

charter. For me, it was a transition from graphing percents to charting frequencies. I still remember the "aha!" experience when those dots, "x's," and little blue lines appeared as a learning picture. Now I try to be patient when people refer to charts as graphs. If you've started charting, and never taken data on individual learning before, you have an advantage. You won't have to change your perspective. However, you may miss a little of the fun in realizing how much more valuable the Standard Chart is in helping you learn to teach.

When I began to chart, I still kept up my checklists and did a little graphing on the side. I wrote down corrects and incorrects on another piece of paper so that I could carefully transfer them to the Chart after school. I certainly didn't show them to my children. After all, how could a handicapped preschooler understand something that I didn't? Gradually the checklists and graphs became an untouched pile on my desk. My charts were telling me much more than those checklists ever did, even when I had taken the time to agonize over them. I was becoming fluent enough to drop a dot and an "x" on the Chart, as the children looked on, and realizing that the Charts and the learning were theirs anyway. We started talking about where their dot went, and the aim symbol became a mountain to climb.

In my present classroom I have children with many different handicapping conditions, who are mildly to severely and multiply impaired. One fourth of the twelve children are nonhandicapped, and serve as peer models. We call it reverse mainstreaming. All the children have individualized learning programs which are monitored with the Standard Celeration Chart. Due to our university setting, we are a training site for teachers in special education and related fields. I've watched a lot of people learn to chart, and go through many of the same things I did. I'm still learning myself. Every week I see something new in the Charts, find some solutions to problems and find new problems to solve.

We who call ourselves Precision Teachers are often lonely. There aren't many people to talk to about what we're doing. I'd like this column to be a forum for teachers who want to share their problems, solutions, and experiences. PLEASE WRITE!

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AROUND THE CHART

Patrick McGreevy

When most of us started using the Standard Celeration Chart, we were accustomed to setting goals (aims) for our students and reporting their performance in terms of percent correct. Our "Chart parent" (to my knowledge, Steve Graf coined this term at the 1980 ABA Conference Overhead Transparency Chart-sharing Session to describe the person who taught us to use the Chart) tried to convince us of the wisdom of using frequency (number correct and incorrect during a certain time interval). Being new to frequency (sometimes called rate), we were somewhat apprehensive. No one else in our building was using frequency, let alone this strange and complicated looking chart. The other teachers were still using their old friend, percent correct. Since percent correct was our old friend too, we were somewhat unwilling to leave it behind.

When our "Chart parent" was not looking, we converted our student's correct and incorrect frequencies to percent correct, snuck a piece of plain (equal interval) graph paper and "plotted" our old friend. We then compared our new Chart with our old friend to see if they looked the same. To our surprise, they were very different. After several days of "courage collecting," we tiptoed up to our "Chart parent" and asked him why our new Chart looked so different from our old friend. He gave us an answer that sounded something like this, ". . . when correct and incorrect frequencies are collected and charted on the Standard Celeration Chart, we have a more sensitive and useful measure of student progress than is possible with percent correct and equal interval charts . . . keep counting and charting; you'll see what I mean. . ." Even though this answer was correct, it was not very helpful or satisfying. However, since our "Chart parent" was a nice person and sounded very convincing, we decided to give frequency and the Chart a fair chance.

After several months (by this time, we were beginning to see the value of frequency), our supervisor came by and noticed our students' new Charts. She also noticed that we had modified our students' goals (we were now calling them aims). Instead of stating the aims in terms of percent correct, we were now stating them in terms of frequency (e.g., 70 problems correct in one minute with 2 or less errors). Our supervisor was horrified! She asked us where our percents were and why we were using this strange new Chart. As luck would have it, our "Chart parent" was off at some behavior mod convention and we were left alone to answer our

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 $x_{\frac{\quad}{\quad}}$ if the dot is above or on top of the "x", and $/_{\frac{\quad}{\quad}}$ 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.

