

# Focus Group Script and Coding Instructions for the CREATE Cross-Site Focus Group Study of Technology Use

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## *Presentations based on this research:*

- Mitzner, T. L., Boron, J. B., Rogers, W. A., & Fisk, A. D. (November 2007). *Older adults' attitudes toward health-related technology use*. Gerontological Society of America 60<sup>th</sup> Annual Meeting. San Francisco, CA.
- Fausset, C. B., Mitzner, T. L., Adams, A., Boron, J. B., Dijkstra, K., Charness, N., Argüelles, T. Lee, C. C., Rogers, W. A., & Fisk, A. D. (August 2007). *Technology use by older adults in the work domain*. American Psychological Association Annual Meeting, San Francisco, CA.
- Mitzner, T. L., Adams, A., Argüelles, T., Bailey, C. L., Boron, J. B., Lee, C. C., Weitz, J. R., Charness, N., Czaja, S. J., Dijkstra, K., Fisk, A. D., Rogers, W. A., & Sharit, J. (August 2006). *Technology use by older adults*. American Psychological Association Annual Meeting, New Orleans, LA.

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# **FOCUS GROUP PROTOCOL**

## Scheduling

- Standard CREATE telephone screening when contacting participants
- All native English speakers between the ages of 65-80
- Schedule at least 2 men per group
- Group size should be 6-7 per group (if group size is smaller than 4, pay participants and reschedule)
- Separate groups for college degree and less than college degree

## Sessions

- Informed Consent
- Domain 1
- Background Questionnaire
- Domain 2
- Technology Questionnaire

# **FOCUS GROUP SCRIPT**

- Script text is presented in bold-faced
- {Notes to moderator are presented in brackets}
- Questions are numbered Q1, Q2, etc.

## Introduction

**Welcome to our Focus Group session today. Thank you for coming in.**

**My name is \_\_\_\_\_, and I work at \_\_\_\_\_, in the Psychology Department. Assisting me is \_\_\_\_\_, who will take care of note taking and recording the session on tape.**

**We are here because we want to get your input on issues related to use of technology.**

**Technology refers here to electronic or digital products and services.**

## Topic and goal

**This research is part of a large 5-year grant, funded by the National Institutes of Health/National Institute on Aging. The focus groups are being done with lots of different people at different locations Our goal is to better understand technology use by older adults. Your information will help us to conduct research on these topics and, ultimately, to develop technologies that are more useful and easier to use.**

**First, I'm going to summarize what you will be doing, but I will remind you of these questions during the session. We are interested in understanding what types of**

**technologies you currently use or have ever used in the performance of everyday activities, how you use these technologies and what you think about them.**

**The activities we will focus on today are {2 circled topics: home / work / health}.**

**What we would like you to talk about is how you have been using technology in your everyday experiences with these activities.**

**First, we would like to know what forms of technology you use in these different activities including how often you use them. Second, we are interested in the question of whether you like them or not and if you encountered any problems. Third, we are interested in the question of whether you feel you could use further training with these technology items.**

#### Procedure

**In this meeting I will present some areas where you may use technology. We will talk about one area at a time. We would like to hear about your real life experiences regarding the use of technology. There is no rush for any of these topics. We plan to take about 45 minutes per topic. We will have a short break after the discussion of the first topic and you will complete a questionnaire. Then we will have a discussion of the second topic and you will complete another questionnaire after that. The entire session will last from 2 ½ to 3 hours. It is ok to get up during the session if you need to but remember there will be an opportunity to take a 5-minute break after discussion of the first topic. We will discuss a total of two topics after the warm-up.**

**Some rules for the conversation:**

- **We are really interested in your personal experiences and ideas.**
- **If your ideas are different from someone else's: speak up, we are interested in a range of experiences.**
- **You can follow-up on something that another person says as long as you do not interrupt that person.**
- **Speak clearly and loudly enough for everyone to hear and for us to be able to transcribe the recording later.**
- **Please speak one at a time. Remember, we are recording the session, and we cannot understand the tape when more than one person is talking at a time.**

A. Icebreaker/ warming up.

**Let's start by going around the room and having everyone introduce themselves (first names only) by telling us what their favorite hobby is.**

B. Scenario – Area 1: Work

**Now, let's talk about technologies.**

**Q1) We would like you to tell us what kinds of technology items you use for work and how often you use them. You should consider “work” in a broad sense here, including volunteer work. If you are currently not working or doing volunteer work, try to contribute by thinking along with the other members of the group, or think back to when you worked in the past. When thinking about technologies you use at work think about technologies you use in the performance of your job, to communicate with other people while at work, or learn new job skills or training.**

{Focus group note taker writes question in short-hand “Technology Items”, then lists all items mentioned on a flip chart so that they are visible for everyone. For each technology

item mentioned, the focus group leader should go through all the questions below. Before continuing with the next technology item and time allows, the focus group leader should ask “Does anyone have anything to add?” Limit item brainstorming session to 10 minutes per area. }

**Q2) For those of you who have used \_\_\_\_\_, what do you like and dislike about using this technology for work?**

{When participants talk about dislikes, focus group leader should include problems while using this technology. Note taker writes “Likes” and “Dislikes” then adds them to the item being discussed. }

