This paper describes the planning and implementation of an instructional unit to teach the basics of American Sign Language to a class of nine elementary-aged male students with serious emotional disturbances (including one with a severe hearing impairment) in a laboratory school. The systematic instructional approach, direct instruction, was used. Direct instruction utilizes a mastery learning paradigm, a structured teacher-directed approach, careful monitoring of student performance, and provision of immediate and corrective feedback. Instructional planning involved pretesting of hand proficiency, selection of specific signs, and development of instructional objectives and detailed lesson plans. Implementation consisted of daily half-hour lessons over a 3-week period, each of which involved review, statement of objectives, direct instruction, practice, and feedback. Evaluation indicated that 5 of the 6 students who completed the posttest surpassed the mastery criterion of 24 signs out of the 42 signs taught, with students gaining an average of 34 new signs. Evidence of intrinsic motivation in learning and using sign language was seen. Most students spontaneously initiated conversation with the hearing-impaired student. Lesson topics, a sample lesson plan, and the assessment story are attached. (DB)
Teaching Sign Language to Children with Behavior Disorders Utilizing Direct Instruction

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Teachers of students with behavior disorders are confronted with many challenging behaviors, and are often concerned with the communication and social skills of their students. Sign language with verbal children who have behavior disorders is an alternative communication mode for maintaining behavior control and fostering self-esteem, attention, on-task behavior, communication, and academics (Miller, 1984). Benefits of using signs in the classroom include reducing unnecessary conversation and expanding on simple cues and signals that most teachers normally employ. In addition, the motivational aspect of curiosity and novelty inherent in sign language makes it appealing to students.

In this article, we describe how we planned and implemented a successful instructional unit to teach the basics of American Sign Language to a class of nine elementary-age students with serious emotional disturbance. The students were all males, ages 8 to 9, who attended a laboratory school for children with serious emotional disturbance. In the beginning of the fall semester, we determined that teaching sign language to our students was necessary for several reasons. One of the students in the class had a hearing impairment and used sign language as a primary means of communication. Therefore, our efforts to foster positive peer interactions among all students in the class were deemed important enough to teach sign language (Webster-Stratton, 1993). Also, many of the students in the school were nonverbal, and sign language was deemed to be critical in enhancing prosocial skills and advantageous during an emergency situation. Knowledge of sign language may be considered beneficial when both the user and the receiver understand it.

To effectively teach sign language, we utilized a systematic instructional approach (i.e., direct instruction) known to be applicable with a wide range of learners (Gersten, Woodward, & Darch, 1986). Direct instruction is characterized by a mastery learning paradigm and a structured teacher-directed approach in which skills are taught using carefully designed and detailed instructional procedures. This approach involves teachers working with students in small groups, carefully monitoring student performance, and providing students with immediate and corrective feedback. Learning is made easier by utilizing a task analysis approach. Although teacher
presentation and organizational techniques (e.g., the ability to maintain student attention through appropriate signaling and pacing and seating arrangements) have received the most attention, a generally unrecognized yet important aspect of direct instruction is its emphasis on instructional design (Tarver, 1986; Kameenui, Jitendra, & Darch, 1994).

**Phase I: Planning for the Instructional Unit**

The instructional unit lessons were scheduled for half an hour every day over a three-week period. As the first step in the planning process, a pretest on basic hand configurations (e.g., open hand, finger isolation) was completed by all students to determine their proficiency in forming signs. Next, we began identifying topics for the instructional unit on American Sign Language. Topics for the unit were determined using the instructional guide for learning American Sign Language. Then, specific signs from the chosen topics were selected for inclusion in the lessons based on students' preferences as indicated by a survey conducted prior to the development of lessons. Apparently, choice of signs within the parameters of selected topics was a motivating factor for our students to learn sign language (Dunlap, DePerczel, Clarke, Wilson, Wright, White, & Gomez, 1994).

The next step of planning for the instructional unit involved specifying the lesson objectives by examining student interests and by reviewing the instructional guide for American Sign Language. The instructional objectives for the entire unit with relevant topics for each lesson are presented in Figure 1. Following the specification of instructional objectives, detailed lesson plans were developed using direct instruction procedures to reflect the learning outcomes, classroom management procedures, and instructional procedures along with examples for the teaching, guided practice, and independent practice stages. A sample lesson plan is shown in Figure 2.
All lessons began with a review of information from previous lessons. Activities for the various lessons were developed around the selected topics and designed with an emphasis on student interests and opportunity to apply the acquired sign. For example, the sign language lesson on Colors began by teaching students the signs for some of their favorite colors. In addition, the lesson provided students with the opportunity to practice taught signs by requesting colored noodles for an art project.

