ONLINE TUTORING: FACE-TO-FACE AND THROUGH A LENS
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• Tutors

• Student Research Assistants: Jonathan MacDonald & Annette Tavernese
Objectives

• Define online tutoring
• Review previous online tutoring with D/HH students
• Examples from the Deaf and Hard of Hearing Virtual Academic Community (DHHVAC)
• Discuss findings from preliminary analysis of tutoring videos
• Q & A
DHHVAC Model
Barriers & Strategies

Student Preparation

Remote Tutoring
Remote Mentoring
Using G+ Hangouts

Remote Mentoring
Peer-to-Peer Interaction
Using G+ Private Community

Socialization

Accessible
STEM Information
Using Website,
G+ Private Community,
& G+ Public Page

Accessible Media
Online Tutoring Defined

• Synchronous or real-time
  – Still face-to-face (like traditional office hours or tutoring), but mediated by the computer

• Asynchronous (delayed time)
  – Email or other exchanges that do not occur at the same time
Synchronous Tutoring Functions

• Instruction
• Collaboration
• Support
• Socialization and informal exchange
• Extended outreach

(Finkelstein, 2006)
Prior Online Tutoring Projects for D/HH Students

• Brown (2010)
  – High school students
  – Science classes

• Bryant (2011)
  – NTID
  – Writing course
DHHVAC Tutoring Models

- **Same Vicinity:** Faculty Tutors + Students
- **Different Vicinities:** Grad Student Tutor + Students
- **Different Vicinities:** Adjunct Tutor + Students
- **Same Vicinity:** Undergrad Student Tutor + Student
DHHVAC Tutoring Experience

• At least 140 synchronous tutoring sessions between February 2012-present:
  – 15 different tutors
  – 34 different students
  – 8 different topics
Online Tutoring Examples from the Deaf STEM Community Alliance
Preliminary Findings from Video Analysis

• Sample: 21 videos (February 2012-April 2014)
• 3 tutors
• 5 students
• Courses:
  – Biochemistry (8)
  – Chemistry (2)
  – Math (1)
  – Physics (10)
Preliminary Findings from Video Analysis

- Communication Strategies
- Interactions
- Materials
- Technology
Preliminary Findings from Video Analysis

• Communication Strategies
  (Simultaneous Communication, ASL only, Spoken English only)
    – Primarily Simultaneous Communication
      • More tutor-initiated than learner-initiated
      • Very few instances of grabbing attention

• Interactions
  – Asking questions, giving feedback or information, expressing understanding – similar initiation tutor/learner
  – Initiating feedback for approval of opinion or response to a problem – more often tutor-initiated
Preliminary Findings from Video Analysis

• Materials
  – On-line course documents
    • Homework modules
    • Reference materials—dictionaries, journal articles
  – Hard-copy materials
    • Drawings, photos
    • Homework sheets
  – Text chat + ASL
  – Text chat only

• Technology
  – Very few tech problems
  – Very few instances of needing to instruct each other on how to use the technology
Discussion

• First step
  – Continue refining coding scheme
  – Adding more videos

• Tutoring is complex, not one-size-fits all

• Provides flexibility for both learner and tutor

• Good way to incorporate increasing online resources used in teaching classes

• With appropriate training, minimal technology problems