**Q3a) What do you think is the best way to learn how to use \_\_\_\_\_ for work?**

{Note taker lists answers with item \_\_\_\_\_ }

**Q3b) Do you think you would like additional help with or instruction with \_\_\_\_\_ for work? If so, what types of tasks you think you might want help or instruction for?**

{Note taker lists answers with item \_\_\_\_\_ }

**Q3c) What type of information or training do you think would help you learn how to do (each task)?**

{Note taker lists answers with item \_\_\_\_\_ }

B. Scenario – Area 2: Healthcare

**Q1) First, we would like you to tell us what kinds of technology items you use for healthcare either for yourself or others and how often do you use them. You should think about technology items here in a broad sense and not limit yourself to very technologically advanced items. Also, think about the occasions in which you use technology for healthcare, such as when you communicate with health care professionals, when you learn to use medical devices, or gather information about diseases.**

{Focus group note taker writes question in short-hand “Items”, For each technology item mentioned, the focus group leader should go through all the questions below. Before continuing with the next technology item and if time allow, the focus group leader should ask “Does anyone have anything to add?” Limit item brainstorming session to 10 minutes per area. }

**Q2) For those of you who have used \_\_\_\_\_, what do you like and dislike about using this technology for health care?**

{When participants talk about dislikes, focus group leader should include problems while using this technology. Note taker writes “Likes” and “Dislikes” then adds them to the item being discussed. }

**Q3a) What do you think is the best way to learn how to use \_\_\_\_\_ for healthcare?**

{Note taker lists answers with item \_\_\_\_\_ }



**Q3b) Do you think you would like additional help with or instruction with \_\_\_\_\_ for healthcare? If so, what types of tasks you think you might want help or instruction for?**

{Note taker lists answers with item \_\_\_\_\_}

**Q3c) What type of information or training do you think would help you learn how to do (each task)?**

{Note taker lists answers with item \_\_\_\_\_}

B. Scenario – Area 3: Home

**Q1) First, we would like you to tell us what kinds of technology items you use in your home and how often you use them. One strategy for thinking about this question is to take a “mental walk” through your home and think about the different technologies in each room. Also, we would like you to think about occasions at which you would use these technology items, such as for leisure/hobby/entertainment, while communicating with family and friends, while performing your everyday activities, or using any kind of security system.**

{Focus group note taker writes question in short-hand “Items”, For each technology item mentioned, the focus group leader should go through all the questions below.

Before continuing with the next technology item and if time allows, the focus group leader should ask “Does anyone have anything to add?”

Limit item brainstorming session to 10 minutes per area. }

**Q2) For those of you who have used \_\_\_\_\_, what do you like and dislike about using this technology in the home?**

{When participants talk about dislikes, focus group leader should include problems while using this technology. Note taker writes “Likes” and “Dislikes” then adds them to the item being discussed. }

**Q3a) What do you think is the best way to learn how to use \_\_\_\_\_ in the home?**

{Note taker lists answers with item \_\_\_\_\_ }

**Q3b) Do you think you would like additional help with or instruction with \_\_\_\_\_ in the home? If so, what types of tasks you think you might want help or instruction for?**

{Note taker lists answers with item \_\_\_\_\_}

**Q3c) What type of information or training do you think would help you learn how to do (each task)?**

{Note taker lists answers with item \_\_\_\_\_}

# SEGMENTING SCHEME: ATTITUDES

## Definition of a segment:

- Only segment the text which begins with the moderator asking “What do you like/dislike about ...” until the moderator changes the topic, for example by saying “What do you think is the best way to learn ...?”(21Jun06).
- A unique idea in a single, uninterrupted speaker turn (31Mar06), related to an attitude (i.e., a feeling or emotion toward a fact or state) (like/dislike/unclear) toward (23May06) a technology item or to technology in general (22Feb06) with which the speaker has had personal experience in the specific domain topic (work/home/health) (21Jun06).
  - A segment will lead to a “Yes” answer to all of the following questions: (21Jun06)
    1. Does the text pertain to technology?
    2. Is it about the domain of interest (work/home/health)? Assume it is unless explicitly stated otherwise.
    3. Does it have an affective component (like/dislike/unclear)?
    4. Is it related to personal use (not other’s)? Assume it is unless explicitly stated otherwise.
- The attitude (positive, negative, or unclear) **must be** explicit or inferred from context (23May06).
- If no attitude whatsoever can be discerned either from the text or the context, (e.g., “I have email” with no context to suggest whether it’s a like or dislike) that text portion **is not segmented**.
- Attitude must refer to self. If no specific reference is being made, assume that the participant is answering the question and talking about him or herself (2Jun06).
- An utterance that is about technologies that are not exactly what the moderator asked about (or a feature of the technology asked about), but is still within the boundaries of the like/dislike questioning, and meets all of the above criteria.

## For Example:

The Moderator asked about using the telephone, then menu systems were talked about (a "feature" of the telephone). Then the moderator asked specifically about the menu systems, and cell phones were brought up by a participant...**The likes/dislikes of cell phones should be segmented.**

- An unclear attitude would be if the speaker seems to have an attitude but it's unclear what it is or it does not fit into the like or dislike categories.

Examples of **UNCLEAR** attitudes:

MODERATOR: Are there any dislikes about this product?

PARTICIPANT(S): **No.** (21Jun06). An attitude is definitely being expressed, but it does not clearly fit into Like or Dislike.

OR

**I think that the microwave may have radon but it is fascinating.** (21Jun06). An attitude is definitely being expressed, but especially in light of the context it does not clearly fit into Like or Dislike.

