Sharing a Message about Curriculum with My Teacher Friends

ANN STARLIN

Ann Starlin is a classroom teacher in Bemidji, Minnesota. She is a precision teacher. With the information available to Mrs. Starlin through continuous measurement, she is able to maintain flexibility in her instructional approach and create an educational environment where each child can function as a unique individual. In her presentation, Mrs. Starlin explained how children move through their individualized curricula at their own rates.

TRY SOMETHING NEW

☐ My hope is that the material presented today will be helpful to teachers and be exciting enough to help you rearrange your classrooms to try something new and to start measuring your students on a daily basis.

LET'S LOOK AT EACH CHILD INDIVIDUALLY

☐ As classroom teachers one of the biggest problems we have is knowing how to match available curricula to our students. Whether we are special education or regular education teachers, we need to look at our students and find out how to keep flexible with each one of them in order to assure that each will progress individually in academic and social areas.

Every child in our classroom is a very special child. Each has different colored hair and eyes and different colored skin. They grow in various sizes and shapes and think and feel differently. The combination of these various attributes creates a totally unique child each time. This is the thing that needs to happen in the area of curriculum. We have to take a part of one curriculum, put it with part of another, and come up with something that is going to fit Cheryl. At the same time we may need to find a different instruction and material to fit Ted or Linda and all of the others—in order to be able, as teachers, to assure ourselves that we have done the best possible job with each student in our classroom. For each unique student we need a unique curriculum.

We have to take part of one curriculum, put it with part of another, and come up with a unique program to fit each child.

How can we do this? Just this problem is what caused my husband, Clay Starlin, to begin doing a great deal of work in the area of measuring and designing a flexible model which assures individualized education for each student. With my help as a teacher we are developing a curriculum design that we would like to share with you now.

THE FLEXIBLE CURRICULUM

☐ Let's look at the curriculum overview first. We have identified three levels of Pinpointing performance (Figure I). Pinpointing means being very specific in identifying particular behaviors and is used by Ogden Lindsley as part of the terminology of precision teaching. We must pinpoint exactly where we should begin instructing a student and continuously measure to see if he is progressing.

Pinpoint exactly where to start instructing each child.

The Inventory Level includes many skills or concepts from a particular curriculum area. For example, in addition our first Inventory is sums 0 to 9. In spelling, it is short vowel words, long vowel words, digraphs, and blends. If a student can learn at the Inventory Level, we do not need to refine our pinpointing any further and can begin instructional work at this level. When the student has reached his aim, we move on to the next inventory sheet.

A second level of evaluation is the Screening Level. Here we have taken the Inventory Level and broken it into smaller units. If a student performs very poorly or not at all at the Inventory Level, we then refine our evaluation by pinpointing his performance at the

Figure 1. Mathematics Pinpointing Model

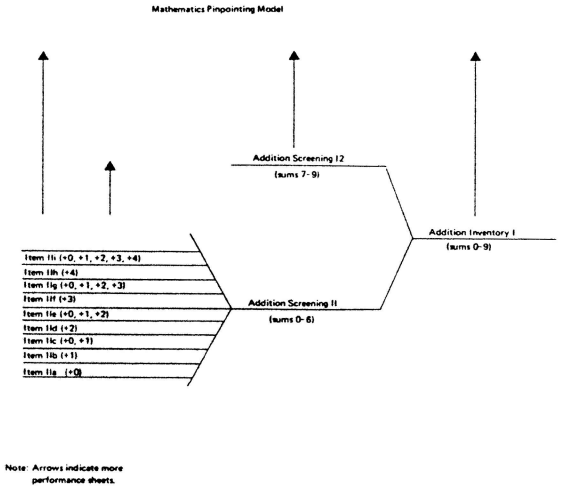

Figure 2. Inventory I Sheet for Addition

Addition Inventory I - Formal
(sums 0 to 9)

2 +1	3 +3	4 +5	0 +8	2 +6	1 +1	7 +2	4 +3
2 +2	6 +3	9 +0	2 +3	1 +2	0 +0	1 +7	3 +5
4 +4	7 +0	2 +7	0 +4	3 +4	6 +2	8 +1	3 +2
5 +3	3 +0	1 +6	0 +5	5 +4	4 +0	2 +4	3 +1
0 +2	0 +6	2 +5	5 +2	8 +0	1 +8	4 +2	3 +6

Name _____

Date _____
day month year

Correct _____
per minute

Errors _____
per minute

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Screening Level. There are two screening sheets under Inventory I, sums 0 to 6 and 7 to 9.

