

supervisor's questions. We stumbled through an explanation of who our "Chart parent" was and that he would be better able to explain what was going on as soon as he returned from the convention.

When our "Chart parent" returned, he apologized for leaving us defenseless and proceeded to construct Chart 1. According to our "Chart parent," this Chart was designed to help us show our supervisor (or anyone else who was interested, including ourselves) that just because we were now collecting correct and incorrect frequencies and charting them on the Standard Celeration Chart, we were merely ignoring percent correct, but not leaving it completely behind.

Our "Chart parent" explained to us that since the Standard Celeration Chart was a multiply-divide (ratio) chart, percent correct was always visible on the Chart. He used Chart 1 to show us that percent correct can always be seen as the distance between the correct and the incorrect frequency (experienced Precision Teachers often call this the accuracy ratio and express this distance as a $x_{\frac{\cdot}{\cdot}}$ if the dot is above or on top of the "x", and $_{\frac{\cdot}{\cdot}}x$ if the dot is below the "x"). He then "went over" several pairs of correct and incorrect frequencies displayed on Chart 1 and pointed out their percent correct and accuracy ratio values (see Chart 1).

Finally, our "Chart parent" cautioned us again about using percent correct, emphasizing that it confuses people and "hides" information about student performance. These final comments were meant to tease us into an additional lecture on the evils of percent correct to be conducted at a later date.

CURRICULUM

Marie Eaton and Peggy Albrecht

Although many of us who use Precision Teaching in the classroom are beginning to be comfortable with proficiency standards in math and reading, we lack clear aims for other academic and life-skill areas in the speech and language area. There are some practitioners in Iowa who have been doing quite a bit of work toward developing standards.

David Schoemer and Susan Thomsen from the Mississippi Bend Area Education Agency in Clinton, Iowa, have been incorporating Precision Teaching in their clinical work. Recently they sent me some proficiency standards for speech and language pinpoints. They have identified some suggested pinpoints in four speech and

language areas: speech, word meaning, syntax and morphology, and articulation. Within each of these areas they have also identified some specific pinpoints and activities which could be used to measure skills in those areas.

The proficiency standards were determined by assessing 10-15 second and third grade children with no noted speech or language problems. These ranges may vary for older or younger children as well as children with motor, auditory discrimination or processing difficulties.

Following are suggested proficiency standards for Speech Pinpoints, Syntactical and Morphological Tasks, Word Meaning Tasks and Articulation Tasks. Remember, these are "suggested frequencies" and may need to be adjusted for child's age and ability, as well as difficulty level of the task. Other lower and higher level input/output channel combinations are possible. It is not necessary to limit assessments to these sampling procedures.

PROFICIENCY STANDARDS FOR SPEECH PINPOINTS

- | | |
|---------------------------------------|---------------|
| 1. think/say sound | 180-240/min.* |
| 2. think/say word (1 syll.) | 90-110/min. |
| 3. think/say word (2 syll.) | 80-100/min. |
| 4. think/say simple sent.
(4-word) | 40-50/min. |
| 5. hear/point to picture | 25-35/min. |
| 6. hear/say word | 45-55/min. |
| 7. hear/say word twice | 70-80/min. |
| 8. see picture/say word | 45-55/min. |
| 9. hear sentence/say sentence | 30-35/min. |
| 10. see picture/say 4-word sent. | 45-50/min. |
| 11. see picture/say own sent. | 25-30/min. |
| 12. see picture/say word pairs | 35-40/min. |

*less than 10 children assessed

PROFICIENCY STANDARDS FOR SYNTAX AND MORPHOLOGY

Level 6 CONVERSATION

5 minute sample once per week.

AIM: 1 or 0 errors for 5 minutes.

Level 5 CARRYOVER

5 minutes question and answer interaction. Instructor asks questions to elicit target responses.

AIM: 1 or 0 errors for 5 minutes.

Level 4 MIXED SENTENCES

1 minute task. Child says 4 to 5 word sentence using target and non-target mixed pictures for stimulus.

AIM: 25 to 30 sentences per minute with 1 error or less.

Level 3 COMPOUND SENTENCES

1 minute task. Child says 5 to 7 word compound sentences using pictures for stimulus.

AIM: 25 to 30 sentences per minute.

Subtask—

Imitation—Compound sentences

AIM: 20 to 25 sentences per minute.

Level 2 SHORT SENTENCES

1 minute task. Child says simple 4 to 5 word sentence using pictures for stimulus.

AIM: 45 to 50 sentences per minute.

Subtasks—

A. Imitation—Short Sentences.

AIM: 30 to 35 sentences per minute.

B. Completion—Fill in target word.

AIM: 25 to 30 words per minute.

C. Imitation Words—Child repeats target words.

AIM: 45 to 55 words per minute.

D. Discrimination—Child judges if sentence or word is "right or "wrong."

AIM: 25 to 30 responses per minute.

PROFICIENCY STANDARDS FOR WORD MEANING

Level 5 CONVERSATION

5 minute sample once per week.

AIM: 1 or 0 errors for 5 minutes.

Level 4 CARRYOVER

5 minute task. Instructor uses pictures or other materials and asks appropriate questions. Child answers with target word in a sentence.

AIM: 1 or 0 errors for 5 minutes.

Level 3 SENTENCES

1 minute task. Child says 5 to 7 word sentences from pictures.

AIM: 25 to 30 sentences per minute.

Subtask—

Sentences—Imitation

AIM: 25 to 30 sentences per minute

Level 2 WORDS

1 minute task. Child says target words from pictures.

AIM: 45 to 55 words per minute.

Subtasks—

A. Words—Imitation

AIM: 45 to 55 words per minute.

