✓		✓
Psychomotor Post Test Assessment Form	3	6	✓		
Job Aid – phone button memory jog	1-3	7	✓		✓

13 Description of the Formative Evaluation Process

The formative evaluation process will differ for the all of the participants and are summarized below.

Table 14: Formative Evaluation Process

	Subject Matter Expert Jane Washburne	Subject Matter Expert Morgan Frederick	Target Learner Betty Jefferson
Process	▪ SME will receive a package which includes appendices 1-10 and a CD. ▪ This assessment is not done in conjunction with the instructional designer.	▪ SME will view materials at the Usability Testing Center at IIT where her test will be recorded. ▪ This assessment will be done in conjunction with the instructional designer who will interview the SME after the assessment	▪ This assessment will be conducted on a laptop in the learner's room. ▪ It will be facilitated by the trainer

Instructions	▪ SME will receive a cover letter, (see Appendix 8). This letter outlines :
	  ▪ the materials included in the evaluation package
	  ▪ the objective of the instruction and;
	  ▪ a brief audience analysis
	▪ The SME will be asked to fill out the assessment questionnaires and return them to the Instructional Designer
		▪ This will be a face to face session so all instructions will be given to the SME directly.
		▪ The Instructional Designer using the Form in Appendix 9, will interview the SME and solicit feedback and discuss the materials.
			▪ This is a face to face session so all the instructions will be given to the target learner by the trainer.

Concerns/Issues	▪ The SME will be required to assess all issues related to **content**, **delivery** and **format** for ALL materials described in the previous section.	▪ The SME will be required to assess all issues related to **content**, **format** and **delivery** for the PowerPoint module ONLY.	▪ Since this assessment is of a target learner, both **formal** and **informal** feedback will be solicited. The learner will not be exposed to any of the test

	Subject Matter Expert Jane Washburne	Subject Matter Expert Morgan Frederick	Target Learner Betty Jefferson
	▪ In particular, **familiarity with teaching the target group** is the area of expertise for this SME and as such she will be exposed to all modules developed for instruction ▪ The SME was asked informally to assess the suitability of the trainer's voice for clarity and appropriateness.	▪ In particular, issues of **grammar** and **organization** were areas of expertise for this SME. Part B Appendix 9 will be especially useful to solicit feedback for individual slides.	assessment forms as in previous documentation it was indicated that this approach was too formal. ▪ This assessment is not meant to be lengthy as the context will most likely not allow it, so the strength of this assessment will lie in the trainer's observations.
Materials given to Evaluators	▪ See Appendix 9 and 10	▪ See Appendix 9	▪ See Appendix 9 and 10

14 Description of Methods for Evaluation

The method of evaluation will be primarily through feedback forms to be provided to the SMEs and the target learner. In all cases some informal feedback will also be solicited in the form of a debriefing session. An additional element of observation on the part of the trainer is necessary for the assessment of the target learner and notes will be taken by the trainer. The table below shows samples of questions to be used to solicit feedback for presentation of **content, learner participation and assessment instruments**. All feedback forms are available in Appendix 9 & 10.

Table 15: Evaluation Methodology

Methods for Evaluating	Subject Matter Expert Jane Washburne	Subject Matter Expert Morgan Frederick	Target Learner Betty Jefferson
Presentation of Content	**Cognitive[7]:** ▪ Is the sequence of material logical? ▪ Is the color scheme appropriate for audience? ▪ Is the font size adequate? ▪ Do the voice and visuals match?	**Cognitive:** ▪ Is the sequence of material logical? ▪ Is the color scheme appropriate for audience? ▪ Is the font size adequate? ▪ Do the voice and visuals match? ▪ Are there any grammatical or mechanical problems?	**Cognitive:** Ability to complete the PowerPoint training and quiz. Specific questions about the job aid and its usefulness is important. **Psychomotor:** Observation and informal interview to be conducted after session. Appendix 9 & 10 to be completed[8]
Learner Participation	**Cognitive** ▪ Is this an effective tool for teaching seniors? ▪ Do learners have adequate opportunity to review material? ▪ Are participants given enough time to assimilate the information presented?	▪ Not Assessed	**Cognitive:** Observation and Notes to be taken by trainer during the session. **Psychomotor:** Observation and informal interview to be conducted after session. Appendix 9 & 10 to be completed
Assessment Instruments	**Cognitive & Psychomotor** ▪ Does the assessment match the	▪ Not Assessed	**Cognitive & Psychomotor:** Appendix 9 & 10 to be completed.