The most refined level is the Item Level. The items are smaller units under the Screening Level. An example of an item sheet in addition under Screening II (sums 0 to 6) would be all +1 problems with answers no larger than 9.

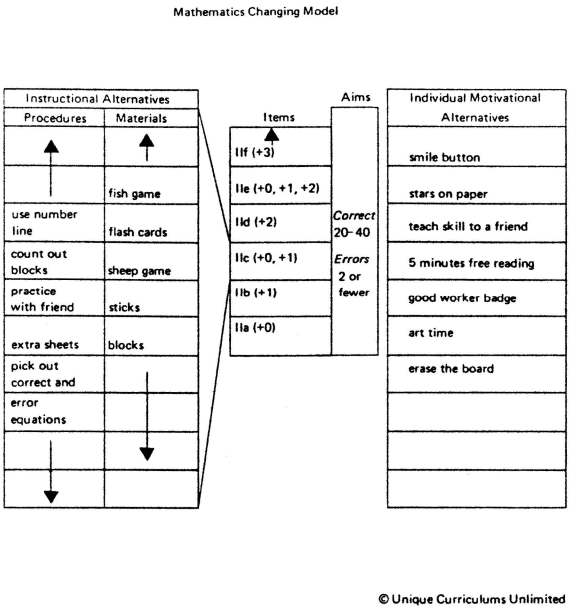
DETERMINING APPROPRIATE LEVEL OF INSTRUCTION

☐ The Inventory I sheet in addition looks like this (Figure 2). These are the basic addition facts 0 to 9. Each student in the room does this sheet of facts. We determine the appropriate instructional level for a student by comparing his Inventory performance to our aims for the number of errors. We have used 20 to 40 correct per minute and two or fewer errors per minute for first grade students. Those children who perform at or above this level go on to the Inventory II sheet. Those who are close to the aim but don't quite reach it would be instructed on this Inventory, and those who fall way below the aim both in correct and error performance would move to the Screening Level.

We adjust our educational program based on overall improvement, not a one day "test."

The Instructional Level is initially identified by performance frequencies (correct performance per minute and error performance per minute). As the student receives instruction at his level, we continue to measure, and the student charts his performance each day. We adjust our educational program based on overall improvement—not a given day's frequency or "test"—until he reaches his aim at the iden-

Figure 3. Changing Sheet



tified instructional level. Improvement means how quickly the student is moving toward his aim. When the aim is met, he changes sheets. This is true for all areas of the curriculum.

ALTERNATIVES FOR INSTRUCTION AND MOTIVATION

☐ If the charted information tells us that the student is not progressing as we think he should, we consult the Changing Sheet that gives instructional and motivational changes for the various items of the curriculum. In this addition example of the Changing Sheet (Figure 3), we have taken the item level under the first Inventory and looked at instructional material alternatives for the specific item of +2. Just look at the number of alternatives, both materials and instructions, that you as a classroom teacher have to help each student learn his +2 facts. (The arrows indicate there are many more than there was room to list here.)

Measuring each day is the key.

When you have a list of alternatives to try with a child, how do you know which is the best one? The only way is to try one and measure. If the student's performance improves—GREAT! If it doesn't improve, then you need to try another—but remember, measuring each day is the key, for it provides the feedback necessary to make decisions.

There are also motivational alternatives to use in helping each student improve his performance. Because we are all unique, we are motivated by different things. Something that may be rewarding to me may not be to someone else. This is true in the classroom also. So again, we look at each child individually and not the group as a whole.

INVOLVING STUDENTS IN THEIR OWN EDUCATION

☐ When I first started teaching, I never even thought about what the students were doing. I was so concerned about what I was doing, and the students were doing very, very little. But this is the students' education. Therefore, we must totally involve them in their own education all the time.