B. Sentence Completion

AIM: 25 to 30 words per minute.

Level 1 IDENTIFICATION

Child points to pictures instructor names.

AIM: 25 to 35 points per minute.

HIERARCHY AND PROFICIENCY STANDARDS FOR ARTICULATION

(Student starts at optimum level on hierarchy and moves up after proficiency is reached. Subtasks are only used when necessary.)

Level 6 GENERALIZATION—Activities to generalize target sound to other settings and observers. These include

A. Peer observation and monitoring

B. Teacher observation and monitoring

C. Parent observation and monitoring

D. Activities outside therapy setting

Level 5 CONVERSATION—5 minute conversation sample taken once per week throughout the entire program.

AIM: 1 or 0 errors in 5 minutes.

Level 4 CARRYOVER—5 minute question and answer task from target sound word list. Instructor uses a list of initial, medial and final target words to elicit from student sentence responses containing target word. (Start **Carryover** and **Sentence** Levels together)

AIM: 1 or 0 errors in 5 minutes.

Subtasks:

A. 5 minute reading task. Instructor asks the student to read from a book for 5 minutes.

B. 5 minute question and answer task from problem solving list. Instructor asks questions and student answers.

C. 5 minute sequencing or storytelling task from pictures or books without words. Student tells stories from pictures.

Level 3 SENTENCES—Initial, Medial and Final—one minute task. Student says sentences 2 times each from a 20 picture probe containing the target sound in the initial, medial or final positions. (Start **Carryover** and **Sentence** levels together.)

AIM: 30-35 sentences per minute with 1 or 0 errors.

Subtasks:

A. Sentences Initial

B. Sentences Medial

C. Sentences Final

D. Phrases—Initial, Medial and Final—one minute tasks. Student says rote phrase (i.e., I see a ____.) 2 times each from a 20 picture probe.

AIM: 45-50 phrases per minute with 1 or 0 errors.

Level 2 WORDS—Initial, Medial and Final—one minute task. Student names 20 pictures 2 times each from a 20 picture probe

containing the target sound in the initial, medial and final positions.

AIM: 45-55 words per minute with 1 or 0 errors.

Subtasks:

A. Words—Initial

B. Words—Medial

C. Words—Final

D. Words—Imitation—one minute task.

Student repeats picture names 2 times each after the instructor.

AIM: 70-80 words per minute.

E. Syllables—Initial—30 second task.

Student says target sound plus vowel over and over.

AIM: 45-55 syllables per 30 seconds.

Subtasks:

A. Syllables—Medial

B. Syllables—Final

C. Syllables—Imitation—30 second task.

Student repeats cv syllables 2 times each after the instructor.

Level 1 ISOLATION--30 second task. Student says target sound over and over.

AIM: 90-120 sounds in 30 seconds.

Subtask:

Isolation imitation--30 second task. Student repeats sound after instructor.

AIM: 60-80 sounds in 30 seconds.

Optional--Auditory Discrimination -- one minute task. Instructor points to target sound picture and pronounces correctly or incorrectly. Student judges correctness by saying "right" or "wrong."

AIM: 25-30 responses per minute.

The AIMS for all these speech and language pinpoints may be too high for kindergarten and first grade students or children with motor, auditory discrimination or processing difficulties. AIMS may be too low for older children. Adjust AIMS accordingly.

David and Susan have been instrumental in developing activities to use Precision Teaching to measure speech and language growth for children. They recently published an article in the **Journal of the Iowa State Speech Language and Hearing Association** called, "Precision Teaching: An Approach for Measuring Progress." This article appeared in the July 1982 Volume of this **Journal**. Anyone who is interested in further information on the use of Precision Teaching in the speech and language areas could write to David and Susan at the Mississippi Bend Area Education Agency, 2604 North 4th Street, Clinton, Iowa 52732.

If there are any other practitioners of Precision Teaching who have developed proficiency

standards in unusual and diverse areas, I would appreciate hearing from them. This column might be an appropriate avenue for disseminating that kind of information to others in the field. I would also be interested in hearing from those of you who are working on curriculum development for the use of Precision Teaching with higher level skills.

PRESERVICE AND INSERVICE TRAINING

Peggy Albrecht and Marie Eaton

Systematic Instructional Management Strategies (SIMS) Project

The SIMS Developer/Demonstrator Project of the National Diffusion Network provides inservice teacher training to interested school districts throughout the United States.

SIMS began in 1972 as an elementary program for severely learning disabled students; and the following year, the project expanded to a junior high site. Since teachers requested information about the methods and materials used at the Centers, SIMS applied for a Title VI-G grant and became a Child Service Demonstration Center in 1975. From 1975 to 1978, the Demonstration Center staff developed the SIMS Reading and Written Language Curriculum, developed inservice training materials, and provided inservice training to Minneapolis and suburban teachers. Evaluation data were collected from those teachers who were trained. In 1979 the Project was validated by JDRP, and later became part of the National Diffusion Network. Since that time, SIMS has trained more than 800 teachers and administrators in at least 12 states.

The SIMS Developer/Demonstrator Project provides two-day training workshops and one pre-planning day. The Project also provides technical assistance in the form of six and twelve week chart reviews, telephone conferences, summary letters, and follow-up on-site training, if requested.

The adopter district provides transportation and per diem costs of the trainer, and curriculum materials. The district also agrees to submit charts and test scores for the on-going evaluation of SIMS.

The SIMS workshop trains teachers to:

1. Use a discrepancy model for solving performance problems.
2. Use the SIMS Reading and Written Language Program to increase the rate at which learning disabled students acquire the basic coding skills.