BULK RATE
U.S. POSTAGE PAID
EUGENE, OR 97401
PERMIT NO. 169

Direct Instruction NEWS

Volume 1, Number 3 | P.O. Box 10252, Eugene, Oregon 97440 | Spring, 1982

Why Attend The

Eighth Annual DI Conference?

By Ziggy Engelmann

August in Eugene is unpredictable. Sometimes it is hot and dry — very hot. Sometimes it is cool and rainy. Sometimes, it is a mix of warm clear days and cloudy cool days. The most predominant memory I have of summer 1975 was that it was hot. I remember the weather clearly, because we had arranged for the first Annual Direct Instruction Conference to be held in a high school that had no air conditioning. We listened to the weather forecasts religiously because we knew that the high school was like a giant greenhouse, with large windows that collected sunshine and raised the inside temperature to levels far above the comfort zone. We hoped that the hot weather would break, but it didn't. The trainers perspired; the nearly 200 participants perspired; and everybody complained about the heat. But before the Conference was over, we knew that it was more than a success. It was a service that would be very hard to provide either through straight college-type training, through inservice as it is normally set up, or through a two-day workshop. In fact, we didn't originally conceive of the Conference as an annual affair. That decision came after the Conference and after we evaluated the unique effect created by an *intensive*, week-long, all-day training program. The response from the trainers was uniform: "Let's do it again." Not only was the Conference reinforcing to the participants (based on their evaluations of the sessions they attended, and discounting the complaints about the physical facility), but it was highly reinforcing to the trainers. The reason was that they had spent the rest of the year training teachers in situations that were less than ideal. The training schedule in the field usually didn't provide enough time to actually train in an area such as beginning reading or to provide an adequate rationale for the design of the instructional material. And often, the people being trained were new to DI, which meant that there wasn't somebody in the group who could confirm that "It works." Finally, the trainers were alone, often one trainer worked with a group of participants.

Over the years, we've tried to maintain the same kind of standards for the Summer Conference that were established that first year. We've tried to keep the Conference so that it was a big reinforcer, both for participants and for trainers. The attendance at the Conference grew to a high of about 500 participants in 1978, and then dropping somewhat as districts' funding tightened up. The attendance for the 1981 Conference, was a respectable 350.

The format of the DI Conference is so different from that of other Conferences that when I attend something like the CEC Conference, I find myself shaking my head and asking, "What is this conference going to do except confuse the participants?" But unfortunately, many participants are not at the conference to learn, but simply to attend. They walk out of the middle of sessions, scrupulously avoid sessions that attempt to provide useful, technical information, and try to see how many pounds of handout material they can collect during their two or three hour sojourn.

The Summer Conference in 1975 was different, and those that followed have remained different. A trainer has adequate time to lay a thorough foundation of practice and rationale. Many participants who attend the Conference are not new to Direct Instruction. Some of them have impressive data on student performance and are very knowledgeable about the instructional programs. These people serve as helpful adjuncts to the trainers' efforts, not only because they have credibility, but also because they have experienced the same kinds of skepticism felt by the people who are being exposed to Direct Instruction for the first time. So when they interact with the newcomers, they present a very powerful perspective. Finally, a trainer is not alone. During that first Conference, eleven trainers presented. It was something of an all-star crew that included Wes Becker, Phyllis Haddox, Doug and Linda Carnine, Gary Johnson, Jean Osborn, and Randy Sprick. Individually, each of these trainers is dynamic and effective. When they were combined in the Summer Conference, they formed a team that was something that made all of us feel very proud. We used the best trainers that we had available in 1975, which was possible because all the trainers were in Eugene during August, before leaving on their punishing travel schedule that typically began the day after Summer Conference.

(Continued on page 20)

A Study of 4th-6th Grade Basal Reading Series*

How much do they teach?

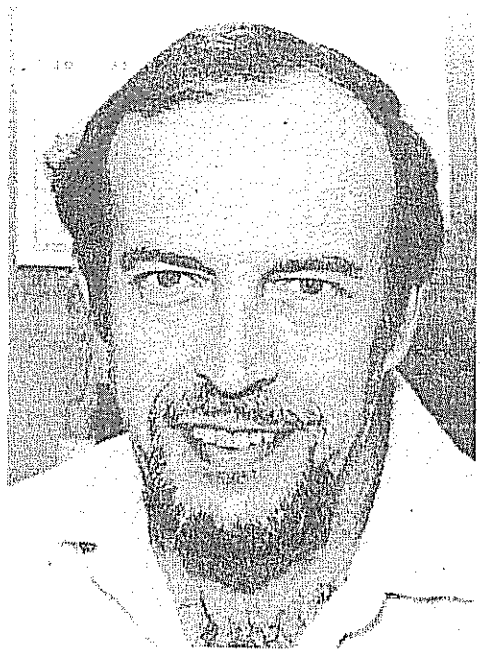
By Ziggy Engelmann

As part of the development of the Direct Instruction reading programs for grades 4, 5, and 6, we did a rather elaborate study to gain more precise information about teacher behavior and how teacher behavior relates to "the ideal." The design of the experiment was basically simple. We first analyzed the major basal reading programs that are used in grades 4 through 6 — Ginn, Scott Foresman, Houghton Mifflin, and Holt. When we analyzed the programs, we considered the clarity of the communication that was provided, the adequacy of the practice, and other aspects that should be controlled by an effective program. Next, we interviewed the 17 teachers who participated in the study. We provided them with no information about the nature of the study. (They knew only that they would receive some free material for participating.) Their participation involved answering questions during two taped interviews and video taping two lessons in their reading program. They were told that they would be taped teaching a main-idea lesson and another lesson (whatever lesson came up during the time scheduled for the testing). The teachers were selected from various regions of the United States, from Bridgeport, Connecticut, to Eugene, Oregon.

After the students received a lesson, they received a simple test of the material that the teacher had just covered. There were no trick items, no extensions of concepts, and basically nothing more than what the teacher had just taught. The test was sufficiently long to provide a reasonable sample of each student's understanding.

With the information from the analysis of the program, the teacher interview, the record of the teacher's teaching, and the student outcomes, we had the information needed to perform a rather thorough analysis that we felt would answer the following questions:

1. Based strictly on an analysis of the program material, how well would the program be predicted to teach the average student?
2. How much do teachers actually deviate from the specifications of the basal programs, and if they do deviate, to what extent do these deviations facilitate communication? (In other words, how much better do the teachers teach than they would if they followed the program to the last detail?)
3. How well do students perform in response to the instruction that the teachers actually provide?
4. How do the facts about the teacher's instructional program, the teacher s actual teaching behavior, and the actual student outcomes relate to the teacher's verbal descriptions of these areas? (Are teachers accurate and knowledgeable about the details of their programs? Do they know specifically



Ziggy Engelmann

(Continued on page 4)

* This project was conducted by Engelmann-Becker Corporation and coordinated by Don Steely.