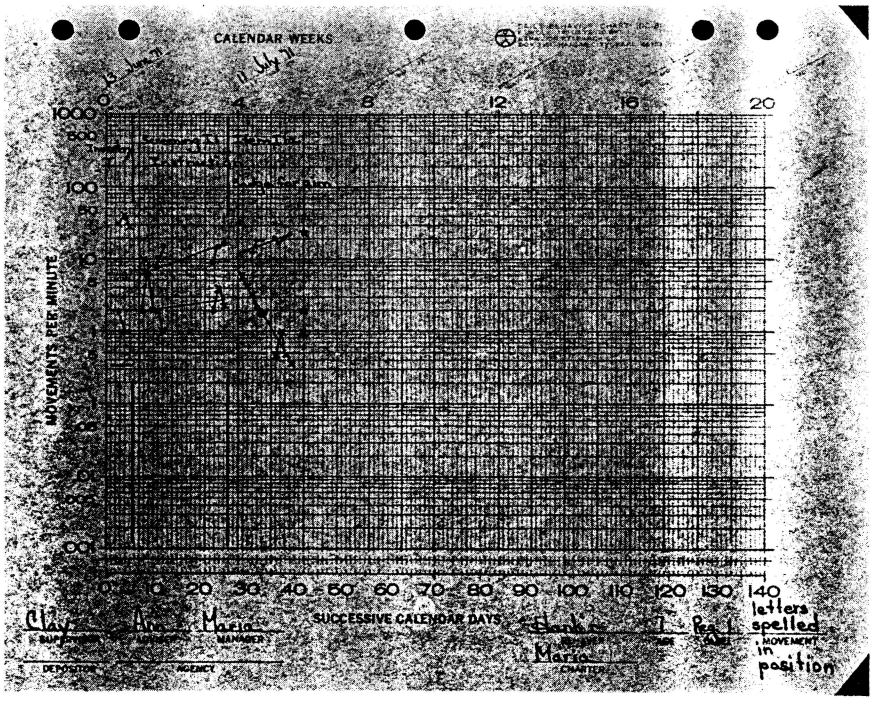


Figure 4. Hank's Spelling Chart

Every child who can, charts his own performance and shares in the making of his educational decisions. There are usually older students who can work with the younger ones. Also, students proficient in one skill can help a student who has not learned the skill yet and help keep his record. Sometimes mothers come in and help out.

Every child who charts shares in making his educational decisions.

☐ Let's look at a few student charts. Here are a few things to keep in mind when looking at the charts:

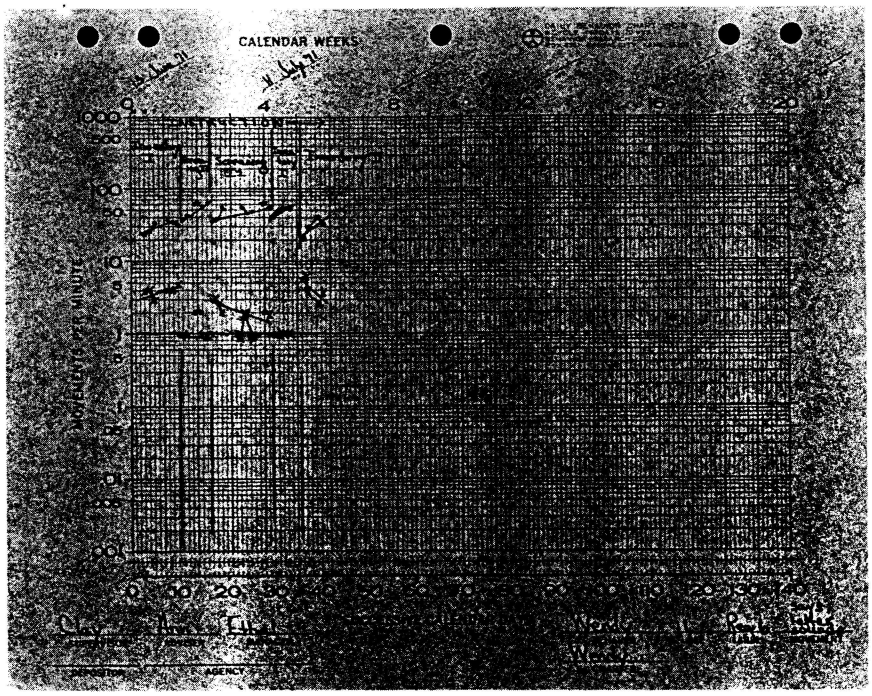
HANK, WENDY, AND SUSAN ARE LEARNING

1. Correct performance is indicated by a dot on the chart and errors are indicated by x's. The dots and x's represent how frequently something occurred (i.e., the number of things done divided by the time it took to do them).
2. The straight lines drawn through the dots and x's represent the improvement in learning that is occurring.
3. The vertical lines drawn in pencil separate the changes made.
4. Stars on the chart tell us the frequencies we are aiming for.

This is Hank's spelling chart (Figure 4). It shows how Hank and his teacher Maria worked together so Hank learned to spell more letters in position. At first in Inventory I (short vowels, long vowels, consonants, and consonant digraphs), Hank was getting many more letters wrong than right, so he and Maria decided to work on the Screening Sheet II (short vowels). As you can see, his correct per-

Hank was getting many more letters wrong than right, so he and his teacher decided to work on the Screening sheet.

Figure 5. Wendy's Say Sounds Chart



formance improved over these weeks. However, his errors were increasing so another change was decided upon.