- A segment may contain multiple sentences.

For example:

**"If they put a movie on you can just sit there and watch the whole movie without being interrupted. They don't have this commercial because they have where you can call in and donate so much money so often to the station. And they don't have these commercials."**

A segment must include no more than 1 reason for the attitude.

- An opinion is expressed about how a technology has changed social activities/interactions potentially including their own(21Jun06).

For example:

**I don't like cell phones because of the way it changes social interactions.** (segment, because this potentially includes their personal use)

Vs.

I don't like cell phones because people don't know how to use them. (do not segment, because this is explicitly about others' use)

- A segment that is "compound," must be separated into its unique segments in brackets. (10Jul06).

For example:

MODERATOR: Service in terms of the cell phone service or customer service or both?

Female: All of it. [**Dislikes cell phone service** AND **customer service** (both features of cell phone)].

**A segment is NOT:**

- Brainstorming (a mention of a technology item or reference to technology in general). Undergrads will list and tally technology references mentioned throughout transcripts (23May06).
- A statement made anywhere other than after the moderator's question of like/dislike of a product (21Jun06).
- References others' attitudes (2Jun06).
- When an attitude is neither explicit nor able to be inferred (2Jun06).
- References to training are also not included (2Jun06).
- How many times someone uses (or has used) a technology (21Jun06).
- When moderator summarizes or brings in a new idea (17Feb06).
- When statements do not fit within the domain at hand (21Jun06).

For example:

(Within the HOME domain): I don't have a security system myself, but I've used one at church. **DO NOT SEGMENT!**

- An attitude or opinion expressed about other people's use of technology (21Jun06).

For example:

"People are not polite when they talk on the phone." This statement would **NOT BE SEGMENTED** b/c it does not refer directly to disliking the technology of the phone; instead it is referring to how others use the technology.

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### Deciding whether an utterance contains one or multiple attitude (23May06) segments:

- If a stated attitude (like, dislike, or unclear) about a technology is immediately followed by a possible reason for that attitude (all within an uninterrupted speaker turn), it is considered the same idea unit (31Mar06).

For example, the following would be coded as one segment:

“Voicemail--I have voicemail. When I’m not home and somebody calls they can leave me a message.”

Or

Mod: What do like/dislike about the TV?

Female: I like it. I like the remote control because you don’t have to get up.

This is segmented as 2 b/c the remote control is a feature of the TV and it is convenient so you don’t have to get up.

- If more than one reason is introduced in an utterance, the utterance must be broken into multiple segments, one reason per segment (2Jun06).

For example:

I like the cell phone because I can talk to some one far way from my home.

OR

I like to email from home. (21Jun06)

OR

I like to call family and friends. (21Jun06)

- Count each feature mentioned as a separate segment (21Jun06).

For example:

I like the refrigerator--it has crushed ice, cubed ice, water, and wine cooler in it.

- If more than one technology is introduced in an utterance, such as for a comparison, the utterance must be broken into multiple segments (5Apr06) but only if an ATTITUDE is expressed about both technologies (21Jun06).

For example:

[you can make] Tea or coffee [in the microwave] but I prefer the oven still.

- An uninterrupted speaker turn can contain multiple segments, if that uninterrupted speaker turn contains more than one unique idea (10 Feb 06).

For example, different highlight colors reflect different segments :

“And what I dislike about is that sometimes I’m in my room on the cordless phone and with these long conversations beep, beep, beep. The battery is fixing to go on me. I say wait just a minute I’ve got to change phones and I hate doing that having to go to another room to get on another phone when I can’t too long on the cordless phone maybe an hour or 45 minutes or something like that. And then it’ll start beeping on me to let me know that they’re fixing to--sometimes it’ll cut completely off if I didn’t stop talking on it. It’ll just cut me off so I dislike that on a cordless phone.”

- In sum, one technology per segment and one reason per segment.

### Definition of a repetition:

- A repetition is when an idea is repeated after the introduction of a second (or third, etc.) idea but within the same speaker turn.

For example, each segment is highlighted in a different color. The repetitions are the second segments in green and blue highlight:

“ I won one. At the time I was interested. I won one from here but for some reason I-- it’s so much to learn and I had my hand in too many different things, sewing and--too much racking my brain. When I was younger I could really work with it I believe. But I like sewing and doing other little things.”

- All repetitions are segmented and coded with categories (3 Mar 06).
- A repetition is NOT when the same idea is repeated across speaker turns. These are coded as unique idea units.

### What to do when segmenting “Yes” or “No” answers to the moderator’s question:

- Endorse the “Yes” or “No” line as a segment and place the technology that is being referred to in brackets [ ].

For example:

Participant: I have voicemail.

Moderator: So you like the voicemail?

Participant: Yes. → Segment “Yes” and add context in parentheses [voicemail], so we know what technology is being referenced.



- If multiple participants answer “Yes” (or “No”), repeat actions above for each answer.

For example:

Moderator: So you like the voicemail?

