

# The Quality of IEP Goals for Students with ASD in 60 High Schools

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## Abstract

IDEA legislation requires that students with individualized education plans (IEPs) make “progress appropriate in light of the child’s circumstances.” (*Endrew v. Douglas City School District*, 2017, p. 16). IEPs are the foundation upon which the educational experience of students with disabilities is built, with annual goals at the heart of the document (Yudin & Musgrove, 2015). In order to measure student progress, it is imperative that these goals and objectives are measurable and linked to assessments with baseline or present levels of performance identified (Yell & Bateman, 2019). The following study evaluated the quality of IEP goals written for students with ASD from 60 high schools participating as part of a large RCT study. Less than half the goals taken from IEPs (41%) met the criteria for high quality, with the lowest number for social goals. Implications for practice are discussed.

## Background and Purpose

This study was a part of a randomized controlled trial (RCT) conducted by the Center on Secondary Education for Students with Autism Spectrum Disorder (CSESA) funded by the Institute of Education Sciences to develop and evaluate a multi-component intervention for high school students with ASD.

The purpose of this study is to analyze the quality of IEP goals and related data collection systems for high school students with ASD in each of the four key domains of CSESA (Social, Academic, or reading comprehension, Independence & Behavior & Transition) prior to intervention in order to determine if they are of sufficient quality to determine student progress.

## Participants

- **60 high schools – 20 in each of 3 sites - North Carolina (NC), a large geographic area of Wisconsin (WI), and San Diego, California (CA) participated.**
- **539 students with ASD (84% male) participated in the study.**
- **The mean age for the students at the start of the study was 16.27 years.**

## Procedures

All data reported are from the initial pretest collected before any intervention occurred.

Goals were coded as (1) being based on the student’s current IEP goal or (0) not being based on the current IEP Goal.

If there was a goal on the IEP – it was assessed for quality. To examine the impact of school program (modified diploma or standard diploma) the goal quality was averaged for each student.

## Assessment of IEP Quality

**Quality of each goal was determined using the criteria outlined on the data collection form below:**

### A. Prepare to Write Goal

- Goal Area
  - ☐ Academic
  - ☐ Ind./Beh.
  - ☐ Social
  - ☐ Transition
  - ☐ \*Other

*Ask teacher to bring a copy of student’s IEP goals and any baseline or current performance data on this target goal*

\*If not aligned with a CSESA component, then select a priority focus goal (SAU schools only)

### 2.A Is selected goal based on current IEP goal?

If **yes**, review IEP goal using 2b-2f

- ☐ Yes ☐ No If No provide coaching

### 2.B Is a **single target** selected?

- ☐ Yes ☐ No If No provide coaching

### 2.C Are the **antecedent** conditions clear?

- ☐ Yes ☐ No If No provide coaching

### 2.D Is the target skill/behavior **observable & measurable**?

- ☐ Yes ☐ No If No provide coaching

### 2.E Is there **mastery criteria**?

- ☐ Yes ☐ No If No provide coaching

## Reliability

### Inter-rater Agreement

Inter-rater reliability for the baseline level of the CSESA educational goals was taken for 10% of the goals. This was done by CSESA staff observing the student performing the behavior in the classroom or on the school campus to determine the reliability with the teacher report of baseline for that goal. Reliability for baseline was X%.

## Data Analysis

- Percentages of goals meeting each quality indicator was averaged across all goals that were created for students for each indicator.
- A Mantel-Haenszel linear-by-linear association chi-squared test was performed to test for trends in differences between student goal quality in modified diploma or standard diploma.
- To examine the impact of data brought to the baseline meeting, scores were averaged for each student to indicate the average proportion of goals that had data brought to the baseline meeting.
- A multivariate multiple regression was performed to examine the extent to which average baseline data predicted the total number of goals that met quality indicators for each student.
- A t-test was performed to compare the number of minutes a CSESA staff spent coaching with the teacher between students whose teachers had brought data whose teachers had not brought data.

## Conclusion

- Two fifths, or 41% of the goals from the IEP met the criteria for high quality, or most were unlikely to be adequate for measuring student progress.
- Only 13% of goals had corroborating data indicating that this is a skill that is lacking for many teachers.
- Teachers with data wrote better goals & required less coaching time compared with teachers without data.
- The least quality goals were in the social domain that remains a challenge for students with ASD is a concern.
- Goals were better written for students in a modified program perhaps reflecting differences in teacher preparation.

## Results

### 1442 Goals were analyzed

- **Only 61%** were taken from student IEPs the highest for academics & lowest for transition.
- **Only 25%** of all goals met the full criteria for a high quality goal with most for academic (30%) and the least for social (18%).

### IEP Goals Written with Criteria for High Quality

Focus of Goal	Goals Based on Current IEP Goal	All 4 Criteria for High Quality	1. Single Target Selected	2. Antecedent Conditions Clear	3. Target skill/behavior observable & measurable	4. Mastery Criteria Included
Academic	80%	30%	81%	74%	82%	82%
Social	61%	18%	67%	56%	63%	65%
Ind/Behav	58%	30%	75%	56%	66%	66%
Transition	51%	23%	76%	69%	72%	72%

- The goals for students in the **modified program** had a **higher number of high quality goals** that had a single target selected,  $\chi^2 (1, N = 386) = 5.46$ ,  $p = .020$ , antecedent conditions clear,  $\chi^2 (1, N = 386) = 9.21$ ,  $p = .002$ , the target skill/behavior observable and measureable,  $\chi^2 (1, N = 386) = 6.33$ ,  $p = .012$ , and having met mastery criterion,  $\chi^2 (1, N = 386) = 8.00$ ,  $p = .005$ .
- **Only 13% of goals had student data**
- **Having data** to support IEP goals was significantly associated with **antecedent conditions being clear**,  $F(5, 108) = 2.64$ ,  $p = .03$ ,  $\eta^2 = .11$ , & target skills being **measurable and observable**,  $F(5, 108) = 2.67$ ,  $p = .03$ ,  $\eta^2 = .11$ )
- **83% of the goal writing required coaching**  
**X = 17 minutes**
- If data on the IEP goal was available, there was **significantly less time needed for coaching** ( $t (456) = 4.39$ ,  $p < .001$ ).

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