Marie started dictating the words on Item sheet IIa (all short "a" words). She and Hank also decided that he could earn a badge when he reached his aim of 25 letters correct per minute with one or fewer errors per minute. The badge helped Hank reach his aim on the item sheet, and his performance improvement shows that he learned a great deal during these two weeks.

This is Wendy's chart (Figure 5). Ethel is her teacher. At the beginning Wendy was working on letter sounds Inventory I (all consonants, short vowels, long vowels, and consonant digraphs). Neither her correct nor her error performance was improving enough for her to stay on the first Inventory, so she and Ethel decided to study the sounds on Screening Sheet I1 (continuous consonants). When Wendy reached her aim of 60 correct per minute with two or fewer errors per minute, they moved to Screening I 2 (stop consonants). After Wendy reached her aim again, Ethel rechecked her on Inventory I. Wendy stayed at her aim, and her errors were only at one per minute. Now she was ready to start Inventory II ("r" controlled vowels and double vowels).

When Wendy reached her aim, they moved from the Screening sheets back to the Inventory level.

HOW CAN I DO THAT EVERY DAY WITH EVERY CHILD?

☐ When we measure *every day,* we find that some days we only have to make changes for two children, because the others are doing just fine. Other days we have to make changes for ten children, and those

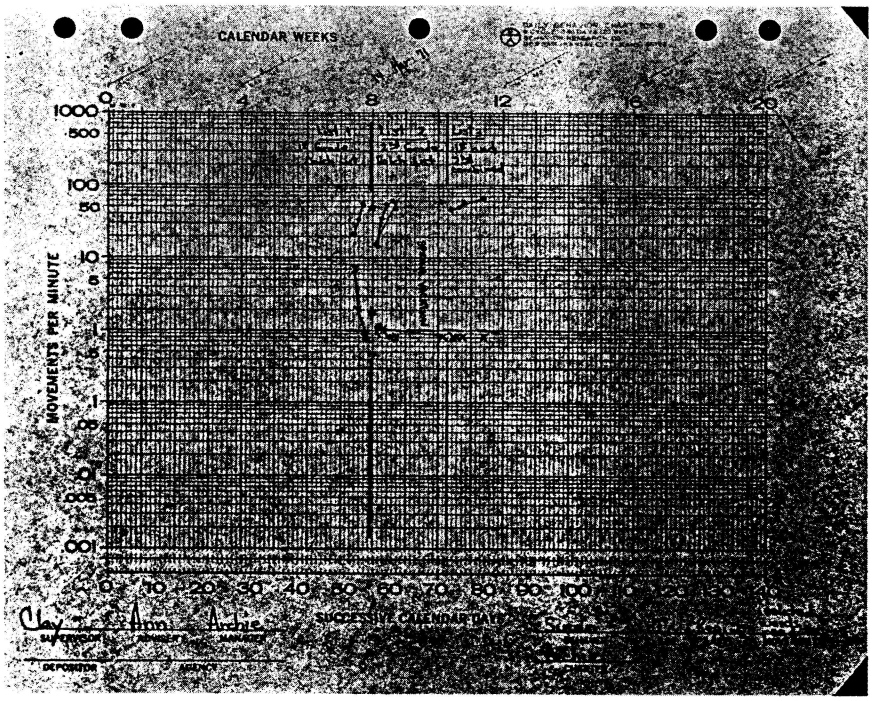


Figure 6. Archie Teaching Susan a Word List

are the days when you go home very, very tired. But the students can help you by helping each other. They can learn to make their own educational changes and share responsibility with each other.

This chart of Susan's shows how Archie, a fellow second grader, helped her learn some sight words that she was having trouble reading (Figure 6). Archie is the charter as well as the manager. At first Archie helped Susan with the first grade Dolch list. Archie knows them, that is why he got to teach them to Susan. He obtained a one minute sample of Susan's performance every day and charted it. Archie is such a good teacher that Susan learned the first list in three days. They had decided that 50 correct per minute with two or fewer errors per minute was their aim. When Susan reached this aim on a list, they went on to a new list.

Archie knows the words, so he gets to teach them to Susan.

It is certainly helpful to have many good teachers in the room. By keeping behavior charts and teaching each other new things, all students learn the thrill of *helping* one another and *being helped* by a friend.

The students help you by helping each other.

☐ If we wish to maintain flexibility in matching curriculum to particular students, we need to pinpoint each student's instructional level and continuously measure his improvement. When we have done this, we are in a position to build educational programs that truly treat all students as special.

ALL CHILDREN ARE SPECIAL