Participant: Yes. Yeah. Yeah, (agreement)

Participant (segmented): [Voicemail] Yes. // [Voicemail] Yeah //  
[Voicemail]Yes. [Voicemail] (agreement)

## **CODING SCHEME: ATTITUDES**

**Primary technologies are the technology items that prompted the discussion/attitude: Do not infer here. Also, if in response to “What do you like about the fax machine” they say “I like the copier because it’s fast.” We’ll code the technology as the fax machine because that prompted the discussion. Secondary technologies are different because they are technologies that cannot be stand alone; rather they always exist as a part of another technology.**

Answering Machine

Blood Glucose Meter

Blood Pressure Monitor

CD Player Includes mention of CDs

Cell Phone

Computer Includes mention of computer software programs

Digital Camera

DVD VCR/DVD Combo Includes mention of DVDs and VHS tapes in the context of VCR/DVD Combo

Fax

Microwave

Copier

Printer

Radio

Scanner

Telephone

TV/Television

VCR Includes mention of VHS tapes

Home/Garden Maintenance

Techs

Misc Health Scale, Treadmill, Diabetic Machine, Thermometer, Hearing Aid

Misc Home/Work Stereo, Doorbell, Security System, Calculator, Adding Machine, Irrigation/watering System, Washing Machine/Dryer, Stove, Oven, Garbage Disposal, Light Timers, Coffee Makers

**Secondary technologies are technologies that are part of a primary technology. With any of these, if they are being really general code with primary technology. When in doubt, go with technology items that prompted the discussion/attitude.**

Call Waiting

Caller Id

Email

Internet Only code if they explicitly mention internet or internet “buzz words” like Google, Website, Surfing, etc.

Voicemail

Misc Secondary Remote Control, Telephone Menu Systems

Code System	Definition	Examples
Gender	Every segment must be coded	
Female	Explicit from context	
Male	Explicit context	
Unclear	Explicit context- Comments from all	

Valence	Every segment must be coded	
Like	Explicit or inferred from context	
Dislike	Explicit or inferred from context	
Unclear	Unspecified or unclear	“I don’t know whether it’s a like or dislike.”

Reasons	Every segment must be coded with at least one reason or as “No Reason”	
No Reason	No Reason Provided	“I like the t.v.” For comparisons also, i.e., if statement is: “I like the microwave better than the stove because it’s simple to use.” Code: Microwave with Complexity as well as Stove with No Reason

REMEMBER: Codes apply to technology!

Is the segment **referring to the technology itself** (System Characteristic), **or is it referring to how the technology affects the person** (Convenience).”

<p><b>Convenience:</b> Refers to “self.” They like/dislike a technology because of what it does for them. They reference a feature but the reason is about what it does for them. E.g., If a person talks about how much of their time is saved, this is a <b>convenience</b>. Conversely, if a person talks about how fast his computer works, this is a <b>system characteristic</b>. Convenience reasons will refer self, e.g., “I can do tasks more quickly” or “it saves [me] time,” where system characteristic will only reference the technology, e.g., “it is fast.” If you have any doubt ask yourself if they like/dislike it because of what it does for them, if so it’s a convenience. If not, it is a system characteristic. If it is unclear and they don’t verbally reference themselves (I, me, my, etc.) it should be coded as a system characteristic in general or a feature in particular.</p>		
Home-Based	Convenient because they can perform task from home. People <b>like</b> something b/c they don’t have to leave home. People <b>dislike</b> something b/c they must stay at home.	“I can watch movies <b>at home.</b> ”
General/Unspecified	Unspecific convenience.	“I like it because it’s convenient.” “They come in handy.” “They are aggravating.” “It’s annoying.” “consider it a nuisance.”
Time	Saves (or frees) or wastes time. It can always be assumed that they are referring to their own time, so “me” or “my” may not be in the statement. Includes issues about waiting. Don’t have to wait at home for a call. Frees time to do other things. No time constraints.	“It saves time.” “It wastes so much time.” “They keep you holding.”
Financial	Saves or wastes money, expensive, inexpensive, etc. It can always be assumed that they are referring to their own money, so “me” or “my” may not be in the statement.	“I dislike the expense.” “Cheap is not the word, it’s unbelievable.” “You’ve got to buy the little strips.” “You used to have to buy that big book.”
Effort	Requires, increases, or reduces physical, mental, or other effort. When they mention easy or hard it can be assumed that they are speaking with respect to the self. Easy or hard or difficult for me.	“I like that I don’t have to get up to change the channel [if I use a remote control]” “You have to carry it with you.” “They [VCRs] are easy to use.” “It’s hard to use.” Or “It’s difficult to use.”
Interruptions	Control interruptions (e.g. screen unwanted calls, avoid commercials, pause) or causes interruptions (e.g., unwanted calls, telemarketers, commercials, junk email, spam)	“What I dislike about it, sometimes it’s too many commercials, too many. Especially when there is something I want to see.” “Half the stuff we get is junk email.”
Physical	Any physical in/convenience, comfort, pain (but anything above convenience would be safety).	“I dislike the prick.” Or “You’ve got to stick it in your finger.” “it keeps the house a comfortable temp.”
Other	Other forms of convenience. When a segment seems like a convenience but does not fit exactly within the other code.	“Get outdated quickly.”

