Employing Adaptive Mobile Phone Applications for Scaffolding the Communication and Vocabulary Acquisition of Language Learners

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Problem
• Recent immigrants are linguistically isolated and underemployed

Possible Solution
• Mobile applications for communication support and vocabulary instruction

Participant Demographics
• 12 participants
• Mean age 43.8 yrs. (s.d. 12.9)
• English Proficiency
  • Fluent: 1
  • Functionally Fluent: 3
  • Near Functionally Fluent: 3
  • Far from Functionally Fluent: 6
• Work Status
  • 90 % Underemployed
  • 70 % Unemployed

MyVoice Use
• Studying
• Listening comprehension
• Pronunciation practice
• Communication support

Results

Learning Strategy Use
• All have taken English language courses
• Most practice listening using
  • Most read simple texts

Commonly Used Technology

English Language Learning Process
• Most struggle with
  • holding conversations / speaking
  • vocabulary
• Areas that were identified as being easy:
  • Grammar
  • Writing
  • Spelling
  • Listening

Unmet Needs
• In-situ vocabulary support
• Support for
  • Interactional communication (all learners)
  • Transactional communication (functionally fluent learners)
  • High-stakes communication (all learners)

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Unmet Needs
• Record occurrences of language use
• View examples of vocabulary use
• Pronunciation feedback

Theoretically and Empirically Grounded Improvements to VocabNomad

Static Features
• On-device vocabulary editing
• Mother-tongue search
• Examples of use

Dynamic Features
• On-demand vocabulary support
• Visual representation of word / phrase meaning
• Testing
• Morphology instruction & synonym introduction

Qualitative Interviews

3 weeks

• Focus
  • Language learning experience
  • Use of computers and mobile devices for language learning
  • MyVoice use

MyVoice

VocabNomad

MyVoice Use

Our mission is R&D in support of aging throughout the life course. We identify “sweet spots” where technology seems relevant to human need, envision ways in which the technology could address those needs, then design and test solutions.