[7] The methods used to assess cognitive module included aspects of content, delivery and format. Whilst this is not strictly the case of all Formative Evaluations, because instruction was presented in an electronic medium, it was important to assess all three characteristics.
[8] The questions in Appendix 9 & 10 will be reworded slightly to be more appropriate for the target population learner. This rewording will be added in the portfolio.

Methods for Evaluating	Subject Matter Expert Jane Washburne	Subject Matter Expert Morgan Frederick	Target Learner Betty Jefferson
	instruction adequately ■ Is the order of the questions effective ■ Is the rate of delivery adequate ■ Are participants given enough time to assimilate information before testing ■ Is the color scheme appropriate for audience? ■ Is the font size adequate? ■ Do the voice and visuals match?		

15 Results of Formative Evaluation

15.1 Summary of SME Feedback

Below are the general comments provided by the SMEs. All feedback forms are provided in Appendix 11.

Table 16: SME Feedback

Materials	Comments
PowerPoint Cognitive Training Module	▪ Slide 3 – the information could have stayed on the screen longer ▪ Slide 3 – the button identifiers could remain on the screen. ▪ Voice and visuals some times did not match ▪ Voice is soothing and I think that Seniors will like and understand it.
Cognitive Practice Test Assessment	▪ The best part about offering it on a CD is that they can run it through as many times as they like
Sample Script for Psychomotor Task Related/Function Related Module	▪ The objectives are simple and clear and appropriate for the targeted audience. ▪ No unnecessary use of jargon, clean script
Psychomotor Practice Test and Post Test Assessment	▪ Assessment instrument is clear and can adequately rate performance.
Job Aid – phone button memory jog	▪ Job Aid is adequate for the audience

15.2 Summary of Target Learner Observation/Feedback

Table 17: Target Learner Feedback

Materials	Comments
PowerPoint Cognitive Training Module	▪ Thought it confusing that when the word "click Enter" on the keyboard was used in the instruction to advance the slides. ▪ Slide 3, thought that the button descriptions came up too fast. ▪ Participant had no problems starting the CD
Cognitive Practice Test Assessment	▪ Completed the quiz successfully. ▪ Liked the personalization in the quiz.
Sample Script for Psychomotor Task Related/Function Related Module	▪ Did not have an opportunity to assess
Psychomotor Practice Test and Post Test Assessment	▪ Did not have an opportunity to assess
Job Aid – phone button memory jog	▪ Thought the Job Aid was a wonderful idea

16 Identification of Major Revision Plans

The formative evaluation exercise was useful as it provided the designer with significant insights and suggestions to improve the content and assessment strategy for this project. Unfortunately, circumstances did not allow the target learner to be taught samples from clusters 2 and 3, and time did not permit the instructor to return for its completion. The revision plans therefore are based on the exercises that were completed. These include:

Cognitive Training Module & Assessment:
1. Slide 3 consistently proved to be problematic. This slide was reformatted to include:
   a. Longer time on each button
   b. Each arrow remains on the screen
   c. A voice reminder that the memory aid is a useful tool at this juncture.
2. Slide 4 had inconsistencies where the voiceovers and the words didn't match, these were adjusted accordingly
3. Voiceovers were re-recorded to consistently use the words "press enter now" instead of "click enter now." The rationale is that the work "click" is commonly associated with a mouse action, whereas the word "press" is better representative of a keyboard stroke.
4. It was also pointed out that participants could incorrectly click on a button and move ahead in the quiz. In trying to address this is was discovered that the only way to move forward on any slide the mouse click. Even if timings are used, the mouse click always overrides timed slides, as a result, a participant could incorrectly click on a "button" and still advance. A solution to this has not been found, but a workaround was implemented, while not ideal, the instructions now read: *"You are going to see a picture of your phone on this screen. I am going to ask you to click on a particular button. A little hand will appear when you have the selected the correct button. Click your mouse when you see the hand, Are you ready? Let's go!"*

Psychomotor Task Related and Function Related Module & Assessment:
1. There have been no recommendations which indicate that these two modules should be revised. In reviewing the instructional module, it was decided that since the instructional designer is also the designated instructor, the sample script would suffice. A complete script would be provided if this material was to be presented by someone else.