<p><b>System Characteristics:</b> Refers to the “<b>technology</b>.” E.g., If a person talks about how fast his computer works, this is a system characteristic. Conversely, if a person talks about how much time is saved, this is a <b>convenience</b>.</p>		
Feedback	Any information that a person can use to monitor your performance. Refers to the specific feedback of a technology (e.g. I like the beeping noise or would be more like an email confirmation).	“I like the fact that we get an email confirmation.” “You get a printout.”
Features		
Specific Features	Specific features of the primary tech being discussed (can be secondary techs if they are listed as the REASON for liking the Primary tech). Features like spell check can be coded here if they are only listed as features they dis/like. If they talk about their USE of the feature it is coded under Activity, i.e., administrative tasks. Anything having to do with automated menus	“I like the computer because of internet/email.” “I like the telephone because of voicemail/caller id/call waiting.” “I like email.” (In response to, “What do you like about the computer?”) “On the stove, I like the clock and timer.” “automated menus”
Access/Storage/Retrieval	The technology accessing, retrieving, storing information. Again, make sure they are only saying they dis/like that the tech does this. If they mention their use, it would be coded under Activity, i.e., “I like retrieving info about illnesses on the internet.” would be coded as Research.	“I like the access to info.” “I like that it stores my phone numbers.”
Speed	Fast or slow	“It cooks too fast.”
Durability	Durable or fragile	“they’re not as fragile as the records and things that we use to use.”
Number/Programming Options	Many or few. Amount of something Many or few. Number of programming options. You either have options or you don’t. That you can find/see what the options are.	“too many options.” <b>“too many gadgets.”</b> “I dislike them because they have a lot of capabilities.” “And the amount of information...” “too many programs.” “There’s so many programs that you can log onto.”
Appearance	Aesthetic	“I don’t like the color.”
Content quality	Good or poor	“too much violence.” “too brief most of the time.”
Portability/Size	Can move around, small, space-saving, big, can’t move around. Anything related to size or fit of something.	“I can bring the radio in the kitchen because it’s small.” “You can use it anywhere.” “You’re not tied to a land line. And so it makes you more mobile.” “It’s wireless.”

Input devices	Button, knobs, etc.	“those buttons are hard to push.”
Quality	Quality of the “output,” like sound of music, quality of picture on television, visual display, etc.	“Visual displays are better on cell phones.” “You can get large fonts” “Makes conversations clear.” “Misinformation.”
Adjustability/Versatility	To be able to adjust or regulate something. That a tech is versatile	
Other	None of the features above.	“They take much less blood now.”
Complexity	Complexity or simplicity of technology	“It’s frustrating because I don’t know how to use them.” “I don’t understand how to use it.” “I do understand how to use it.” “I don’t know how to use it.” “I do know how to use it.” “It’s too complex.” “It’s too simple.” “It’s too technical for me.”
Reliability	How well a technology does or does not work. If a technology gives a different reading every use.	“It worked perfectly.” “It’s accurate.”
Serviceability	Anything related to the service and or maintenance associated with a technology.	“I like the VCRs because they’re very easy to repair.”
Other System Characteristics	Segment is a property of the system but does not fit into the above categories.	

Security		
Unspecified/general security	Increases or decreases.	“Vulnerability.”
Privacy	Increases or decreases. Accurate conceptions and misconceptions.	
Safety	Increases or decreases. Accurate conceptions and misconceptions. Worries of personal concern	“And there have been some horrible examples of that where you get stuff that’s bad.” “It’s dangerous.” “a computer is bad for your health.” “back trouble” “carpel tunnel”
Trust	Does the person trust the technology: Yes or no. Use trust whether the person’s “take on the technology” is an accurate conceptions or a misconception.	“I don’t trust the microwave b/c of all of the radon.” [Despite the misconception of the microwave having radon, still code as trust issue.] “Misinformation.” “Danger is, are you getting what you think you’re getting form a reliable source?”
Virus etc. (Computer specific security issues)	Computer viruses (and hackers, spyware, cookies), protects from or makes vulnerable to	
Other Security	General vulnerability statements	



Supports/Interferes with an Activity		
Administrative tasks	Filing, typing, mailing, printing, storing information. Use of a feature, i.e., "I like <i>using</i> spell check." When a personal pronoun is used to describe their use of a feature.	"I like the computer because I can print labels." "I like it for editing." "I can spell check and edit."
Communication	Communicate with family, friends, customer service, and health professionals. Social and business communication (exchanging ideas or information)	"I like email because I can talk to my son in another state." "I called my daughter from the airport [cell phone]." "It makes it easy to carry on a conversation."
Cooking	Cooking	"that's the most wonderful thing, is baking potatoes in the mic."
Emergencies	Emergencies or crises	"I think that's the only reason I want one is for my emergency situations."
Leisure, Hobby, Entertainment	Leisure Hobby Entertainment Stress Relief Relaxation	"The t.v. keeps me company." "I like to watch movies using the VCR." "And watch them [tapes] when I have nothing better to do." "That's stress relief. It takes your mind of things."
Health Monitoring & Maintenance	Health Monitoring & Maintenance Recording information about your health or your physical state is Health Monitoring and Maintenance.	"I like the blood glucose meter because it helps me stay healthy." "I like to show my records to my doctor."
Research and Education		
Health	Health research and education Includes learning, getting information, news, etc.	"I can look up my medications on the internet." "I like to check physician references."
Other	Research and education that is not health-related Includes learning, getting information, news, etc.	"I learn on the t.v." or "Information, it's very informative." "I like Googleing to find info"
Financial	Managing finances, tracking expenses	
Shopping	Shopping, purchasing, ordering	"[using the internet] to order goods."
Transportation	Transportation and travel	"I get directions on the internet."
Spirituality Religion	Spirituality Religion	"I like listening to gospel on the radio."
Other Activity	Job-specific tasks (other than administrative)	"it's good for design"
Other Reason		