Letters-to-the-Editor

Dear Editors:

I just received my copy of *Direct Instruction News*. Congratulations! Welcome to the world of educational publications. I welcome a publication dedicated to Direct Instruction, especially one from the fountainhead. We need your in-depth sort of presentation of how well DI works. There are a lot of people out there who think that it's some sort of Communist plot, a denial of teacher creativity, or an outright hoax. I'm pleased to see that you are fighting back with the most effective weapon — FACTS.

DI jolted many of us out of our old ways of doing things in education. *Direct Instruction News* should continue to point out to us that DI is still developing and moving into areas which we did not expect — such as affective programs. I suspect that most of us get a bit off course from time to time. Thanks for sending a beacon which shows us the way.

Keep up the good work. I look forward to the next issue.

Harry N. Chandler
Associate Editor
Journal of Learning Disabilities

Dear Editors:

I was very happy to receive a copy of your *Direct Instruction News* in the mail through the courtesy of SRA. I am currently principal and one of the teachers of the Shanghai American School, located in Shanghai, People's Republic of China. We have an enrollment of 12 students at the current time, all of whom are English speaking, ex-patriot dependents of locally hired foreigners. I am currently using the Distar Arithmetic, Language, and Reading programs for my Kindergarten class.

Previous to coming to Shanghai, I taught in Murfreesboro, North Carolina, and Eugene, Oregon. I became acquainted with direct instruction while working as an Instructional Aide for Title I in Veneta, Oregon.

I am pleased to see that an association has been formed to help keep those of us who are using the methods in contact with each other and to let us know about other publications that are available on the subject. I find the philosophy behind Direct Instruction is the most compatible educational philosophy to my way of thinking and teaching.

Catherine L. Schroeder
Shanghai American School
People's Republic of China

Help! Transitions From DI

Have you ever faced the problem of having to help a student make a transition from Direct Instruction to non-direct instruction curriculum materials? If you have ever taught from Direct Instruction materials, you have probably faced this issue. Most students make this transition quite readily. Others, however, require considerable assistance. They seem to become too dependent on certain features of the Direct Instruction material. They do not seem to realize that information which *looks* different does not necessarily call for an answer or a response they do not know. They do not seem to realize how widely applicable their skills really are.

Clearly, the point at which a student leaves Direct Instruction can make a difference. For example, a first grader who moves from a Direct Instruction classroom before the orthography in DISTAR Reading I shifts to traditional print, might have difficulty with a basal reader in a new classroom. But even students who complete a Direct Instruction series (e.g., reading, arithmetic, decoding, comprehension) sometimes have difficulty when they move to more traditional curriculum materials or instructional methods. What can be done about this?

We are interested in any information you can provide on this topic — experiences, suggestions, materials, reports, etc. We will collect materials for a period of time. Then, when sufficient information is available, we on the editorial staff — or someone we recruit — will write an article for the DI News on this topic. Please send material for this article to: Stan Paine, Co—Editor, DI News, P.O. Box 10252, Eugene, OR 97440. Thank you for any help you can lend.

The **Direct Instruction News** is published Fall, Winter, Spring and Summer, and is distributed by mail to members of the Association for Direct Instruction. Readers are invited to submit articles for publication relating to DI. Send contributions to: The Association for Direct Instruction, P.O. Box 10252, Eugene, Oregon 97440.

Editors . . . . . Wes Becker
. . . . . Stan Paine
. . . . . Susan Jerde
Art Director . . . . . Wes Becker
Layout . . . . . Springfield News
. . . . . Arden Munkres
Photography . . . . . Pan Typesetting
Typesetting . . . . . Springfield News
. . . . . Springfield News
Printing . . . . . Springfield News

A Call for Creative Contestants: Design a DI Logo

Have you ever wondered how (or whether) creativity and artistic flair fit into a highly structured educational program? If so, you might want to consider entering the Association for Direct Instruction's first creativity competition. We are on the lam, looking for a logo.

Webster's New World Dictionary defines "logo," from the word "logogram," as "a letter, character, or symbol used to represent an entire word." In our case, we need a letter (or combination of letters, such as ADI), character, or symbol to represent "Association for Direct Instruction" on letterhead stationery, on the masthead of the DI News, and on various banners, flyers, and other promotional materials. Engelmann immediately offered himself when he heard we were looking for a character, but it wasn't quite what we had in mind. Another suggestion involved lengthening the name of the organization to ADI International, which reflects the involvement of our members from Canada, Mexico, England, and several other countries outside of the United States. The acronyms for the group would then be "ADII" (pronounced A DEE EYES). The appropriate logo to accompany this acronym would obviously be a cluster of forty children's faces with "eighty eyes" staring up at you from the corner of the page — clever, but perhaps a little too subtle. And so, with Engelmann and the children's faces rejected, the competition remains open.

Send us *your* idea for an ADI logo in any graphic medium you feel comfortable working in — acrylics, water colors, charcoal, pencil, color crayon . . . Please accompany your entry with a brief (i.e., one paragraph) written description which explains the relationship you see between your design and the goal of the organization — to promote excellence in education through direct instruction. Entries *received* by May 15, 1982, will be printed in the Summer issue of the DI News and submitted to a vote of ADI members. The winning logo will be announced at the annual meeting in August and used beginning next September. The winning design will be awarded a free membership for 1982-83.

Please submit all entries to:
Stan Paine, Co-Editor
Direct Instruction News

Tell Us Why You Use DI Programs

A Reader Survey

The DI News will, from time to time, present survey questions for consideration by the readers. In the following issue, we will publish the results of the survey. Think of how foolish we would look — and how uninteresting it would be to read — if no one responded to the survey. Therefore, as a sign of good faith, we respectfully ask you — if you anticipate *reading* the results of the survey in the next issue — to be one of those who responds to it. Please send your reply to Stan Paine, Survey Editor, Direct Instruction News, Follow Through/Education, University of Oregon, Eugene, Oregon 97403.

The question addressed in this survey is an item completion. Please complete *one* of the following two items (whichever best fits your perspective):

A. The reason(s) I use direct instruction programs is (are) . . .
B. The reason(s) I support/promote direct instruction (in other ways than by using DI programs) is (are) . . .

Please state your answer(s) as clearly and concisely as possible. Please postmark your reply no later than May 15, 1982, to enable us to compute the answers before the next issue of the News goes to press. You need not sign your name to your answer if you do not wish to do so, but we *do* ask that you provide us with four pieces of information: (1) your gender (M or F); (2) your title or occupation (teacher, administrator, trainer, supervisor, researcher); (3) the size of program you work in (an indication of whether it is rural, small town, urban, suburban, or inner-city); and (4) the number of years you have used direct instruction (counting the present school year). You can provide the information in coded form to save space. For example, M/T/U/3 would be a male teacher, working in a small or medium-sized city, and in his third year of using direct instruction.

The most valuable aspect of conducting this survey is likely to be that it will provide us (and you) with a comprehensive list of reasons for using direct instruction. These, in turn, will provide a wide range of rationales which advocates of direct instruction can use in explaining it to others. We look forward to your replies.