17 Appendices
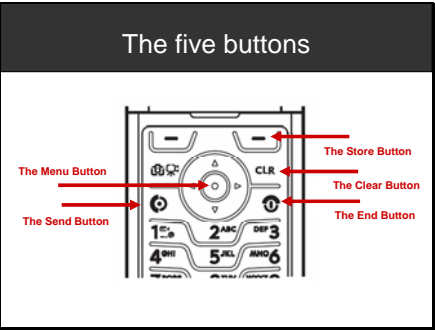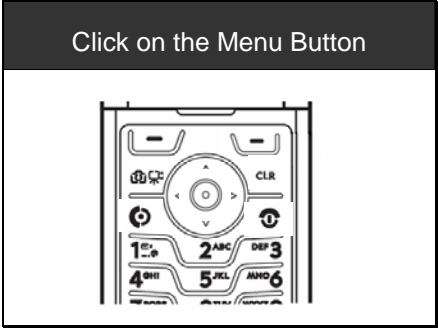
Appendix 1: Sample Materials for Cognitive Instruction

Figure 4: Sample Instruction for Cluster 1 – Cognitive skills

Figure 5: Sample Exercise for Cluster 1 – Cognitive Skills

Appendix 2: Assessment Form for Practice Test for Cognitive Instruction

Objective: Seniors should successfully identify the delete, store, menu, send and end buttons on the phone.

Checklist

Criteria	Yes	No
6. Did the senior correctly identify the Delete button?	☐	☐
7. Did the senior correctly identify the Store button?	☐	☐
8. Did the senior correctly identify the Menu button?	☐	☐
9. Did the senior correctly identify the Send button?	☐	☐
10. Did the senior correctly identify the End button?	☐	☐

Table 18: Checklist for Practice Test for Cognitive Skills

Appendix 3: Sample Script9 for Psychomotor Function-Related Instruction

ID Module	Sample Script	Objective	Materials
Introduction	Hi Peggy, As you may remember, we are going to be learning how to use your mobile phone. Your first exercise which you did on your own taught you about 5 new buttons. Can you tell me how that went?	Reminder about last instruction and assessment	PowerPoint Slides if needed for review
	Great well let's get your phone out and get started with today's exercise. Today we are going to do three things. You are going to learn how to use the delete button, the menu button and how to use your keypad on your phone.	Disclose objectives of module	
1.1.1.1	Can you start by showing me how you turn on your phone?	Testing entry behavior	Phone
1.3.1.1	Great. Now I am going to show you how to use the delete button. I am going to type in some numbers on the screen and then I am going to use the DELETE key to remove the numbers on the screen. (repeat this demonstration as often as necessary) Good, Peggy why don't you try it. Type in four numbers and then use the delete key to remove them.	Demonstrating use of the delete key	Phone Job Aid
1.5.1	Are you ready to move on? Now we are going to learn how to use the keypad to type letters and spaces. Let's take a look at the phone together and see how it works. Let's look at the number 3 key. What letters do you see? Great, A, B and C. It means you click the number 3 key once for A, twice for B, 3 times for C and if you want the number 3 you click the key four times. Let me show you how. Look at the phone and tell me how many time you press the number 8 key to enter the letter V? Great! And which button do you press to enter the letter L? Great Peggy. Now I am going to enter my first and last name on the screen and I am going to put a space in between my names. Do you remember how to delete characters? Try deleting my name and entering your first and last name on the screen? Great, now delete your name.	Demonstrating the use of the keypad for characters and spaces; reminder about the delete key.	Phone Job Aid
Assessment	Instructor fills out Assessment form	Practice Test Assessment	See Appendix 4

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9 This is not a complete script. The intention is to illustrate the tone, the language level and the type of demonstration the participant will be exposed to.