**Phase II: Implementing the Lessons**

The teaching procedures were implemented using the principles of explicit or direct instruction (Carnine, Silbert, & Kameenui, 1990; Rosenshine, 1986) that included modeling, guided practice in controlled materials, monitoring and corrective feedback, and independent practice. At the beginning of each instructional session, students were informed of the instructional objective, behavioral and academic performance criteria, and reinforcement. A brief introductory statement served to present the necessary information in a clear and concise manner. For example, the teacher stated, "Today, we will learn the five color signs. At the end of this lesson, you will learn to independently sign at least three of the five signs presented. You can earn five participation points for the practice activity and five for the independent activity, in addition to your checks for appropriate behavior." Both rules and participation points were prominently displayed throughout the instructional session.

Each instructional session provided continued practice on previously taught signs. Students received consistent feedback and reinforcement during the session. Specific verbal praise was provided for both correct responses and effort. In addition, students acquired participation points for correct demonstration of signs in both the practice and independent stages of instruction. Extra credit was also incorporated into the point system such that students could individually earn five points at the end of the lesson for correctly performing all five signs presented in the lesson. Furthermore, students could earn pictures or other visual representation of signs that they independently produced at each session. Correction procedures for incorrect responses included a model, lead, test procedure.
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Students were actively monitored during the instructional session as the teacher circulated among the students by recording errors, providing corrective feedback, and documenting student performance of instructed signs. In addition, an individual behavior management plan developed for each student was implemented during this session.

Phase III: Evaluating Instruction

In addition to the on-going evaluation throughout the instructional unit, the teacher evaluated the effects of the instructional intervention at the completion of the unit using an assessment story (see Figure 3). The story included words for all trained signs, and students were required to perform the correct sign when the target word appeared in the story. Given the objective of learning at least three signs per lesson, results of the assessment indicated that with the exception of one student, all students who completed the posttest \( n = 6 \) met and surpassed the mastery criterion of 24 signs out of a possible 42 taught signs (see Table 1). Students gained an average of 34 new signs, ranging from a low of 20 signs to a high of 42 signs (maximum taught).

In general, the half hour sessions seemed adequate in achieving the specific instructional objectives in each lesson. Students demonstrated few errors, most of which were random errors that were easily corrected through modeling and/or physical prompting. However, two students evidenced specific problems in acquiring the signs. For example, Joey had trouble imitating presented signs because of the perceptual problems he experienced. As such, remediation included a staff member sitting beside him and modeling the sign. In contrast, John sometimes experienced difficulty in finger isolation which was corrected by having the teacher's aide work with him individually during the day.
In summary, the sign language topics generated much interest on the part of students as they constantly requested to learn additional signs. In fact, some students indicated an interest in constructing sentences to express themselves. Apparently, intrinsic motivation in using sign language was evident from students' questions about sign language and from informal observations of students using sign language in various contexts such as in the hallways and lunch room. Additionally, most students spontaneously initiated conversation with the student with hearing impairment.

Conclusion

Because sign language is unlike the traditional academic subjects with which students with disabilities have had a history of failure and feelings of antipathy, the success of this instructional unit is beguiling. Clearly, the instructional intervention (direct instruction) not only served to reduce the disruptive behaviors of the participating students, but also showed a marked increase in task engagement.
References


Figure 1. Lesson Topics and Instructional Objectives

**Instructional Objectives**

**Lesson 1: Introduction**
Students will demonstrate three nonverbal ways of communicating (e.g., wave, nod head, shrug shoulders, etc.)

**Lesson 2: Pre-Motor Assessment** ("Simon says")
Students will correctly perform the five basic hand configurations necessary for sign language (e.g., whole hand, thumb isolation, index isolation, middle finger isolation, little finger isolation)

**Lesson 3: Alphabet/Name Signs**
Students will select and correctly perform their own "name signs"

**Lesson 4: Color Signs**
Students will correctly perform three out of five presented color signs (e.g., red, orange, blue, purple, green)

**Lesson 5: Food and Snack Signs**
Students will correctly perform three out of five presented snack and food signs (e.g., French fries, pizza, popcorn, candy, hamburger)

**Lesson 6: Animals and Pet Signs**
Students will correctly perform three out of five animals/pets signs (e.g., dog, cat, frog, spider, worm)

**Lesson 7: Sports and Hobbies Signs**
Students will correctly perform three out of five presented sports and hobbies signs (e.g., baseball, bowling, football, hockey, basketball)

**Lesson 8: Thoughts and Feelings Signs**
Students will correctly perform three out of five presented thoughts and feelings signs (e.g., tired, happy, mad, scared, sad)

**Lesson 9: Health and Emergency Signs**
Students will correctly perform three out of five presented health and emergency signs (e.g., shower, toothbrush, danger, help, medicine)

**Lesson 10: Conversational Phrases Signs**
Students will correctly perform three out of five greeting signs (e.g., good morning, see you later, see you tomorrow, come sit with me, and hi, how are you?)