Employment Exchange

As a service to our readers, we would like to publish notices of positions available, positions wanted, and job exchange opportunities in each issue of the News. To do so, however, we need information which only you, the readers, or your colleagues, can provide for us. This is one feature of the News for which we cannot generate information ourselves. If you want to hire someone, but you want to make sure they have a direct instructional background; or if you are frustrated about your efforts to use direct instruction in your present position and are looking for a supportive movement; the Employment Exchange might be a source of assistance for you. We are interested in helping people find direct instruction staff and direct instruction positions at all levels of employment in both service delivery (aides, teachers, supervisors, administrators) and higher education (teaching, research) settings. Send your notices, marked "Employment Exchange" to the editors. Restrict your length to 50-60 words. For the immediate future, no charge will be made to members for this service.

Making Moderately Retarded Children Smarter

Study by Alex Maggs and Phillip Morath.

The original report of this study appeared in *The Journal of Special Education*, 1976, 10, pp. 357-364.

Reported by Wes Becker

This study was carried out in Australia between 1972 and 1974. Twenty-eight children from Stockton and Marsden Hospital schools in New South Wales participated. They ranged in age from 6 to 14 at the start of the study. All had been institutionalized for at least 5 years.

At each school, the children were randomly assigned to one of two conditions. Condition 1 children were given intensive direct verbal instruction following the DISTAR I Language program and behavioral teaching techniques. Instruction was provided for one hour per school day over two calendar years. Condition 2 children were given the standard curriculum in effect in the schools, using the Peabody Language kit (P-level) and some teacher-provided variations. The Condition 2 teachers did not systematically apply behavioral principals (e.g., reinforcement, prompting, modelling, shaping, etc.). Teachers for both groups were monitored at least once a week to insure that they were applying the appropriate instructional procedures for their group. Videotapes were made of the teaching and analyzed to gain evidence for validity of program implementation.

A battery of tests was given before and after the two years of instruction by nine independent testers, who were unfamiliar with the program objectives. The tests included Engelmann's Basic Concept Inventory, the Reynell Verbal Comprehension Test, the Stanford-Binet (L-M) Intelligence Test, Piaget's tests of Class Inclusion and Seriation, and Bruner's Matrix test.

The results of this study are summarized in Table 1. The results show the DISTAR group to have gained significantly more on every measure of cognitive functioning. The last line in the table (Omega Squared) gives the percent of total variance that can be attributed to experimental treatment effects. The size of these effects implies an extremely powerful treatment. The gains on the Stanford-Binet IQ test are most readily interpreted. The DISTAR Language group gained 22.5 months in mental age in 24 calendar months. This growth is nearly a *normal* (average) growth in mental age. The Peabody Language group gained 7.5 months in mental age in 24 calendar months. This growth is exactly what would be expected of children with IQ's averaging in the lower 30's.

These findings imply that much more can be done with moderately and severely retarded children than has been assumed in the past. They raise critical questions about using labels such as *educable* and *trainable*. In a companion article on this page, we look at the application of DISTAR methods in Reading and Language over a four-to-five year period to moderately retarded children.

Table 1

Mean Gain Scores on Six Tests

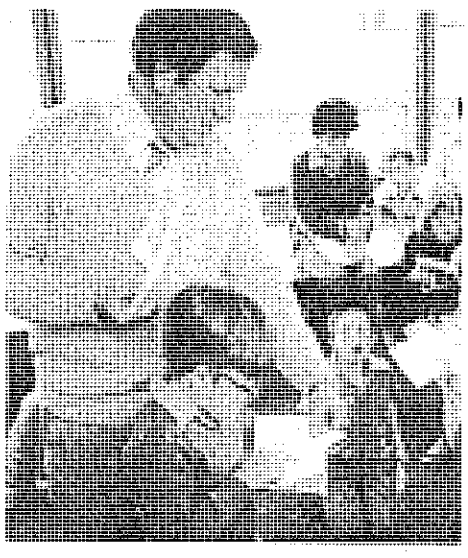
GROUP	Basic Concept Inventory	Reynell Verbal Comprehension in Mental Age Months	Stanford-Binet IQ in Mental Age Months	Sereatim (Total Score)	Class Inclusion (Total Score)	Matrix (Total Score)
DISTAR GROUPS (N=14)						
Mean	12.0	17.1	22.5	2.9	2.2	2.1
Standard Deviation	*3.6*	*6.9*	*5.2*	*1.5*	*1.0*	*1.4*
PEABODY GROUPS (N=14)						
Mean	3.1	6.0	7.5	1.1	.6	.4
Standard Deviation	*3.8*	*4.1*	*6.4*	*1.1*	*.8*	*1.0*
Significance of Difference	.01	.01	.01	.01	.01	.01
Omega Squared	60%	57%	47%	41%	31%	28%

What Can Be Done in Five Years?

Making Moderately Retarded Children Literate – A Five Year Study by Alan Booth, Don Hewitt, Warren Jenkins, and Alex Maggs

Reported by Wes Becker from his personal visit and the published report in the *Australian Journal of Mental Retardation* (1979, 5, pp. 257-60).

On my visit to Australia in September, 1980, I visited Kurrambee School for moderately retarded children (IQ's 35-55). I was entranced by the excitement of the children when the principal (Alan Booth) rounded up those covered in this study so they could read to me. I have never seen "retarded" children so eager to show off their skills to a stranger. The visit left me overwhelmed with feelings for the children and their pride of accomplishment. Frankly, I did not understand how much they cared about learning to be smart.



The children of Kurrambee School and their principal showing Dr. Becker what they can do.

This study focuses on 12 children, mostly with IQ's in the low 40's at the start, who were involved in DISTAR Language and Reading for four to five years. The DISTAR Language program was started in 1974, after Maggs and Morath had demonstrated its effectiveness with institutionalized retarded children (see related article). The DISTAR Reading program was added in mid-1975. At the start of the project, the children's ages ranged from 8 to 14 years (averaging about 10). There were seven boys and five girls.

The children were given the Peabody Picture Vocabulary Test (PPVT) at the end of each year. The DISTAR Mastery Tests in Reading and Language were administered throughout. The Baldie Language Ability Test, the Neale Analysis of Reading Ability Test, and the Schonell Word Recognition Test were administered at appropriate times throughout the study. All testing was done by independent examiners.

The Baldie Language Ability Test is a comprehensive language test which measures 66 objectives covering specific skills in comprehension, imitation, and language production. It is basically a criterion-referenced test designed to measure mastery of critical language skills in reading, writing, and speech.

Results

Prior to the study, the children were progressing at a rate of about two months in language age for each five calendar months. This is the expectation for children with IQ's in the low 40's. The children could not read and had weak language comprehension and production skills. During the study, the children received instruction for 8 months a year for five years in DISTAR Language and for four years in DISTAR Reading. They showed 34 months gain in language age on the PPVT, averaging 8.2 years at the end (an average expected of early third graders). On the Neale Analysis of Reading Test, they averaged 7.8 years in Accuracy and 7.6 years in Comprehension. On the Schonell Word Reading Test, they averaged 7.5 years. The average reading grade equivalent was estimated to be 3.1 years. Five of the children had IQ's which had moved from the low 40's to the low 70's. The children were into level 3 Reading and Language. They were reading and understanding what they were reading.

