

Effective Instructional Strategies For Teaching Technology Use to Older Adults

INTRODUCTION

- Aging in place is a priority for most older adults, with many preferring to remain in their homes rather than move to institutional care (Kasper et al., 2018).
- Occupational therapy practitioners support this goal through home assessments and environmental modifications, though in-person visits are often limited by distance, mobility, and access barriers (Harper et al., 2022).
- Emerging technologies, such as 360-degree cameras and mobile apps, show promise for remote assessments, yet limited research addresses how to best support older adults in using these tools(Kang et al., 2025).

The purpose of this study is to determine the most effective instructional strategies for teaching technology use to older adults for future remote home assessments conducted by a skilled Occupational Therapist.

METHODS

- **Study Design:** Qualitative study
- **Participants:** Eleven English-speaking individuals aged 50 years or older (mean age = 66.45 ± 8.97) who were able to physically and cognitively participate
- **Procedure:** Participants completed an online survey and then participated in follow-up interviews conducted online or in person according to preference.
- **Data analysis:** Inductive iterative thematic analysis

Characteristic	Category	n (%)
Gender	Female	9 (81.8)
	Male	1 (9.1)
	Prefer not to say	1 (9.1)
Race	White	10 (90.9)
	Prefer not to say	1 (9.1)
Education	High school or equivalent	1 (9.1)
	Some college	1 (9.1)
	Bachelor's degree	4 (36.4)
	Graduate/professional degree	4 (36.4)
	Prefer not to say	1 (9.1)

RESULTS

I. Emotional Negotiation in the Learning Process

1) Overwhelm in the Face of Unfamiliarity

"There's just a natural response in me that it's going to be hard... there's an avoidance kind of thing" (P04)

2) Fear of Mistakes & Digital Vulnerability

"They're afraid they're going to delete everything out of their computer"(P05)

3) Resistance to Replacing Human Interaction

"I seriously object to technology replacing people" (P10).

II. Technology as a Moving Target

1) Instability Created by Constant Change

"My camera used to be my easiest, but with a recent update... it has changed. Some of the things are not obvious to me." (P03)

2) Change-Induced Withdrawal

"Yeah, because I don't really have apps on my phone. And that's something I think I've kind of avoided" (P08).

3) Dependency as a Consequence of Rapid Evolution

"I found my biggest help to me is like Grandpa and then later [my sons]. If I needed to do something then they would put the app on my screen... So someone has to set it up" (P02)

III. Supportive & Collaborative Learning

1) Emotional Safety Through Guided Learning

"Somebody's there to help me. If I get into trouble, I have no problem, you know, working on this" (P07)

2) Help Seeking as an Adaptive Strategy

"I did Google 'What do I need to know?' ... My next thing might have been to ask my husband if he knew how to do it" (P04).

3) Motivation Cultivated Through Encouragement

"Just give them [older adults] positive, you know, that they can do it and help them out if they don't understand... Maybe explain in a different way... It's not hard, just might take time and patience" (P01)

IV. Scaffolding Competence Through Structured Design

1) Hands-on Practice as a Pathway to Mastery

"If I can see right then and practice at the same time, that helps me the most" (P03)

2) Cognitive Relief Through Simplicity & Clarity

"I just need someone to tell me what to do... how to get connected to help... Short and to the point" (P02)

3) Visual and Accessible Instructional Support

"It needs to be less technical, more ordinary language... Color is really good...larger print is really good" (P04)

4) Flexible, Multimodal Learning Pathways

"Give us options. Do I want to do a digital? Do I want to look at it?" (P06)

CONCLUSION

- Older adults' engagement with technology is shaped by a dynamic interaction of emotional, contextual, and instructional factors.
- Effective technology education must extend beyond clear instructions to address emotional responses, relational support, and the preservation of meaningful human interaction.
- **Limitations:** The small sample size and predominance of women with higher educational attainment may limit generalizability to more diverse older adult populations.
- **Implications for Occupational Therapy Practice:**
 - ✓ Address emotional barriers (e.g., fear, overwhelm) alongside technical instruction.
 - ✓ Use simple, step-by-step guidance with opportunities for supported practice.
 - ✓ Incorporate relational support (e.g., family, caregivers) to enhance confidence.
 - ✓ Ensure remote assessment technologies include clear onboarding and available human support.