# SEGMENTING SCHEME: TRAINING

## Definition of a segment:

- A unique idea in a single, uninterrupted speaker turn (31 Mar 06), related to training (23May06) on **the technology item in question (19Jan07)**. The segment must answer **explicitly** and **clearly** (22Jan07) one of the following questions posed:
  - **Best method:** What do you think is the best way to learn how to use \_\_\_\_\_?
  - **Tasks:** Do you think you would like additional help with or instruction with \_\_\_\_\_. If so, what types of tasks you think you might want help or instruction for?
  - **Method for new tasks:** What type of information or training do you think would help you learn how to do (each task)?
- If the Moderator interrupts a speaker with a comment (such as “Mmmhmm” or “alright”), each speaker’s comments must be segmented separately because we cannot assume that the second speaker is the same as the first. (28Feb07).

For example:

Male: One of my best resources are a **couple of friends**. [1 segment]

Moderator: Right.

Male: I can’t imagine a question **my friends** can’t answer. [1 segment]

- Only segment preferred training methods (19 Jan 07)
- Segment comments from people who own and have used a technology as well as from people who do not own the technology. (26 Apr 07)

For example:

"I don't have a cell phone, but if I bought one, I'd like for someone to show me what to do."

- Segment based upon what the moderator asks about (26 Apr 07).

For example, segmenting for task (what):

- Segment for task (what) if the comment occurs after moderator asks “Do you want any additional training?”
- But do NOT segment for task (what) if it occurs at any other place during training; except if participant explicitly says they would like to have additional training on a task (what).

- And the segment must refer to a who, where, how, when (19 Jan 07) and/or what (i.e., task) related to training:

For example:

“Ask your neighbour’s kids to come over. They can show you the basics.” (19 Jan 07)

This segment would be coded as:

Who: Neighbor’s kids

Where: At home (to come over)

How: Show

What: the basics

When: Not specified

- Segment answers to questions from the moderator or from other participants. (22 Jan 07).

For example: (22 Jan 07).

Moderator: “So a kind of one-on-one and um practice. What if you have to learn a new task or are there any new tasks that you would like to learn on a computer that you don’t already know how to do?”

Male: “Dozens of them.” (Answer to what tasks would you like to learn)

Female: “Yeah.” (Agreement with the answer to what tasks would you like to learn)

For example:

Male: “You said that you want to put slide presentations together?”

Male: “Uh yes. I was asked recently to give a lecture...” (Answer to what tasks would you like to learn)

- Assume “BEST METHOD” and is preferred unless otherwise stated.  
For example: “That’s how I learned it.” [We must assume that this speaker’s agreement with the previous statement is his/her preferred method--going to a class, for instance.] (28Feb07)
- Segment unique meaning training methods.  
For example: “Being told or shown” reflects two different training methods. (28Feb07)
- Segment unique nouns each individual instance during an utterance.  
For example: “Brother, neighbor, friends” are all separate. (28Feb07)

**A segment is NOT:**

- Any mention of technology training in other parts of the transcript are NOT included (only include segments following the first training question and prior to the likes/dislikes discussion of the next item.)
- Training for **others** is NOT included (i.e., they must be referring to their own preferences).
- When **moderator** summarizes or brings in a new idea (17 Feb 06).
- Any utterance labelled as “**Moderator**,” even if it sounds like a participant speaking because we cannot be certain. (28Feb07).
- Methods that are dislikes or not preferred (19 Jan 07). Any mention **other** than a specific task or preferred **method**. (22 Jan 07).

For example:

“Yes, I’d like to find out where I can get a car adapter charger that’s reliable.” (22 Jan 07).

For example:

“I think a VCR is a bad example because that technology is on the way out.” (22 Jan 07).

- For **methods** (how): Do not segment references to **psychological constructs/strategies** such as patience or motivation. We are interested in the “MODE” of training

For example:

- I tell them if I can learn it, they can learn it
- Have the problem; have the health problem
- Go deaf (best way to learn how to use hearing aids)

- Any **method** that solves the problem, but **doesn’t lead to learning**. This usually involves having someone else do something for you so you don’t have to do it. (26 Apr 07)

For example:

- “That may be your best bet [paying someone to do it for you].”
- “Get a teenager to program it.”
- “I would assume that you would have to call Comcast to come in and set that up”

- An **ambiguous** statement that does not clearly or explicitly answers one of the questions. (22 Jan 07).

For example:

“I mean you know I may change my mind about text messaging. I don’t know. I haven’t gotten that high bound yet but right now I don’t use it because I don’t understand it and so I say I don’t want to know anything about it but if I knew more about it I might like it. I don’t know.” (22 Jan 07).

For example:

“They sent me a camera phone for free and it was like \$299 if I had to pay for it and he’d said to me when I called in that I was going to get a \$180 rebate on a camera phone. And I said, “Look I’ve rarely had a cell phone before and I don’t know how to use a cell phone much less a camera.” So he says, “Forget it then.” But I got the camera phone anyway and I think that’s one thing that’s complicated everything else for me. If I just had a basic cell phone I think I’d be more comfortable trying to get it to work.” (22 Jan 07)

- If a speaker is talking about a way that they don’t like, **do not infer that the opposite** way is the BEST way to learn. (23 Apr 07)
- A mention of a **task** that a participant does not perform. (22 Jan 07).