The results on the Baldie are more difficult to interpret without listing each of the 66 skills. However, when compared to *normal* children (up to and including third and fourth graders), they showed a higher percentage of skill mastery on 31 of the 66 objectives.

The major implication of this study is that "trainables" can be educated in basic language and reading skills. It takes time and effort, but with a Direct Instruction approach, it can be done.

The authors of this report also noted that with systematic programs such as those designed by Siegfried Engelmann, there are a number of practical advantages for school management:

1. Despite a constant turnover of staff at various points in the year, the programs insure continuity for the student.
2. For the new teacher, the programs provide guidance on where the children have been and where to go next.
3. For the teacher-supervisor, the programs lead to meaningful task-directed inservice activities.
4. The vertical progression in language skills was most beneficial.

The programs keep building skills in classification, comparison, description, verb tense, definition, synonyms and opposites, problem solving, deductions, absurdities, etc. This kind of systematic building is lacking in most other programs.

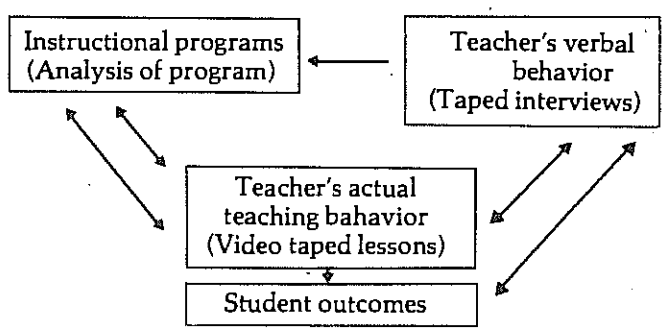
Kids of Kurrambee School

Basal Reading Study (Continued from page 1)

the types of problems their children have? Do they accurately evaluate their own teaching?)

Figure 1 shows the four areas that were investigated. The arrows indicate the various comparisons that were possible from one area to another area.

Figure 1. Four Areas of Investigation



Program Analysis

Perhaps the greatest new contribution the study provided was a basis for analyzing instructional programs. The analysis was based on fairly reliable information that we had received when developing Direct Instruction programs. Tryouts consistently disclosed that skills must be taught for a minimum amount of time, that the wording should be simple and consistent, that the skill must be reviewed on a regular basis, that distractions result in mislearning, and that the set of examples and rules that are presented must be unambiguous (so that the learner will not learn a misinterpretation). The misinterpretation is perhaps the most important single consideration, because there is a very reliable rule that if the presentation is ambiguous, some students will learn an unintended interpretation. A simple example would be a presentation that showed all examples of the concept "red" as being round balls and all examples of "not-red" as squares. Clearly, this demonstration cannot teach the naive learner what red really means because the learner has the option of concluding that the word "red" refers to the color or that "red" refers to the circular shape (or that something is called "red" only if it is both circular and red in color). The problem with presentations that present possible misinterpretations is that while students may perform perfectly on the initial examples (red balls, for instance), it is not until later that we discover that they don't understand red.

A more sophisticated illustration of misinterpretation would be provided by a poorly designed series of examples used to teach main idea. Let's say that for the first four examples, the main idea is expressed by the first sentence in the passage. The students perform marvelously on these examples. The next example, however, may be one that contains no sentence that expresses the main idea. The prediction, based on this poor set of examples, is that when some of the students reach this last example, they will identify the first sentence as the main-idea sentence and that it will require great effort to teach them the real concept of main idea. The point is that these students are not behaving in an unreasonable way. The series of examples the teacher presented strongly prompted them to attend to the "first sentence," just as certainly as the red balls would teach some children that red means round.

The results of the program analysis were, at best, frightening. Table 1 summarizes the averages of the five basal programs for the teaching of main-idea in grades 4, 5, and 6. Note that the number of lessons and examples refer to a three-year period.

The asterisked items provide some indication of the lack of precision exercised by these programs. Item 1 indicates only 14% of the examples are taught. An example is considered "not taught" if the question of the type asked about the example had not been presented in the last 50 teaching days. (These basal programs, as you know, are not divided into daily lessons. To compute the lessons, we counted the total number of pages presented over the 3-year period, divided the total by 480 [160 lessons a year times 3 years].) The resulting number provided an arbitrary, average number of pages that should be covered during a "daily" lesson.

Item 11 shows that the probability of a correct interpretation (based on the set of examples presented by the program) is only 27%. In other words, there are approximately 4 possible interpretations that are perfectly consistent with the set of examples presented by the program. Item 18 shows the percentage of prompted examples (49 percent). These are items that give the student the answer. Item 19 indicates that a period of 62 days elapses before two or more examples of main-idea are presented in the program. Over the three-year period, only 66 examples of main-idea are presented, only nine of these appear on the same day in the teacher and student material, and only 22 lessons deal with main idea at all. No specific correction procedures were specified in any of the five programs (item 24).

This analysis of main-idea suggests that if the teacher follows the average program and teaches precisely according to the program specifications, the programs are incapable of teaching the average student. The student will be bombarded by spurious prompts, will possibly be confused by distractors and variation in teacher wording, will be misled by the set of examples the teacher presents, will receive practice that is sparse and poorly designed, and will receive ambiguous and confusing instructions from the teacher.

The analysis of other skills paralleled that of main-idea. Fact-versus-opinion, for example is frequently taught so that it is perfectly misleading. Fact and opinion are taught as exclusive categories, which means that a person could not have an opinion that was a fact. (John said, "It's Friday today." It's a fact that John said that it's Friday today. If it is Friday, it's a fact that it is Friday. It is further a fact that in John's opinion, it is Friday. The material provided by the basals does not typically make these distinctions. Instead, it suggests that if something is an opinion, it is not a fact.)

Table 1

Program Analysis Results Across Programs

	Means Across Program	Ideal
* 1. Percentage of examples taught	14	100
2. Percentage of questions ambiguous and not taught	88	0
3. Percentage of answers to questions that were misleading and wrong	12	0
4. Percentage of minimum discrimination not taught	5	0
5. Percentage of variation in teacher presentation wording	14	0-15
6. Percentage of variation in student workbook wording	44	0-15
7. Percentage of variation in items, teacher presentation	10	0-50
8. Percentage of variation in items, student workbook	18	0-50
9. Percentage of questions relevant to concept, teacher presentation	62	100
10. Percentage of questions relevant to concept, student workbook	75	100
*11. Percentage of probability of correct interpretation	27	100
12. Percentage of response variation	13	0-50
13. Percentage of visual distraction, student workbook	25	0
14. Percentage of academic distraction, teacher presentation, student workbook	31	0
15. Percentage of strength of teacher presentation responses	89	100
16. Percentage of strength of student workbook responses	72	100
17. Percentage of prompted, teacher presentation	24	0
*18. Percentage of prompted, student workbook	49	0
*19. Days since two examples were presented	62	7
20. Total number of examples in program	66	7
*21. Number of student examples on same day as teacher material	9	7
22. Percent of student examples on same day as teacher material	14	7
*23. Total number of lessons	22	50-80
*24. Percentage of examples for which correction is specified	0	100

How the Teachers Teach

The programs are basically incapable of teaching the average student, but possibly the teachers embellish these programs with good teaching that makes them work for the students. Certainly, we've all heard talk from teachers about how they don't follow the program and how they improve on it. (We received the same kind of information from the teacher interviews, where the teachers indicated that they deviated from the program specifications about 20% of the time.)