**Lesson 11: Etiquette Signs**
Students will correctly perform three out of five etiquette signs (e.g., please, thank you, I'm sorry, excuse me, and you're welcome)

**Lesson 12: Signs for the first verse of "Kids on the Block" song**
Students will correctly sign the first verse ("Kids are Different") of the theme song, "Kids on the Block."

**Lesson 13: Review of Signs**
Students will correctly perform all familiar signs when presented with a video of basic sign language.

**Lessons 14 and 15: Assessment**
When presented with the assessment story, students will accurately identify the signs learned thus far and correctly perform the appropriate sign.
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**Figure 2. Sample Lesson Plan**

**Title of Lesson:** Introduction to American Sign Language

**Classroom Management:** (1-2 minutes)

**Grading Criteria and Contingency:** 5 points for practice activity (1 point for each performed sign) and 5 points for independent activity. If the entire class gets > 80%, points will be awarded to the group toward the goal of attending a performance by "Kids on the Block" puppeteering company.

**Specific Learning Outcomes:** (1-2 minutes).
Today, we are going to talk about different types of communication. By the end of class, you will show three ways of talking to others without using your voice.

**Anticipatory Set:** (3 minutes)

**Focus Statement.** The teacher moves lips without producing sounds to gain students' attention. Students might respond with queries such as "I can't hear," or "I don't understand."

**Relevance of the Lesson and Transfer of Past Learning.** The teacher introduces the lesson as follows: "Some people cannot hear, which makes it hard for them to talk. And some people can hear, but cannot speak. Do you know of anyone in these situations?" "Today, we will learn what sign language is about. Many of you are already familiar with sign language, because some of your teachers have been talking about American Sign Language and have shown you books and posters of it. Also, you have seen some students in our school use sign language."

**New Vocabulary Terms:** (1-2 minutes)

American Sign Language -- a manual language used by deaf people in America.

Finger Spelling -- Use of the manual alphabet to form words and sentences.

**Interpreting** -- A signed and finger spelled presentation of another person's spoken communication

**Teaching:** (10-12 minutes)

**Sequence/Steps:**
1. Show five minutes of Bernard Bragg video tape of mime story.
2. Discuss what students saw (e.g., body language, gestures, facial expressions, etc.)
3. Teacher demonstrates 3-4 examples of nonverbal communication.

**Questions/Examples/Nonexamples**

What was the story about? How do you know when he was an eagle/squirrel? What body parts did he use? What is different about this story teller? What did you like best?"

The teacher drops the pencil on the floor, points to a student, and then to the pencil. The student should respond by picking up the pencil.

**Guided and Independent Practice:** (5-8 minutes)

The teacher guides students in demonstrating the following using nonverbal communication: sad, hello, go away, come here, tired, sick, no, scared, I don't know, I don't want to. A checklist is used to determine points. The criterion for mastery includes correctly demonstrating at least three of the above signs.

**Closure:** (3 minutes)

"Today, we learned a number of different ways to talk without using our voices. What kinds of activities did we perform to help us learn about sign language? Who can tell me why American sign language is important for people to know?"
There was a boy named [ ] who had a dog, a cat, and a frog. [ ] also liked spiders and worms. [ ]'s frog was green. The frog liked to swim in the blue pond while [ ] sucked an orange candy. He was wearing his favorite purple shirt and a red baseball cap.

It was almost time for lunch. [ ] was thinking about what he would have for lunch. He thought about having a hamburger with french fries or maybe he would have some pizza. As he walked to the lunch room, he could smell some buttery popcorn. [ ] decided he would have a hamburger with french fries for lunch.

Later that day, [ ] was talking with his friends about his favorite sport. He had seen a football game on television on Sunday; his favorite team had won. [ ] could play baseball and basketball. Sometimes he went bowling with his school. One game he always wanted to play but never got a chance was hockey.

[ ] felt tired at the end of the day, so he decided to go home and take a shower. His dog was so happy and excited to see him that he scared the cat away. [ ] became mad and scolded his dog. His dog became sad. [ ] brushed his teeth with a toothbrush and took a shower.

[ ]'s mother was watching Rescue 911 on television. Someone was in danger and needed help. The ambulance took the person to the hospital. The doctor gave him some medicine.

[ ] went to school the next day. He said good morning to his teacher, Mrs. Henderson. [ ] wanted to earn points that day so he said please and thank you to [ ] when he borrowed his pencil. He also said excuse me to [ ] when walking past him in the doorway and I'm sorry when he accidentally stepped on his toes. [ ] was being very polite by saying you're welcome to [ ] when he thanked him for picking his book up from the floor.

Now it was time to go home. [ ] said, see you later to his friends and went home.

Note: [ ] refers to individual students who were tested.
Table 1

Number of Signs Acquired on the Pretest and Posttest

<table>
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<tr>
<th></th>
<th>Marty</th>
<th>John</th>
<th>Mark</th>
<th>Joey</th>
<th>Steve</th>
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<td>20</td>
<td>25</td>
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<tr>
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