

Communication_Device

The design of a phonetics-based augmentative device for children with significant communication disorders

Names:

Brian Mogen (Leader)
Steve Wyche (BSAC)
Prachi Agarwal (BWIG)
Erin Devine (Communicator)

Client: Dr. Lawrence Kaplan

April 10 – April 17, 2009

Problem Statement: (Working Statement): To design a device that allows people with communicative disabilities but motor functions to speak and express emotion with their voice. The device must provide immediate output, and it must be intuitive and accurate.

Team Goals:

Testing

Individual Goals:

Brian: Paper – See team goals
Erin: Paper – See team goals
Prachi: Paper – See team goals
Steve: Paper – See team goals

Summary of Accomplishments:

Characterized how tube length and diameter affect sound quality

Statement of Team Goals (Next Week):

Testing – fit tubing attachments and adaptors. Test connections
Research – alternate microphones

Statement of Individual Goals (Next Week):

Brian: testing - tubing
Erin: testing - tubing
Prachi: testing - mics
Steve: testing - mics

Difficulties:

The diameter of the tube provided makes speaking with the tube difficult because you can't close your mouth well

Activities:

Brian:
Progress Report .5 hr
Testing 2hr
Buying supplies 1 hr

Erin:
Testing 2hr

Prachi:
Testing 2hr

Steve:
Testing 2hr

Time

	Brian	Erin	Prachi	Steve	Team
Week 1	5	3	2	3	13
Week 2	4.5	4	2	1.5	12
Week 3	2.5	1.5	1	2	7
Week 4	3.5	2	2.5	2	10
Week 5	5	4.25	4	5	18.25
Week 6	3.5	2.5	3.5	3	12.5
Week 8	1	.5	0	0	1.5
Week 9	3.5	3	3	3	12.5
Week 10	2.5	2	2	2	8.5

Week 11	3.5	2	2	2	9.5
Cumulative	34.5	24.75	24	23.5	101.75

Timeline

QuickTime™ and a
TIFF (LZW) decompressor
are needed to see this picture.