Probably the most interesting fact about the performance of the teachers in the study was that not one teacher deviated in any way from the specifications for the primary part of the lesson. Teachers sometimes didn't do the enrichment or additional activities provided by the teacher's guide, but followed the lessons precisely. Note that they were given no instructions about how to present other than, "Just present the lesson the way you normally would."

The tapes of the teaching were analyzed two ways — they were first analyzed without referring to the instructional program; next they were compared with the specifications provided by the program.

The teaching provided by the teachers (regardless of the program used) was not sound *from a technical standpoint. The* following is a brief profile of how the average teacher in the study taught:

1. The *maximum* rate of the teachers' presentation produced an average of 4.2 responses per minute. On student-reading tasks, the maximum rate was slightly higher — 4.6 responses per minute.
2. The teachers presented 84% of the tasks to individuals and 16% to the group.
3. The teachers gave the answer to 34% of the tasks, either by responding with the students or by modelling the answer.
4. The teachers praised nearly half of the correct student responses (46%). Most praise was directed to individual students (95%). Only 2% was behavior-specific praise, rather than general praise.
5. The teaching presentations produced a student error rate of 27%. Only 37% of these errors were corrected. Of those mistakes for which a correction was provided, only on 10% was the student retested to determine whether the information provided by the correction was actually communicated to the student.

Table 2 compares the average teaching behaviors with ideal teaching.

As mentioned earlier, all teachers followed the specifications that were provided by the programs they used. If we compare their teaching with the teaching that would have resulted if the program were presented by some kind of recording device, we do notice some differences, however. These differences are caused by one problem — student mistakes. The teachers responded to these mistakes, and when they did, it

Table 2

Teacher Behavior Data Across Programs

	Grand Mean	Ideal
:al percent questions with errors.	27	10-12
:al percent questions that were group tests.	16	25-60
:al percent questions that were individual.	84	40-75
:al percent errors that were corrected.	37	100
:al percent errors that were corrected & retested.	10	100
:al percent of tasks that were models.	20	0-20
:al percent of tasks that were leads.	14	0
:al percent of tasks that were models or leads.	34	0-20
:al percent of responses that were given general ›raise.	44	0-10
tal percent of responses that were given specific praise.	2	15-30
tal percent of responses that were praised.	46	15-25
tal percent of responses that were given negative eedback.	1	0-2
:e per minute.	4.4	9-15

Table 3

Average Teacher Behavior and Average Program Specifications

Total number of questions asked in the program lesson.	8
Total number of questions asked by the teacher.	20
Percent more teacher questions over program questions.	251%
Percent of program questions that were ambiguous or misleading.	42%
Percent of teacher questions that were ambiguous or misleading.	48%
Percent of program questions that were relevant to the topic.	69%
Percent of teacher questions that were relevant to the topic.	24%
Student correct interpretation probability from the program.	22%
Student correct interpretation probability from the teacher.	27%
Strength of student responses from program questions.	78%
Strength of student responses from teacher questions.	77%
Percent of prompted responses in the program.	12%
Percent of prompted responses from the teacher.	22%

›pically increased the number of ques-
›ns that were judged irrelevant or am-
guous. For example, students read a
›ain-idea passage that does not contain
:opic sentence that expresses the main
›a. The students had just finished
›ading three passages in which the
›ain-idea was expressed as the first
ntence in the passage. The passage
›y read now indicates a host of pro-
›ems that the railroads encountered
ter they crossed the Mississippi River
railroad wars, disease, Indian raids,
:. When asked, "What's the main idea
this passage?" a student raises her
›nd and when called on, reads the first
ntence in the passage. The teacher
›ds and adds a question that does not
›pear in the teacher material. "Yes,"
e says, "that was one thing that hap-
›ned. But what is the whole main idea
this passage?" The students frown
›owingly, return to the passage, and
ise their hands. The next child called
› (of course) reads the last sentence.
gain, the teacher repeats, "Yes, that
so happened. But what is the whole
›ain idea?' The question the teacher
›ked was judged irrelevant because the
udents had never been presented with
›is kind of task and the only way they
›uld know what the *whole main idea* is
ould be to receive direct information
›out how the main idea is formulated
hen no topic sentence expresses it. So
›e teacher typically asks more ques-
ons than the program specifies. These
uestions are presented in response to
›istakes. And questions added by the teacher are either irrelevant, ambiguous, or misleading.

Table 3 shows a comparison of the average teacher behavior with the average program specifications. Note the teachers asked 151% more questions than the program specifies.

The comparison of the program specifications with the teacher's presentation disclosed one important fact: Not one teacher (on either taping) taught as well as or better than the program specifications. In other words, **the instructional program tends to function as a limiter of what the teacher does.** The teachers follow the program, are aware of the problems that the students experience, but are quite incapable of responding to the problem with effective remedies.

Student Outcomes

After the taping, students were presented with test worksheets that tested the material that had been presented during the taped lesson. Table 4 summarizes the student performance on 8 topics. These outcomes dramatically confirm that the programs are incapable of teaching if presented as taught, and that the teacher's presentation was technically poor and presented a sequence of tasks that was actually inferior to that presented by the printed program. Although there was some variability from topic to topic, the tests disclosed that the students did not generally understand the concepts and presented. The three topics that are of most interest to traditional educators are *main idea*, *context clues*, and *inferences*. No more than one-third of the students taught these topics scored more than 75% correct on what the teacher had just finished teaching. When we consider all the topics that were tested, we see a very frightening trend. Only about one-half of the students' scored 50% correct on the material just presented.

The first response to these results is perhaps shock. Imagine only about 30% of the students understand even 75% of what the teacher is trying to convey. When we look at the results in a broader context, however, we may draw the conclusion that the results are the inevitable outcome of traditional education. Consider achievement tests. Items for these tests are designed so they will maximize individual differences and "spread the distribution." The test designers achieve this spread by designing items that are passed by about half the children (so the average child will correctly answer about half the items). The same pattern of correct responses appears in the results of the tests for the various topics. The average student correctly responds to about half the items. The basal programs, therefore, seem to be quite consistent with the achivement tests that are used to evaluate programs; traditional evaluations are appropriate for good instruction.

Teacher Verbal Responses

The reports by teachers generally showed that the teachers were not familiar with the details of the program they used, were not greatly aware of their teaching behavior, and greatly overestimated their students' understanding of the material presented. Table 5 gives a summary that compares their verbal responses to seven questions on student mastery on the topic *main idea*.

The final step that we took in this study was to determine the extent to which the teachers we sampled were typical of a broader population of teachers. To make this comparison, we designed a questionnaire that was sent to 3,000 teachers in grades 4, 5, and 6. The same questionnaire had been presented to the experimental teachers as part of their first interview.