For example:

“We don’t do the record thing. We play the tapes.” (22 Jan 07).

- Don’t segment (code) the content of how best to learn (Task - what). Only segment for task if it is clear by expression or moderator question that participant wants additional training. (26 Apr 07)

For example:

- “start with the basics”

- If participant says that this is best method to learn: do NOT segment (code) for task because it doesn’t tell us how s/he wants to be trained on those basics.
- If participant says that s/he wants more training on the basics, then DO segment for task.

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### **Deciding whether an utterance contains one or multiple training (23May06) segments:**

- If a stated training method for a technology is immediately followed by a more detailed description of the training (all within an uninterrupted speaker turn), it is considered the same idea unit (23May06).

Fabricated example:

Having the grandkids teach me is really great. They come over to the house and show me what to do. (19 Jan 07).

- If more than one training method is introduced in an utterance, such as for a comparison, only segment the preferred method.

Fabricated example:

I prefer one to one training over a classroom setting.

- If more than one preferred training method is introduced in an utterance, the utterance must be broken into multiple segments (23May06), even if they share components, in which case use brackets to indicate the whole segment.

Fabricated example:

I like to go to a class or ask a friend.

Fabricated example:

I would like a customer service rep [to come to my house to show me how to do everything] or friend to come to my house to show me how to do everything.

- An uninterrupted speaker turn can contain multiple segments, if that uninterrupted speaker turn contains more than one unique idea (10 Feb 06).

For example, different highlight colors reflect different segments:

No examples yet...

Fabricated example:

Classes are really great, and tutoring one-on-one is really good, too. (This person likes or prefers both classes and one-on-one instruction.) (19 Jan 07).

### Definition of a repetition:

- A repetition is when an idea is repeated after the introduction of a second (or third, etc.) idea but within the same speaker turn.

For example, each segment is highlighted in a different color. When there is a repetition of an idea within a speaker turn and it is broken up by other things the person is saying only segment the most descriptive/informative piece:

For example, the following would be coded as one segment:

You have to explore. You have to hit the “help” key and pull down the windows [LAUGHS] and make a good faith effort to try to learn something. But there’s a lot to learn. (22 Jan 07).

Fabricated example:

The best method to learn is classes (don’t segment this mention of classes). Tutoring one-on-one is really good, too, but classes are offered on a regular schedule and at my local library (segment this one instead as it provides more information). (The “who, where, how, when, or what” for each method should be included in each segment. This person likes or prefers both classes and one-on-one instruction.) (19 Jan 07).

- A repetition is NOT when the same idea is repeated across speaker turns. These are coded as unique idea units.

## **CODING SCHEME: TRAINING**

Technology	Every segment must be coded	
<p><b>Primary technologies</b> are the technology items that prompted the discussion: <i>Do not infer here. Also, if in response to “What do you like about the fax machine” they say “I like the copier because it’s fast.” We’ll code the technology as the fax machine because that prompted the discussion.</i></p>		
Answering Machine		
Blood Glucose Meter		
Blood Pressure Monitor		
CD Player	Includes mention of CDs	
Cell Phone		
Computer	Includes mention of computer software programs	
Digital Camera		
Fax		
Microwave		
Copier		
Printer		
Radio		
Scanner		
Telephone		
TV/Television		
VCR/DVD	I Includes mention of DVDs and VHS tapes in the context of VCR/DVD or Combo	
Home/Garden Maintenance Techs		
Misc Health	Scale, Treadmill, Diabetic Machine, Thermometer, Hearing Aid	
Misc Home/Work	Stereo, Doorbell, Security System, Calculator, Adding Machine, Irrigation/watering System, Washing Machine/Dryer, Stove, Oven, Garbage Disposal, Light Timers, Coffee Makers	
<p>For Training Purposes we will not be coding secondary technologies as we did for Attitudes</p>		



<b>Training task:</b> Code in this category when participant answers question about <b>WHAT</b> the participant would like to get training on or explicitly states that s/he wants training at a different section within training. Something that s/he <u>doesn't yet know how to do</u> . Do not code this category if participant mentions a task in the context of how to best learn it.		
Not mentioned	A training task to be learned was not mentioned	“You can really find tutorials on just about everything” → participant doesn't indicate that want tutorials
Yes-General training	Just wants to learn more about the basic functioning of the technology.	“Just the basics.” “Lots of things” “Dozens”
Yes-Specific task	Mentions a particular task or class of tasks that wants more training on.	“I'd like to know how to have the caller ID on my cell phone.” “Excel” “Spreadsheets” “Publication software”
No training needed	Indicates that there is nothing else with that technology s/he wants to learn.	“I don't want to learn anything else.” “No.” (to question if want to learn anything else)
Yes-Other	Includes tasks that do not fall into the General or Specific definitions.	“I want more real time - specific training” “I really want individual instruction. Again, preferably on what I really want to know.” “Right [classes would come in handy to show you things you hadn't thought to ask.]” “Yes [want help/add'l training]” “Advanced features; lots of features” – too specific for general training and too general for specific task “New programs” or “Software training”

