

**Point Scribe Research Intervention
Report
Pikes Peak BOCES, Colorado Springs, CO • 2010**

LIBERTY Program description

The LIBERTY Program is a licensed educational setting that provides students with structure, routines, and communication supports in order to improve academic achievement, develop appropriate behaviors, and gain independence in all areas of life.

Student population description

LIBERTY students are racially, culturally and socio-economically diverse. The students have a dual diagnosis and/or a diagnosis on the autism spectrum. The 20 students participants in the Point Scribe Intervention ranged in age from 7 to 17 and grades 2 to 11.

Writing difficulties

LIBERTY students typically struggle with both the construction of letters and the consistency of letters. This often negatively impacts the quality and readability of their academic work. It may also negatively impact their behavior due to frustration. Examples of each student's writing will be presented as a baseline.

Point Scribe intervention expectations

The expectations from the Point Scribe intervention are improved letter construction, lessened writing difficulties, and improved behavior around writing tasks.

Timeline

The students were introduced to Point Scribe during January 2010. Data was collected until May 2010. Analysis of the data and assessment of the intervention was completed by June 2010.

Setting

The students were arranged into 3 classrooms. The elementary room (7 students) served grades Kindergarten through 5th grade. The middle school room (6 students) served grades 6, 7, and 8. The high school room (7 students) served grades 9, 10, 11, and 12th grades. Each classroom had a certified teacher and at least 3 paraeducators. Each classroom was equipped with computers. A computer lab was also available to students.

Intervention process

The students copied a passage from the whiteboard onto paper as their baseline example. Elementary students wrote the lower case alphabet and numbers 0-9. The older students wrote the phrase "The quick red fox jumped over the lazy brown dog" and numbers 0-9. The students were introduced to Point Scribe as a class. Each student began Point Scribe at an individually appropriate level. The level was determined by the teacher using the student's baseline example. The Point Scribe program generated data and reports during the intervention. The teacher adjusted each student's level as they progress based on the data and reports. In May 2010, each student copied a passage from the whiteboard onto paper. This example was compared with the baseline example.

Population Information

Twenty students began the intervention. Thirteen students were unable to complete the intervention for the following reasons: baseline showed appropriate writing skills; transfer to another school or program; inconsistent access to Point Scribe; or resistance/refusal/behavioral issues. The remaining 7 students were all male, aged 9-15, and in grades 4 to 8th. The students averaged 15-20 minutes a day, 4 days a week access to Point Scribe. The students practiced the pre-writing skills, numbers 0-9, and upper and lower case letters. Some of the students also practiced their names and addresses.

Documentation

Due to technical problems not associated with Point Scribe, the Point Scribe reports for the 7 students are unavailable. To ensure confidentiality, each student is referred to by a number between 1 and 7. Baseline writing examples are identified as "(a)." Final writing examples are identified as "(b)."

Results

Student #1: 9 years old, 4th grade

The baseline sample showed inconsistent letter formation, switched between upper and lower case, and little spacing between letters. The final sample showed a marked improvement in letter formation, spacing, and all letters were written as lower case. Apparent improvement.

Student #2: 10 years old, 5th grade

The baseline sample showed upper case letters that were mostly well formed. The positioning was inconsistent. Letters were different sizes and did not remain within the lines of the paper. The final sample showed improved letter size regulation. The letters were arranged within one writing line with some spatial movement. Improvement noted.

Student #3: 10 years old, 5th grade

The baseline sample shows large, well formed, multi-line, upper case letters that do not conform to the writing lines. The final sample shows line consistency and spatial awareness. Improved readability is evident.

Student #4: 12 years old, 6th grade

The baseline sample shows ill-formed letters that do not conform to the writing lines and numbers with no spacing. The final sample shows well-formed letters that conform to the writing lines. Numbers are a consistent size and have appropriate spacing. The letters also indicate individual stylization. Readability is definitely improved.

Student #5: 13 years old, 7th grade

There is no baseline sample for this student. At the beginning of the intervention, he would not copy any writing. He did, however, hold a pencil and trace cartoon pictures. He began Point Scribe using his finger and gradually began to hold a pencil, eraser end to the screen, to complete the Point Scribe tasks.

Student #6: 15 years old, 8th grade

The baseline sample shows poorly formed letters, of varying sizes, that do not conform to the writing lines. Words are not spaces and readability is reduced. The final sample shows marked improvement in letter formation, letter size, and letter placement. The readability of the sample is significantly improved. Marked improvement noted.

Student #7: 15 years old, 8th grade

The baseline sample shows no readability. In fact, the writing looks like cuniform. It is unintelligible. The final sample shows a drastic improvement. The letters are ill-formed but can be read. The letter size is consistent. Significant improvement is evident.

Narrative

Student acceptance of and behavior with the program negatively impacts the consistency of the intervention. The evidence shows with consistent intervention using the Point Scribe software program, students improve the consistency, readability, and appearance of their writing.

Recommendations

Continued, consistent use of the Point Scribe software program is indicated for students with special needs. Once students are competent with letters and numbers, they should have individualized macros to improve their skills with important personal information.

STUDENT #1 (a)

abcdefghijklmnopqrstuvwxyz

a

Student #1 (b)

5-17-10

q b c d e f g h i j k l m n o p q r s t u

v w x y z 1 2 3 4 5 6 7 8 9 10

Blank handwriting practice lines consisting of solid top and bottom lines with a dashed midline.

Student #
#2
(3)

JAN 11 / 2010

A B C D E F G H I J K L M N O P Q R

S T U V W X Y Z 3

Student #2
(b)

5-17-10

Q Z 3 4 5 6 7 8 9

A B C D E F G H I K L M N O P Q R S T U V W X Y Z

3/11

01-20-10

Student #3

(b)

I show self-discipline
when I finish my
chores before playing

Student #3 (a)

JAN. 11, 2010

ABC DEF GHIJK

L MN O P Q R S

T U V W X Y Z

0 1 2 3 4 5 6 7 8 9

The quick red fox jumped

over the lazy brown dog

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

~~the quick red fox~~

21

Student
#5
(b)

IT IS HOW
COMPASSION
WANTS TO
KNOW THINGS
ABOUT US.

Student # 6 (a)

1-11000

The quick red fox jumped

over the 124

brown dog

0 1 2 3 4 5 6 7 8 9

bin

Student #6 (6)

The quick
1 2

red fox
3 4

jumped over
5 6

the lazy
7 8

brown dog
9 10

0 1 2 3 4 5 6 7 8 9

7
20
10

Student #8
(a)

W W 10

~~I S A F E H W~~

~~F A I S P I A S G~~

~~a) I F A G S C A C i P H~~

re when

F A C C E T A O F T A G C G

n S L

H O I F S G O M T O W F W O T

Student
#~~8~~
(6)

→ - 17
P.V.I

1 2 3
T P quick P → 6

4 5 6
P O K J U M P O V E R

7 8 9
P O K P O K P O K

10
P O K

11
0 1 2 3 4 5 6 7 8 9