Sixteen percent of those receiving the questionnaire responded (493 responses). The responses provided by the experimental teachers showed that the teachers gave atypical responses on 12 of the 94 scorable items on the questionnaire. The experimental teachers, in other words, seemed to be a representative sample of teachers who were in-

(Continued on page 19)

Table 4

Mean Percent At or Above Different Criterion Percent

	Criterion Percent		
Topic	90% correct	75% correct	50% correct
Main idea	10%	33%	58%
Key Words	8%	32%	65%
Map Skills	30%	33%	56%
Inferences	15%	30%	62%
Context Clues	0%	0%	15%
Relevant Details	24%	82%	99%
Cause Effect	10%	30%	60%
Fact/opinion	0%	25%	70%
Means across all topics	12%	30%	55%

Table 5

Teacher Reports on Main Idea and Student Performance

T:	What percent of the students should master any skill?	86%
S:	Percent of students at 90% criterion on all topics.	12%
	Percent of students at 75% criterion on all topics.	30%
T:	What percent of the students could do the workbook exercises after the lesson was taped?	72%
S:	Percent of students at 90% criterion level on all topics.	12%
T:	What percent of the students need more practice on the topic taught?	58%
S:	Percent of students below 75% criterion level on all topics.	70%
T:	How much practice do they need?	1 week
S:	Percent of students below 50% criterion level on all topics.	55%
T:	What percent of the students master main idea?	56%
S:	Percent of students at 90% criterion on main idea.	10%
	Percent of students at 75% criterion on main idea.	33%
T:	What percent of the students remain unchanged?	40%
S:	Percent of students below 75% criterion on main idea.	67%
T:	How deficient is the program for teaching students main idea?	16%
S:	Percent of students below 75% criterion on main idea.	67%

Teaching Three- and Four-Year Olds in a Structured Education Program

By Barbara E. Anderson

(Editor's Note: The following is the abstract of a thesis submitted to the University of Utah for the degree of Master of Science, in June, 1971. We have edited the presentation of data some to make it more readable. The study was conducted at Ethna Reid's Exemplary Center for Reading Instruction. The information is still very contemporary. We appreciate Barbara sending this abstract to us.)

This study was designed to determine at what age children should be formally taught academic material in a structured school program. It was also designed to give Granite School District information on which it could confidently base future decisions about early childhood programs. Finally, it was designed to demonstrate teaching techniques in working with three, four, and five-year old children.

During the first year (1968-69), the program involved 120 children (two classes of three-year olds and three classes of four-year olds). Of the 120 subjects in the first year, 87 remained at the end of the second year. Five-year old children, the regular kindergarten children at an elementary school in Granite School District, were added to the study the second year (1969-70). They were instructed with the same material and methods as used with the original three- and four-year old children. A randomly selected control group of five-year olds came from the regular kindergarten of an elementary school in the Granite District. The random selection was made from among schools rated at the same socio-economic status as the experimental group.

The three- and four-year old children were selected on a "first come, first serve" voluntary basis on the part of the parents. An announcement of the program was made by letter to parents in Granite School District and by two daily newspaper articles.

Upon entrance into the program the three- and four-year olds were given the Peabody Picture Vocabulary Test (1965 Ed.). Scores ranged from a low of 59 to a high of 138 (mean about 106). The children were taught reading, arithmetic, and language, using the Engelmann Distar materials. A music program, using *Threshold to Music* materials (Fearon Publishers), a concept development program, and an art program developed by staff members were also used with the children. The children attended school three hours a day, five days a week.

The five-year old experimental subjects were also given the PPVT on entrance to assess mental ability. Scores ranged from a low of 81 to a high of 145; the I.Q.'s of the five-year old controls ranged from a low of 81 to a high of 141. The mean of both groups was 107.

The instructional program for the five-year old control group was not prescribed. The teachers taught the way they thought best. This study does not examine curriculum, program, or method of instruction for the control group. Their instruction included reading readiness, reading activities, and math. There was a time for creative play, records and singing, games, educational TV, and a recess. The children were taught as a group with one teacher instructing them. There was more freedom for choice of activity or inactivity in this program and there were differences between groups in instructional content, as well as in sequence of experiences.

Results of this study show that there was a significant (4 point) increase in the Mean I.Q. of the Experimental Five-year Olds after one year in the program where the structured academic program had been used. There was no significant increase in the Mean I.Q. of the Experimental Three-year Olds, Experimental Four-year Olds, or the Five-year Old Controls after one year in the program. After two years in the program there was a highly significant increase in I.Q. for children who had begun in the experiment as three-year olds (105 to 111) and as four-year olds (106 to 117).

All subjects were assessed upon entrance and after one year in the program on the Murphy Durrell Reading Readiness Test, and on the Wide Range Tests for Reading, Spelling, and Arithmetic. The experimental three- and four-year olds were also assessed for these skills after two years in the program.

When comparing each group's performance *after one year*, the Experimental Five-year Olds scored significantly better in Reading Readiness, Reading, and Spelling than the Experimental Three-year Olds; the Experimental Four-year Olds scored signficantly better in Reading Readiness and Reading than the Experimental Three-year Olds; and the Experimental Five-year Olds scored also significantly better in Reading than the Control Five-year Olds. The experimental Three-year Olds did not score significantly better than any other group at this testing. Table 1 shows means converted to grade equivalents after one year.

When comparing the Experimental Three-and Four-year Olds, *after two years* in the program with the Five-year Old group after one year in the program, the Experimental Three- and Four-year Old groups scored significantly better in Spelling and Reading than the Five-year Old Control group. The Experimental Four-year Olds scored significantly better in Arithmetic than the Five-year Old Control group (see Table 2).

These data show that with Distar programs for three- and four-year old children, significantly greater increases in academic skills take place after two years in the program than are characteristic of the gains made by five-year old children in the regular kindergarten program. Also, significant increases in the Mean I.Q. occur for five-year olds after one year in a structured academic program, and for three- and four-year olds after two years in a structured academic program.

Editorial Comments. The data in Table 1 imply that while the children made good progress, the programs were not readily taught to three-year olds. Table 2 shows that after two years of instruction, three-year-old-starting children do no better than five-year olds with one year of Distar, although they are still a year younger and could therefore leave kindergarten more advanced than the five-year olds. These findings are consistent with our later experiences. Starting earlier may lead to further advancement, but may not be cost-effective. (W.C. Becker)

Table 1

Wide Range Achievement Test Means Converted to Grade Equivalents After One Year

	Threes (E)	Fours (E)	Fives (E)	Fives (C)
Reading	K.7	1.5	2.3	1.2
Spelling	K.8	1.3	1.7	1.2
Arithmetic	K.9	1.4	1.6	1.2

Table 2

Wide Range Achievement Test Means Converted to Grade Equivalents

	After 2 Years		After 1 Year	
	Threes (E)	Fours (E)	Fives (E)	Fives (C)
Reading	2.2	2.6	2.5	1.2
Spelling	1.7	1.8	1.7	1.2
Arithmetic	1.6	2.1	1.6	1.2

Teacher-to-Teacher

by
Jane Coté
Whiteaker Community School
Eugene, Oregon

Teaching Independent Seatwork Skills

Jane Coté

Teacher-led instruction is critical in helping students develop solid basic skills in the primary grades. In addition, helping them form good independent seatwork skills is also important, since this is the learning format they will most often be expected to use in the intermediate grades. Just as basic skills require direct or active instruction, so too must seatwork skills be carefully cultivated. In this article, I will describe a set of procedures which I have found helpful for teaching seatwork skills to primary grade students. I hope you find them helpful too.

