



10/03/2001 - Problem Opportunity Statement
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Who Are We Designing For?

Community/Group

Families with disabled members.

Network can include:

- Disabled school children and their able-bodied friends
- Disabled children and their school faculty and staff
- Disabled children and their medical caregivers, audiologists, therapists, psychologists, parents, intervention specialists, and other support persons
- Parents with disabled children
- Disabled parents with able-bodied children
- Disabled persons with the general public
- Parent-to-parent support network

The network will be more clearly defined when Team YoG has contacted local resources, and confirmed their level of participation.

Social Impact of the YoG Device

The social impact of our device will be narrowed down from the following:

- Facilitate interaction among disabled persons, as well as with able-bodied persons. This will
 - 1) Increase social involvement in the community and create a sense of belonging
 - 2) Create a more positive attitude among society towards disabled persons, and create a more realistic understanding of who disabled persons are.
- Help disabled members more naturally integrated in the community. (e.g., Caption readers)
- Increase safety for the disabled person; this includes personal injury and assault. (e.g., Bus Stop)
- Help parents make more informed decisions about the care of the child. (Parent-to-parent support network)

“When a child is born with, or acquires a vision impairment, the family is challenged to understand the visual diagnosis, the impact of vision loss on development, and to begin to bring the world to the child. Without a dependable visual system the child with vision impairment is called upon to understand the world through incomplete messages from the other senses of touch, sound, taste and smell. The child needs to organize this incomplete information and then respond to what may be a confusing view of the world.”

Blind Babies Foundation
http://www.blindbabies.org/frameset_unique.htm

Statement of Opportunity

Problem Statement

Current products for the blind and deaf are:

- Unappealing
- Relatively bulky (e.g., TTY units)
- Expensive
- Some important technologies such as TTY, TDD, even sign language can only be enabled when both parties use the system
- Require a lot of additional components and extra maintenance (e.g., Dryer, covers, adapters)
- In short... alienating

Project Goal

To design a device using 3G technology that closes the emotional and informational gap among the disabled as well as their able-bodied counterparts, including the public in general.

To accomplish this task Team YoG will apply appropriate aesthetics for the senses, include optimum mobility, and connect the device to existing everyday technologies to optimize usefulness.



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Scenario of Use

Today's Scenario - Without YoG

Rachael, a visually impaired girl age 13 and her able bodied best friend Sarah want to meet at the local Toys-R-Us after school to check out the new games. Rachel attends a special school for the disabled, but Sarah attends public school.

Rachael is going to meet Sarah at the store and has to navigate the bus by herself. She is taken the bus before and knows where the station is, but finds it difficult to know when to get on and off. The last time she rode the bus she tried counting the number of stops but ran into trouble when the bus didn't stop at every station and she got lost. Now she just asks the driver, but finds it difficult to get help during rush hour.

After getting off at her stop she makes her way to the store, but Sarah doesn't seem to be there or at least she can't find her.

Eventually Rachael does locate Sarah, but Rachael finds the whole experience exhausting, isolating, and frightening. Maybe her parents are right and she shouldn't try to go places on her own.

Tomorrow's Scenario - With YoG

Rachael recently got her new YoG device and she loves it. This afternoon Rachael and Sarah are meeting at the playground near Sarah's house.

Rachael hasn't every been there before, but she goes to the bus stop and her YoG lets her know when the bus she needs has arrived. Rachael gets on easily and finds a seat. A few minutes before she needs to get off her YoG let her know and signals her when her stop has arrived.

Rachael hops off the bus and her Yogi device directs her to the playground. As she enters the park her Yogi lets her know that Sarah is waiting for her by the swings. Rachael and Sarah, laugh and head over to the monkey bars for a day of fun.