Appendix 4: Assessment Form for Practice Test for Psychomotor Function-Related Instruction

Objective: Seniors will be expected to successfully demonstrate the following skills: use the delete button; use the keypad to type characters and spaces and use controls to scroll through a menu.

Checklist

Criteria	Yes	No
4. Did the senior correctly use the delete button?	☐	☐
5. Did the senior correctly use the keypad to do the following:		
a. type letters?	☐	☐
b. type numbers?	☐	☐
c. create spaces?	☐	☐
6. Did the senior correctly use the Menu button to scroll through the menu?	☐	☐

Table 19: Checklist for Practice Test for Psychomotor Skills

Appendix 5: Sample Script for Psychomotor Function-Related Instruction

ID Module	Sample Script	Objective	Materials
Introduction 1.1.1.1	Hello Again Peggy. Can you remind me what you learnt in the last session. Great. We'll let's get started, what is the first thing we need to check before we begin?	Ensure that the phone is on	Phone
	Great well let's get your phone out and get started with today's exercise. Today we are going learn how to enter your daughter's number, then we're going to call her to say hello and then we're going to end the call. Are you ready?	Personalize the objectives	
1.2 **1.3**	Let's start by entering your daughter's number. You don't have to enter the spaces or dashes in between the numbers, just enter the digits. Why don't you give it a try? Great, before we move on, can you check to make sure the number is correct?	Use of the keypad to enter numbers.	Phone
1.4 **1.5** **1.6**	Excellent now let's store the number, can you click on the store button. You can look at your model phone (job aid) if you need a reminder. Good, now you are expected to type in your daughter's first and last name. We learnt that last time, do you remember how? Let's try it together, I'll enter her first name, you'll put in the space and her last name. Remember it's ok if you make a mistake you can always use the delete key. Great, can you ensure her name is spelt correctly?	Use of the store button; reminder of how to use the keypad to enter characters and spaces	Phone Job Aid
1.7	Excellent, now we need to tell your phone that you are done. Can you press the done key on your phone? You can look your model phone if you need a reminder.	Use of the Done button	Phone Job Aid
Assessment	Instructor fills out Assessment form	Practice Test Assessment	See Appendix 6

Appendix 6: Assessment Form for Practice Test for Psychomotor Task-Related Instruction

Objective: Seniors will be expected to successfully demonstrate how to enter the phone number of a contact into the address book; retrieve the number of a contact and make a call and end a call.

Checklist

Criteria	Yes	No
1. Enter the phone number of a contact into the address book		
1.1. Did the senior ensure that the phone is on?	☐	☐
1.2. Did the senior correctly enter the number of the contact?	☐	☐
1.3. If incorrect, did the senior use the delete button to correct the number?	☐	☐
1.4. Did the senior correctly press the Store button to create a contact entry?	☐	☐
1.5. Did the senior correctly enter the name of the contact?		
1.6. Did the senior correctly use the keypad to type characters and create spaces?	☐	☐
1.7. If incorrect, did the senior correct the name of the contact?	☐	☐
1.8. Did the senior click Done to save the entry?	☐	☐
2. Retrieve the number of a contact and make a call		
2.1. Did the senior correctly click once on the Menu Button?	☐	☐
2.2. Did the senior correctly scroll down to the Address book?	☐	☐
2.3. Did the senior correctly click "Select"?	☐	☐
2.4. Did the senior correctly type in the first letter of the Contact's name?	☐	☐
2.5. If the contact's name was not highlighted, did the senior correctly type in subsequent letters of the contact's name?	☐	☐
2.6. Did the senior correctly click to select the contact's name?	☐	☐
2.7. Did the senior correctly click the send button to call the contact?	☐	☐
3. End a call		
3.1. Did the senior correctly click the end button to end the call?	☐	☐

