MOTIVATION:

Professor Fogarty mentioned in class that everything in the world we encounter has been designed by someone who may or may not have us in mind. Furthering this idea sometimes we encounter bad design that is not merely inconvenient but negatively impacts the quality of our lives. I am excited to propose a project which uses technology to achieve a social justice goal while employing personal informatics.

"Being the richest man in the cemetery doesn't matter to me… Going to bed at night saying we've done something wonderful – that's what matters to me."
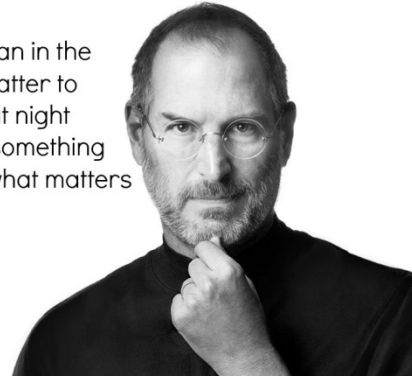— Steve Jobs

Figure 1: inspiration

Figure 2: The Challenge

PROBLEM:

In Seattle Public Schools (SPS) only 50 percent of students with disabilities graduate from high school, compared with 75 percent of students without disabilities [1]. How can parents and their children with disabilities ensure educational success in this current system?

The National Center for Learning Disabilities has this advice for families:

> *"Advocating for your child throughout the "LD journey" requires you to be vigilant and knowledgeable about your child's needs and the special education system—not an easy job! This includes understanding your child's Individualized Education Program (IEP) and helping them build self-esteem and set goals [2]."*
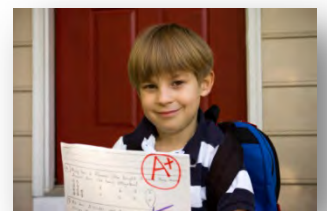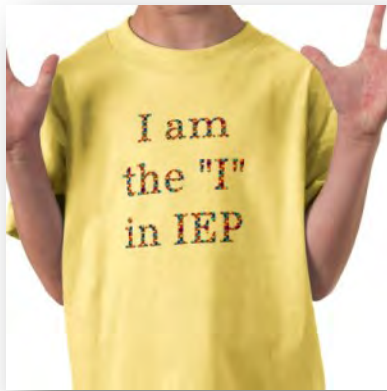

Figure 3: What is Possible

Figure 4: The Solution

ANALYSIS OF PROBLEM

An IEP when functioning properly is a documents which details educational services to support the learning and behavioral goals of the student. The goals by law must be measurable and data collected over time to assess progress. A good IEP is a personal informatics tool. SPS is failing to provide these IEP services and proper data collection. The results are missed opportunities for students to learn something meaningful about how they best learn and can be successful.

Foundation for a Brighter Future: Essential Needed Improvements in Special Education in Seattle, a report released July 2014, had the following Data-based recommendations for SPS:

"Recommendation #3 – Useful and Usable Data: Ensure multiple measures are available to guide decisions. Make collecting and using high quality data an Urgent district-wide Imperative. Significantly improve the capacity of Central Office special education staff to produce, access, and use timely data reports [3]. –"

"The current IEP data system needs to be linked to measures of progress so that effectiveness of services can be transparently evaluated. Student registration must be integrated with special education data needs and accuracy must be greatly improved. Further, SPS data systems need to be upgraded to capture actual service delivery of instruction and related services by provider and student to increase accountability [3]. "

"Recommendation #4 – Data Use Culture: Instill, reinforce, and reward a culture of data-based decision-making in all Central Office and school functions with a special emphasis on improving the quality of instruction for all students, particularly students with disabilities [3]. "

Figure 5: The Future

PROPOSAL

I am proposing that we design an IEP navigator toolkit to help families to create and track their child's Individual Education Plan and skill development

This tool would:

- Educate parent and students on the ways in which their student is differently abled and provides specific successful strategies for academic and personal success.

- Create and track the implementation and progress of IEP goals.
- Inform parents and students of legal IEP procedures and their rights.
- Strengthen the parent and child's ability to advocate for themselves by providing data to support their educational requests and file complaints if necessary.

MOVING FORWARD

Through this project we would improve on existing tools to create one multi-faceted tool with a good balance between automated technology and user control. A few baseline tools of interest:

IEP Checklist http://www.peatc.org/peatc.cgim?template=IEPChecklistiPhone

Myhomework https://myhomeworkapp.com/

iRewardChart https://itunes.apple.com/us/app/irewardchart-parents-reward/id341306389?mt=8

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<http://www.seattleschools.org/modules/groups/homepagefiles/cms/1583136/File/Departmental
Content/strategicplan/background/special_ed_1pager.pdf>.

[2]

Stage Related Content: How Do I Ensure My Child's Success? - National Center for Learning Disabilities |
NCLD.org - NCLD." *National Center for Learning Disabilities*. Web. 30 Sept. 2014. <http://www.ncld.org/stage-
related-content-child-future-ld>.

[3]

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