Decide on a day on which you will begin working on students' seatwork skills, then prepare the following ahead of time:

- Schedule a ten-to-twenty minute period when all students are at their desks and you are free to devote your complete attention to them.
- Select a seatwork assignment which all students are capable of doing without teacher assistance.
- Choose three or four short, specific rules which fit your classroom style and your students' current behavior. For example:
  1. Stay seated.
  2. Keep working.
  3. Raise your hand if you need help.
  4. If you finish early, read.

Rehearse these rules ahead of time so that you are comfortable when you present them to the students.

- Decide upon a praise and reinforcement system. Plastic chips or small squares of paper make easily-handled tokens. You should be prepared to tell students where to store their tokens. For example, "When you earn a chip, be sure to put it inside your desk. If I see a chip I can take it back." This should pre-

(Continued on page 7)

Administrator's Briefing

Maximizing Student Progress

by Linda Carnine

Linda Carnine

The workloads of school administrators typically require them to react to issues which arise in their schools rather than allowing them to be planful and proactive about student learning. Even an administrator who has set a goal of frequently checking student progress is often kept from doing so by meetings, parent visits, discipline problems, scheduling problems, and maintenance problems. The lists seems endless once the day begins. In addition, current economic conditions seem to work against our goal of providing educational excellence in our schools. How can an administrator effectively monitor student and teacher progress in a time-efficient and cost-efficient manner?

Student progress in Direct Instruction programs is particularly well-suited to evaluation through the monitoring of four variables: lesson day progress, time-on-task, percentage of correct responses on worksheets, and performance on criterion-referenced mastery tests.

Lesson day progress. Direct Instruction programs are broken down into *lesson days*. Each instructional day, an appropriately placed group of students should cover one lesson. Some lower-performing students may cover less than this; at times, higher-performers will cover more. But there should be a close correspondence between the number of days in school and the number of lessons covered by a majority of the students in any Direct Instruction program. A quarterly gathering of lesson day information is one means by which an administrator may gain a reading on student performance. Recommended checkpoints are late October, mid-December, mid-February, late March, and the end of the school year.

Time-on-task. By making classroom observations, two other sources of data can provide valuable information about how well students are progressing. The first of these relates to *time-on-task*. One means for gathering such data is to take a time sample. While observing small- or large-group instruction, select three-to-five students and observe them in turn for 5 seconds each. Continue observing in rotation for 5 to 10 minutes. If the student is "on task" during the whole 5 seconds, record a plus (+). If the student is "off-task" for any part of the time (not attending to what the teacher is demonstrating, not following teacher directives), record a minus (−). At the end of the time period, count up the total marks and divide this into the number of plus marks. This will give a percentage of time-on-task. The same procedure can be followed for students doing independent seatwork. A percentage of 90 for teacher-directed work and 75 to 85 for seatwork is excellent.

Unfortunately, such a short sample of classroom behavior will not necessarily give you an accurate picture of general classroom progress. It is just a snapshot. If your visits into the classroom are infrequent, the students' behavior will tend to look very good; if your visits are more frequent, you are likely to get a more representative picture.

Response accuracy. It is important to couple time samplings with a check on students' *independent work performance*. If students are answering questions in a workbook, working computational problems in arithmetic, writing spelling words, etc., they should be performing at 80-95 percent accuracy level. If the students are remedial, this probably needs to be even **higher.** If students are reading material silently, have them read aloud to you in a quiet voice. The same accuracy information is applicable, i.e., a student should be able to read the material orally, unpracticed, at a 90-100 percent accuracy level. Those that cannot will be relatively easy to identify. It is a good idea to ask the teacher about those whose accuracy levels are lower because the teacher may have valuable information about why they do less well.

Test performance. Data on time-on-task and accuracy on independent work will enable you to arrive at a fairly accurate reading of student performance within a specific classroom in a short time period. Nevertheless, as most administrators will attest, it's difficult to get into classrooms as frequently as we would like. Therefore, another source of information about student performance gathered second-hand can be accuracy levels on *criterion-referenced tests* that are specifically designed to accompany Direct Instruction programs published by SRA. Requesting criterion-referenced test data from teachers whenever they reach mastery checkpoints is another means for getting a reading on students' performance. Again, these scores should be in the 80-100 percent range if students are making satisfactory progress.

While data collected more frequently than suggested here would allow more responsive monitoring of student and teacher needs, time and person resources usually will not permit this. However, some schools have been able to afford trained aides or volunteers to help collect and summarize data on student performance. More typically, with this four-step procedure, principals and teachers are able to collect the information themselves.

Even in a time of shrinking resources, it is possible to work toward *maximizing* student performance through careful monitoring of progress. Good luck and good data in your efforts to "do more with less" for your students and teachers.

DI Preschools Please Help

Do you use DI in a Preschool? Paul Weisberg wants to find out about the scope and extent of usage of Direct Instruction in preschools across the country. If you know of a Head Start, day care, or special school that uses D.I. please contact Paul either by calling (205) 348-5083 (or 5553) or by writing P.O. Box 2968, Department of Psychology, University of Alabama, University, AL, 35486.

Seat Work (Cont. from page 6)

vent the problem of students playing with the tokens rather than working.

- Rehearse a variety of praise statements related to your seatwork rules: "Kathleen is working. She earns a chip."; "George is raising his hand for help. He earns a chip."; "Susan finished her work and is reading." The more frequent and specific your praise statements, the sooner all students will learn independent seatwork skills.
- Plan a follow-up reinforcer for students who earn an appropriate number of tokens (at least 3 in a 20-minute period). The reinforcer can be an activity such as a classroom game, free time, extra recess, or a tangible reward like a sticker.
- Remember to ignore behavior which is incompatible with your seatwork rules. (Don't skip this step. It is important and takes an incredible amount of concentration to accomplish this task correctly!) Mentally, see yourself ignoring a student who is talking. Use that talking as your cue to praise a student who *is* working. Your praises will be more powerful if you praise a student seated near the one who is not following the rules. Be sure to praise the specific behavior you want to increase. Continue in this manner until the target student is working appropriately. Then immediately praise that student for the correct behavior. "Molly, you're working quietly! That's how to earn a chip!" Praise target students frequently to ensure that they see the value of learning the seatwork rules.
- Role-play a variety of situations ahead of time so that you are prepared to deal with these behaviors when you are with your class. Try not to miss an opportunity to praise. When starting a new routine, the praise rate should be very high.
- Finally, don't give up or slip into paying attention to students who are not following the rules. Stick with the praise. It will produce a more positive atmosphere in your classroom. Your students will gain self-confidence and will learn excellent study habits.

Here are a possible script and a procedure for teaching seatwork skills:

"Everyone, we are starting something new. You can earn chips for following these rules at your desk. (State your rules here. You may find it helpful with younger children to have them repeat the rules. With older students, have the rules posted in the room.) "If you earn enough chips in twenty minutes, you can trade those chips for (insert your reinforcer here). When you earn a chip, put it inside your desk. If I see a chip, I can take it back."

