

Digitizing record keeping in the classroom

Streamlining the way teachers evaluate students with special needs to improve record keeping and protect schools from lawsuits

CHALLENGE

The Orange County Department of Education's special education department wanted to improve the way instructors were tracking students' progress.

Teachers were using paper evaluation forms that were cumbersome to manage and limited teachers' ability to customize goals to fit each student's unique needs.

SOLUTION

A web app that allows teachers to manage students' academic and behavioral goals, log evaluations digitally, and track student progress over time.

IMPACT

The ability to submit evaluations with their phone increased the total number of evaluations submitted by more than 50%.

Better records ensured compliance and protected the school against litigious parents.

CONTEXT

When a student enters a U.S. special education program, they receive an **Individualized Education Plan**, or IEP, a document that outlines the student's needs and the goals the school must help the child accomplish.

PARENTAL CONCERN

Parents want to know that their child is getting the resources they require and that the school is holding itself accountable for the their child's progress.

ADMINISTRATION FEARS

Schools are regularly sued by parents who feel their child's needs are not being properly met.

INSTRUCTOR FRUSTRATION

Teachers want to keep accurate records, but their time is limited and they prefer to put energy into teaching rather than bureacratic tasks.

Need finding

Questions

Why aren't teachers tracking student progress in the proper way?

How can we encourage more accurate record keeping?

Process

Interviewed two admins, five teachers, three behavior analysts and two parents

Reviewed examples of student IEPs and evaluation forms

Competitive analysis of goal tracking software

Observations

Older instructors are uncomfortable using unfamiliar software

Paper evaluation forms require two hands (or a desk) to complete

Goal descriptions are quite lengthy.

Behavior analysts manage creation of individualized education plans and are most invested in a solution

Design Principles

Any software solution needs to be simple and easy to use

Logging evaluations needs to be straight forward and designed for mobile phones

Allow teachers to import goals or copy and paste text from their desktop.

Software alone will not solve the problem. More process and accountability are needed

"The problem is more than 'lack of technology'... There is no process for tracking student progress... and very little oversight for teachers."

– Jenny, Special Education
Dept Director

"I'm like the nanny state... I have to hound the teachers to get me their evaluations."

– Ross, Applied Behavior Analyst

Flexible templates

10-23-2015 TUE MAR Set 1 y 5

Student: [REDACTED] Instructor: [REDACTED]
Date of Initial Instruction: OCT. 2015 Projected Date of Accomplishment: 10-2016

Annual Goal: 1. FUNCTIONAL ACADEMICS/FINE MOTOR/RECEPTIVE/COMMUNICATION LIFE SKILLS
By 10/20/2016, During a structured computer activity, [REDACTED] will follow verbal directions to complete a "winning task". Given a computer set up with a large "button interface" and verbal prompts, [REDACTED] press the button to hear the story "paired with" child's light music or other. [REDACTED] will follow task "to turn" the pages of the story by clicking the switch, until he hears "THE END" 10 per trial day. (100% accuracy 8 of 10 trial days as measured by the SANDS data collection and number observation. This goal was collaborated on with the Vision Specialist as well as recommendations from [REDACTED] current IEP assessment, and recommendations.

Current Response with Breakdown of Short Term Objective

Progress Date	1	2	3	4	5	8	N	O
OCT. 2015	X	X	X	X	X	X	X	X
NOV. 2015	X	X	X	X	X	X	X	X
DEC. 2015	X	X	X	X	X	X	X	X
JAN. 2016	X	X	X	X	X	X	X	X
FEB. 2016	X	X	X	X	X	X	X	X
MAR. 2016	X	X	X	X	X	X	X	X

1 evaluation instance

10 tasks tracked per evaluation

1. FUNCTIONAL ACADEMICS/FINE MOTOR/RECEPTIVE/COMMUNICATION LIFE SKILLS
By 10/20/2016, During a structured computer activity, [REDACTED] will follow verbal directions to complete a "winning task". Given a computer set up with a large "button interface" and verbal prompts, [REDACTED] press the button to hear the story "paired with" child's light music or other. [REDACTED] will follow task "to turn" the pages of the story by clicking the switch, until he hears "THE END" 10 per trial day. (100% accuracy 8 of 10 trial days as measured by the SANDS data collection and number observation. This goal was collaborated on with the Vision Specialist as well as recommendations from [REDACTED] current IEP assessment, and recommendations.

Paper evaluation forms force teachers to break goals into 5 or 10 subtasks

INSTRUCTIONAL PLAN - 5 TRIALS
ACADEMICS-READING COMPREHENSION

Student: [REDACTED] Instructor: [REDACTED]
Date of Initial Instruction: 12/15/15 Projected Date of Accomplishment: 12/2/16

Annual Goal: After being read a short passage consisting of a minimum of 5 sentences, [REDACTED] will use his communication device to respond correctly to 4 of 5 simple questions about what he has read over 3 consecutive trial days as measured by data collection and observation.

Short Term Objectives: STO #1: passage consisting of 2 sentences, 3 consecutive trial days
STO #2: passage consisting of 5 sentences, 4 consecutive trial days

Current Response with Breakdown of Short Term Objective

Progress Date	1	2	3	4	5	8	N	O
DEC. 2015	X	X	X	X	X	X	X	X
JAN. 2016	X	X	X	X	X	X	X	X
FEB. 2016	X	X	X	X	X	X	X	X
MAR. 2016	X	X	X	X	X	X	X	X

1 evaluation

Tasks tracked per evaluation (5)

1. FUNCTIONAL ACADEMICS/FINE MOTOR/RECEPTIVE/COMMUNICATION LIFE SKILLS
By 10/20/2016, During a structured computer activity, [REDACTED] will follow verbal directions to complete a "winning task". Given a computer set up with a large "button interface" and verbal prompts, [REDACTED] press the button to hear the story "paired with" child's light music or other. [REDACTED] will follow task "to turn" the pages of the story by clicking the switch, until he hears "THE END" 10 per trial day. (100% accuracy 8 of 10 trial days as measured by the SANDS data collection and number observation. This goal was collaborated on with the Vision Specialist as well as recommendations from [REDACTED] current IEP assessment, and recommendations.