<b>Training method:</b> This refers to other aspects of training, such as <b>how</b> participant wants to be trained, <b>when</b> , <b>where</b> , and <b>by whom</b> .		
<b>Not mentioned</b>	<b>A training method was not mentioned</b>	
<b>How</b>	<b>In what manner or way is being trained?</b>	
Not mentioned	'How' was not mentioned	
1-on-1	Interactive but only with one other person. This could be a sitting with a friend or family, or a talk to sale representative, or a call to a 1-800 number, or an email. Only Tutoring as a verb.  DO NOT infer 1-on-1 but code as 'unspecified' for example for "Grab a teenage".	"Tutoring" "You have to ask insurance carrier for it" "I want individual instruction"
Class	Class setting, which is interactive and has many people. Do NOT code for 'WHO = instructor', unless specifically mentioned.	"Class" "School" "Right [classes would come in handy to show you things you hadn't thought to ask.]"
Text	Training yourself, but through information in a written format. This refers to a paper manual or reference. We assume that text is referred to in print-format, unless someone specifically mentions internet or computer.	"manual" "read the instructions" "take notes" "write my own manual"
Online	Training yourself, but through information on the internet or computer. Only code if "online" or "web" or "internet" or "Google" or "computer" or the like is explicitly mentioned.	"online dual access manual" "Google" "help screens in the application" "you can go right on the computer itself <inaudible> how to scan or whatever"
Show/Demo	Demonstration or showing how/what to do.	"I want someone to show me"
Trial & error	Training yourself, but through experience, trial-and-error, more unsystematic. Trying things out.	"Trial and error" "Just using it" "Do it" "Search"
Training (general)	If "training" was mentioned, but without any other details or specific aspects about the training. Participant mentions that s/he wants some sort of training, but does not specify which kind.	"Training" "Some formal training session" "on the job training" or "training according to the work you are going to do" "instruction" "let them teach you"
Practice	Training yourself via 'practice.' Repeatedly doing the same thing again. This is an approach to trial and	"You've got to practice."

	error, but knowing what to do and having to repeat it many times.	
other	Code here if the 'how' is ambiguous and it doesn't fit any of the other categories	"Interactive" "prior knowledge" "You can really find tutorials on just about everything; it's worth the effort." "Being told" "workshop," "conference"
<b>When</b>	<b>At what time is the training provided?</b>	
Not mentioned	'When' was not mentioned	
Purchase	At the time of purchase, point of sale, acquisition of the original technology item itself (e.g. physical computer, physical cell phone)	"When I bought it"
Troubleshoot	When the person has a specific problem using the technology, needs help	"Grandkids are great if you need help"
other	The person acquires extensions of the technology or uses new functions of existing technology (software for a computer). Or participant's comment suggests a time, but it not unambiguous what time this was	"I use Google to find health-care information on the web after being diagnosed with diabetes" "Initial training" "Well, that's what I did really early was a class"
<b>Where</b>	<b>At which location does the training take place? Note: an institution is coded as in this category</b>	
Not mentioned	'Where' was not mentioned	"Come over" is too vague
Home	Informal setting, at the place of the trainee.	"Come over to my house"
other	Other places, for example within organizations or institutions	"Diabetes center" "The hospital has a special division" "The library" [fabricated example] "The doctor's office"
<b>Who</b>	<b>Who provides the training? This refers to a person or agent. Note: institution is coded as 'place'</b>	
Not mentioned	'Who' was not mentioned (e.g.	"tutoring" "I want individual instruction" "Demonstration" "Being told" "or shown"

Domain professional	Any domain professional, including: The person related to who sells or supports the basic functionality of the technology (IBM for computers)	"A sales representative" e.g. sales or customer representative e.g. doctor, nurse, medically trained person e.g. insurance carrier e.g. "someone who knows computers should train you"
Family/Friends/Relatives/Coworkers	More informal instruction via a person who one knows on a more personal basis. This could also be a colleague one works with.	
Instructor	More formal instruction via a tutor, or a class. Do NOT code here if participant says "tutoring"	"A nice teenage tutor" Teacher Instructor
Self	Specific reference to own person, rather than just mentioning a method (I read the instruction vs. instructions)	"I", "You" "The manual helped <i>me</i> to learn how to .." "I read the instructions"
Unspecified person	A mention of a person but not of a specific individual.	e.g. "Someone, somebody, a person, a young person" e.g. "Somebody to show me how" e.g. "They could tell you how..."
other	A 'who' is mentioned but cannot be easily categorized or doesn't fit any of the above categories.	e.g. "We are members of a computer club and we help each other solve problems." e.g. "Have a person who is a master barber show you." e.g. "The business or company would train you."
<b>Other</b>		

REMEMBER:

- Every segment is coded on all three dimensions!
- We act as if all questions were asked and use 'unspecified' in all the other dimensions which were not answered. For example:

For codes to training tasks only:

\* Do you think you would like additional help with or instruction with ....?

\* If so, what types of tasks you think you might want help or instructions with ...?

→ use '*unspecified*' training method

For codes to training method only:

- \* What do you think is the best way to learn how to use ....?
  - \* What type of information or training do you think would help you learn how to do a task...?
- use *'unspecified'* training task, if no task is mentioned

- Codes apply to training!
  - Only 'best' or 'preferred' method
- 

**Examples:**

*Moderator: Would you like add'l training?*

*Person: "I don't have a cell phone, but if I bought one, I'd like for someone to teach me the advanced features"*

Code on Methods (i.e., WHO, HOW etc.) as well as Task (Task/General)