Table 20: Checklist for the Post Test for Task Related Psychomotor Skills

Appendix 7: Job Aid – Memory Jog for Cognitive Module
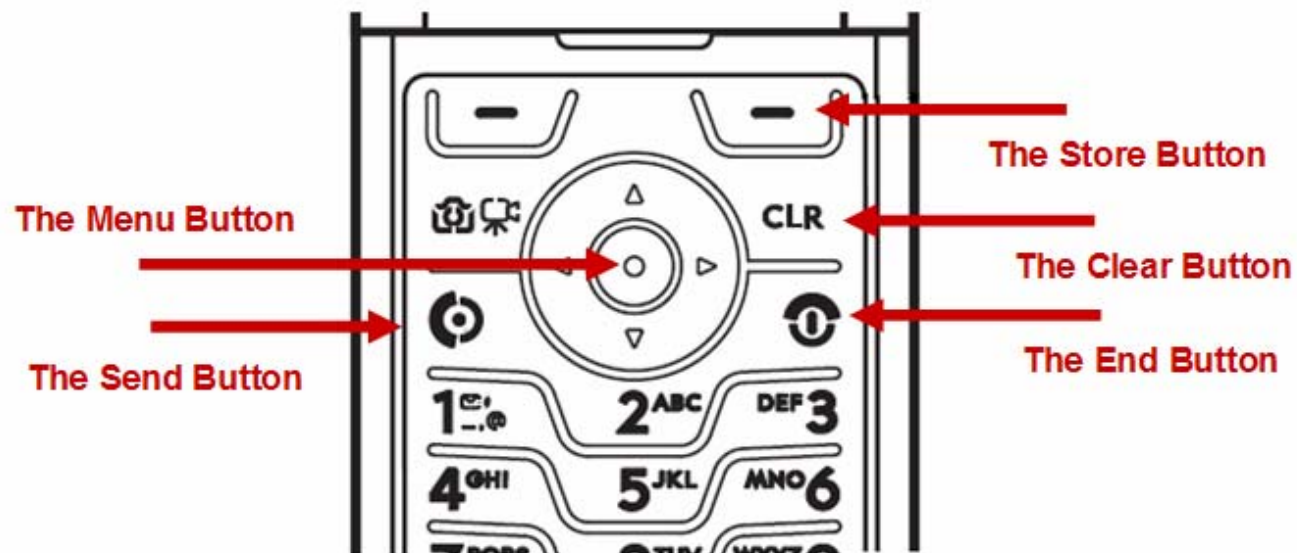
Appendix 8: Sample Formative Evaluation Directions

Dear <Recipient Name>:

Thank you for taking the time to review the following materials and providing me with your feedback and input for any revisions you deem necessary.

I am asking you to review the following:
- One PowerPoint Instructional Module
- Two sample instructional scripts
- Two practice test assessment forms
- One Post test assessment form
- One Job Aid

When you are finished reviewing all the material, I am asking if you can fill out the attached forms. As the Subject Matter Expert in this area of elderly learning, I am also asking if you will make yourself available for an informal interview if I require additional information.

Below is an overview of the instruction goal and a brief audience analysis.

Objective
Senior Citizens, using a Motorazr mobile phone will perform the following functions:
1. Enter the name and number of a contact into the address book.
2. Retrieve a number of a contact and make a call.
3. End a call.

Description of Learners
The primary learners for this module will be three senior citizens who live at the Newport condominium in Lake Park. In all cases, they are considered to be "shut-ins" due to disability, leaving home in some cases only to go to the doctor or to the bank. All learners have access to a computer and have a basic literacy level. They primarily are alone during working hours.

Please feel free to contact me if you have any questions

Thanks again,

Halcyon Lawrence

Appendix 9: Formative Evaluation Form – Cognitive skills

Instruction: Having reviewed the PowerPoint Instructional Module to teach Cognitive Skills, please fill out the following assessment questions.