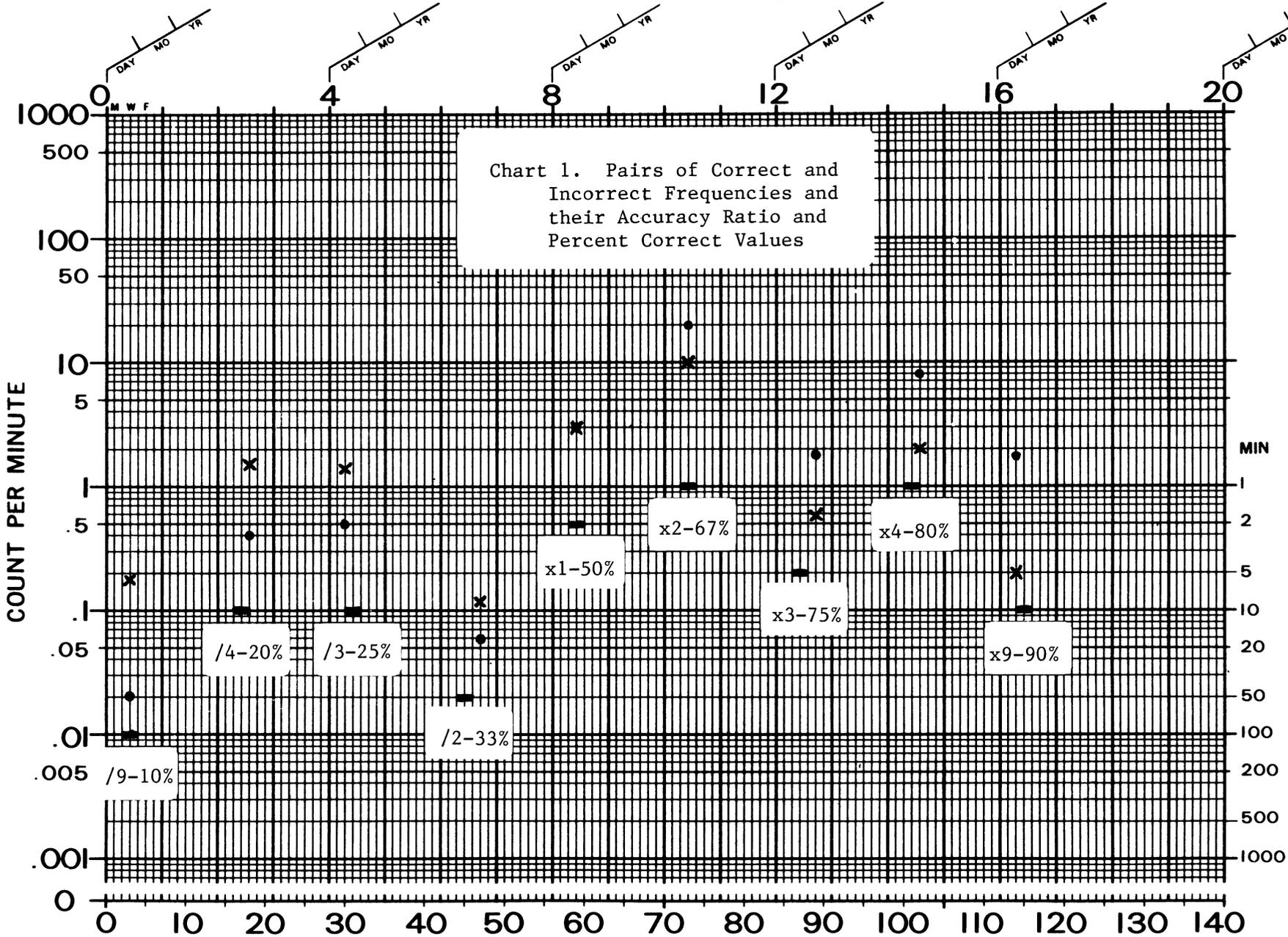
Level 4 MIXED SENTENCES

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.

CALENDAR WEEKS

DAILY BEHAVIOR CHART (DCM-9EN)
 8 CYCLE-140 DAYS (20 WKS.)
 BEHAVIOR RESEARCH CO.
 BOX 3351-KANSAS CITY, KANS. 66103



McGreavy, Patrick, AROUND THE CHART Column.

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SUPERVISOR	ADVISER	MANAGER	BEHAVER	AGE	LABEL	COUNTED
DEPOSITOR	AGENCY	TIMER	COUNTER	CHARTER		