Description

Johnny will spell his name correctly with 80% accuracy

Tasks to track

J

A

C

O

B

+

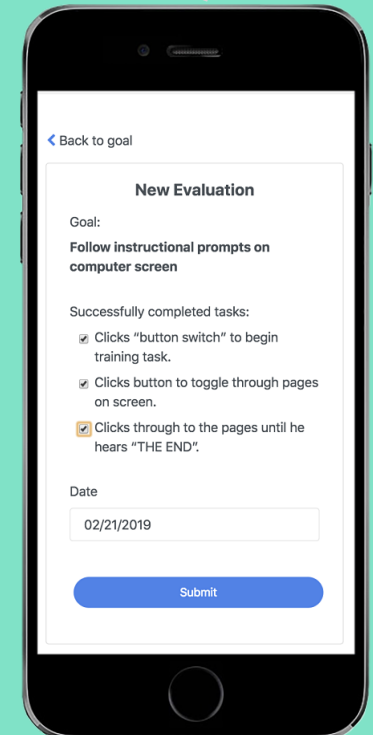
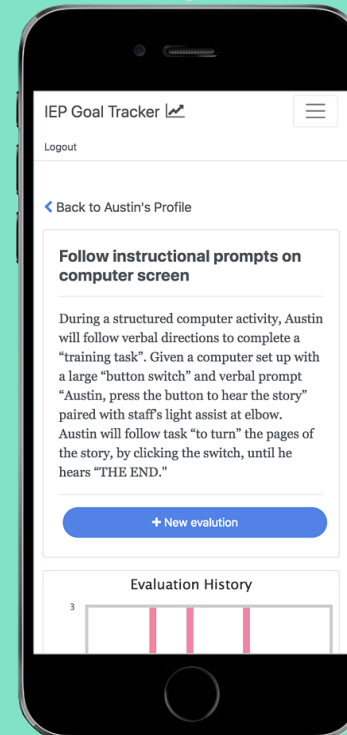
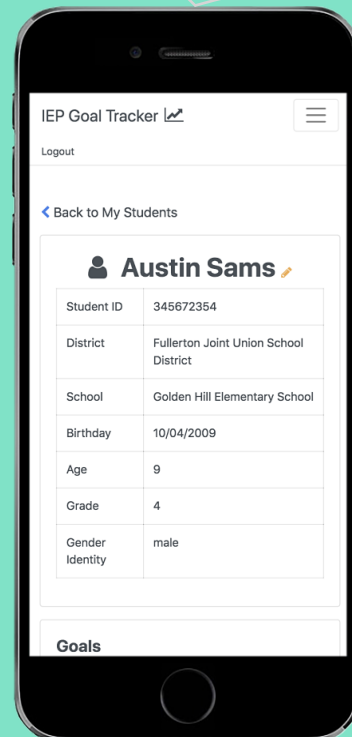
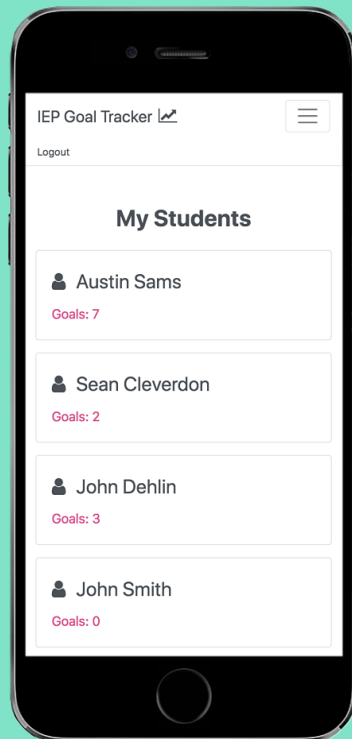
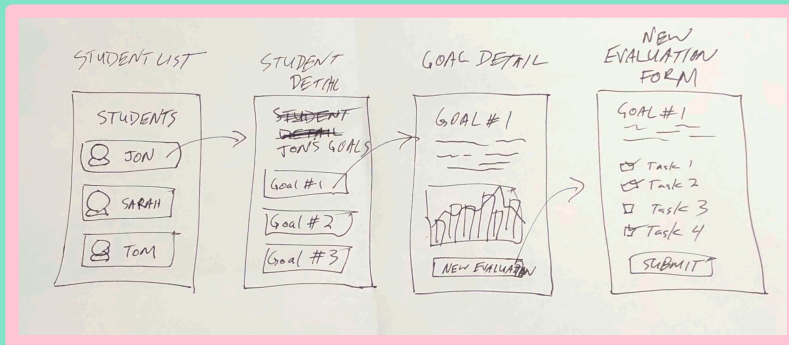
Category

Digital solution allows goals to be broken into as few or as many tasks as needed

Quick and easy

Paper evaluations require a surface to write on, two hands and shuffling through dozens of forms.

The mobile web app allows teachers to log an evaluation in as few as 4 taps on their phone.



Real time data visualization

- Parents expressed a desire to receive updates more frequently than their child's quarterly report cards.
- Behavior analysts complained that teachers rely on "gut checks" rather than data.
- Even teachers who tracked goals religiously had trouble synthesizing their results at the end of each quarter.

The animated charts delighted users and provide sense of student progress at a glance.