Formative Evaluation Process	Yes	No	Comments
1. Content			
a. Instruction			
i. Is this an effective tool for teaching seniors to identify the buttons on their phone?	□	□	
ii. Is the sequence of material logical?	□	□	
iii. Do the learners have adequate opportunity to review the material?	□	□	
b. Assessment Instrument			
i. Does this assessment adequately match the instruction?	□	□	
ii. Is the order of the questions effective?	□	□	
2. Delivery			
a. Instruction			
i. Is the rate of delivery adequate?	□	□	
ii. Are participants given enough time to assimilate the information presented?	□	□	
b. Assessment Instrument			
i. Is the rate of delivery adequate?	□	□	
ii. Are participants given enough time to assimilate the information they are being tested on?	□	□	
3. Format			
a. Instruction and Assessment			
i. Is the color scheme appropriate?	□	□	
ii. Is the font size adequate?	□	□	
iii. Do the voice and visual images match?	□	□	
4. **Job Aid:** is this an adequate memory jog?	□	□	

Instruction: Below are all the slides used in PowerPoint instruction. Feel free to write detailed notes or recommendations for revisions for each slide
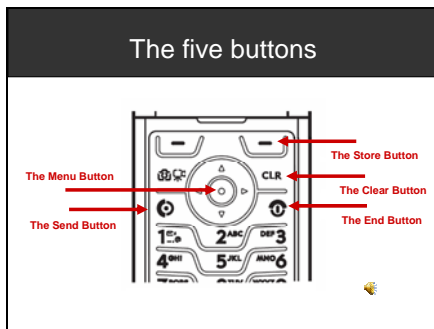
Slide 1

_____

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Slide 2

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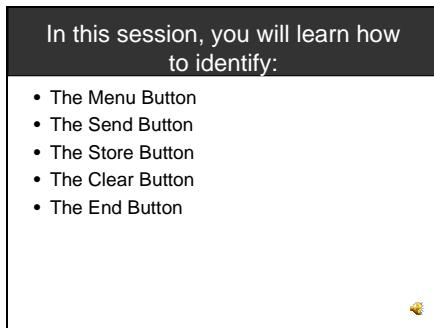
Slide 3

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Slide 4

So what do these buttons do?

The Menu Button allows you to tell your phone that you would like to enter a contact's number

The Send Button tells your phone that you want to make a call

The Store Button allows you to tell your phone that you would like to save a contact's number

The Clear Button allows you to delete any mistakes which you make.

The End Button allows you to hang up or end a call

Slide 5

What would you like to do now?

Review the position of each button

Review what each button does

Take a short quiz

End your session

Slide 1

Let's take a quiz

You are going to see a picture of your phone on this screen. I am going to ask you to click on a particular button. You will not be able to move ahead unless you click the right button.

Are you ready? Let's go!

Slide 2

Click on the Menu Button

Slide 3

Very Good,
Now click on the Send Button

Slide 4

Excellent,
Now click on the Store Button

Slide 5

Well Done,
Now let's Click on the Clear Button

Slide 6

We're nearly done,
So click on the End Button

Slide 7

Excellent Job!

This brings you to the
end of your Quiz.

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Appendix 10: Formative Evaluation Form – Function/Task Related Psychomotor Skills

Instruction: Having reviewed the sample script for the function related/task related[10] Psychomotor Skills, please fill out the following assessment.

Formative Evaluation Process	Yes	No	Comments
1. Content			
a. Instruction			
i. Are the stated objectives clear?	☐	☐	
ii. Are the objectives appropriate for the targeted audience?	☐	☐	
iii. Is the order of instruction logical?	☐	☐	
iv. Does the script reflect clear instruction?	☐	☐	
v. Is the language level appropriate?	☐	☐	
vi. Is there any unnecessary use of jargon?	☐	☐	
vii. Are the examples used in the instruction adequate?			
viii. Are the examples used clear?	☐	☐	
b. Assessment Instrument			
i. Is the assessment instrument clear?	☐	☐	
ii. Is the assessment instrument adequate to for rating performance	☐	☐	

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[10] This form will be submitted to the SME twice. The same questions will be asked for both the Psychomotor task and function related skills.

Appendix 11: Subject Matter Expert and Target Learner Feedback:

11-A: Jane Washburne

11-B: Morgan Frederick

11-C: Betty Jefferson