Briefly explain the seatwork assignment and instruct the students to start working. Immediately begin to praise and hand out tokens to students who are working. Remember to ignore a student who may be talking or looking around. Praise other students seated near the target student. For example: "Sam is reading. That's the way to earn a chip;" or "Melinda is writing. That's how to follow the rules." Continue to praise around the target child until that child starts to work. Then immediately praise the target child. "You are working. You earn a chip! Super!"

At the end of the seatwork period, have the students count their chips. Tell the students how many chips they need to earn the reinforcer. Praise the students for their hard work as you collect the chips: "Peter, you worked very hard;" "Nancy, you stayed at your desk;" "Phil, you are really getting smart. You have earned some extra recess."

Most, if not all, students will earn a sufficient number of tokens to take part in the reinforcing activity if you are careful to praise around a target student and quickly praise that student for getting to work. However, if one or two students have not earned the reinforcer, tell them you are sure they can earn the reward if they follow the seatwork rules. "Jack, I am sure you can earn early recess next time. Let's go over the rules for working at your desk so that you will be able to earn lots of chips next time." Have the target students repeat the rules. Encourage the students to remember the rules and tell them when you will be having a seatwork session again. Before that session, again have them review the rules and assure them that if they follow the rules, they can earn the reinforcer. You may also wish to start the work session with a work cue like, "Everyone, get your pencils out and begin work." Concentrate your praise on the target student(s) during the next work period. "You've got it Jack! You are really working!"

After several days using this type of practice, you may want to change the situation slightly so that you can teach a group while some other students are doing seatwork. To accomplish this, remind the class of the rules and tell them they cannot interrupt your group. If they need help, they should read or do another page until you can help them. Frequently during your teaching, you should pause to praise and hand out tokens to the students working at their desks. To remind yourself to praise seatwork, you may want to write a cue in your teacher books or set a timer.

Don't lose faith! All this praising takes a lot of time, effort, and concentration at the beginning. The long range payoffs will be that your students will become more self-confident, independent workers, and that you will find yourself being a more relaxed and positive teacher.

Springfield High School's Approach To Corrective Reading

By Jack Stoops and Pamela Saunders, Springfield, Oregon

Direct Instruction was adopted at Springfield High School by Principal Bill O'Neal and social studies teacher Graydon Lewis, who were searching for a program for high school students deficient in reading. The *Corrective Reading Program's* Decoding C and Comprehension B were first selected and piloted for the Engelmann-Becker Corporation. Before 1975, the EMR classes used a prototype of the comprehension program in a self-contained format. This has been expanded for the use of all students who qualify. The reading classes can include certified Learning Disabled, Educable Mentally Retarded, and Severely Emotionally Disabled students, as well as regular students.

The reading teachers and program are within the Special Services Department of Springfield High School. This department is a unique grouping of individuals highly qualified in teaching reading and content area skills to remedial students. Their efforts are coordinated to provide the most efficient service to insure student skill attainment. Every reading teacher is required to be formally trained in *Corrective Reading* techniques and district policy dictates full use of the program as designed.

Assessment and Placement

A flow chart indicating the classes offered and their sequence is shown in Figure 1. Students are screened for the program in several ways. Incoming ninth graders are identified in the spring of their eighth grade year by California Achievement Test (C.A.T.) scores in language skills and by teacher recommendations. C.A.T. scores are also used for high school students to identify any who are low. The English Department also gives the Stanford Diagnostic Reading Test, Brown level, each fall to incoming ninth graders. Students falling in the bottom three stanines (lower 23%) are referred for further testing and specific placement within the program by using the *Corrective Reading* Placement Test.

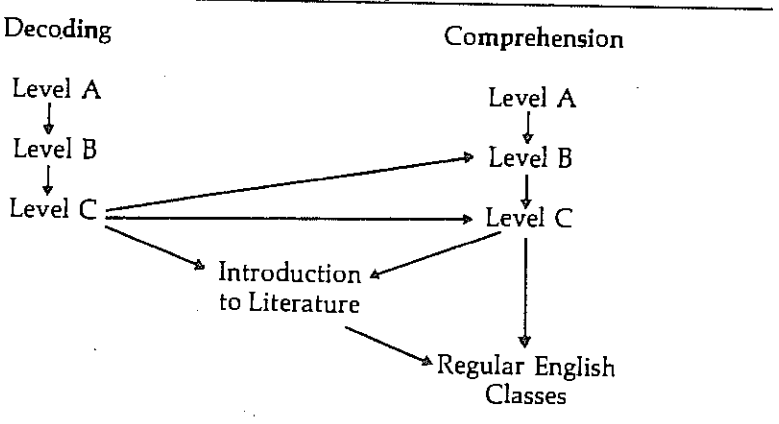
Each Special Services Department teacher acts as a liason between their own department and an assigned department. The liason assists the assigned department in writing academic referrals. This includes interpreting the student's cumulative folder. A battery of tests (Gilmore, Gallistell-Ellis, and Individual Reading Inventories) are used when initial screening warrants additional assessment. In addition to reading, remedial content area classes are available for those students reading below grade level.

Delivery of Services

Reading classes are homogenously grouped by academic skills. Reading is a regularly scheduled class (rather than a resource room activity) for which the student receives English credit. Comprehension C is designed for the student to take a full year and receive writing credit at the 11th or 12th grade. Classes meet five days a week for fifty minutes each day and one complete lesson is taught daily. Most of the classes offered at the high school are taught on a semester basis; this is not true of the reading classes. It is made clear to students in the fall that they will be in reading class for the full school year. The goal is to complete 140 lessons by the end of the school year. In most instances, it is in the student's best interest to follow the sequence of the program until they have mastered the skills at every level.

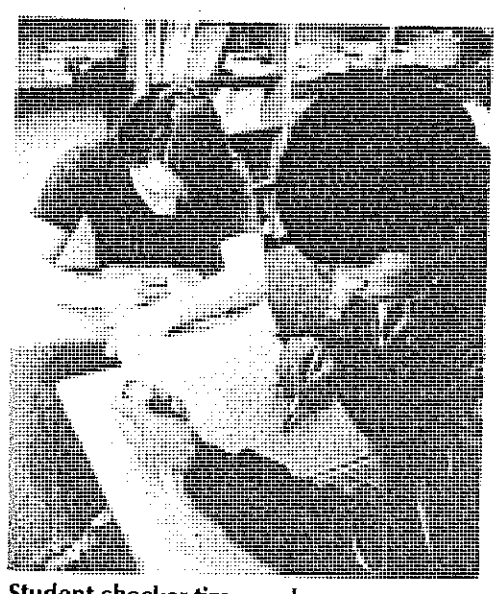
Figure 1

Springfield High Reading Program Flow Chart



Program Goal: Passing Required Reading Competency and/or Completion of Program Sequence

Peer tutor helps student in decoding class



Student checker times pole on "checkout."

Within the classroom, Direct Instruction techniques provide for maximum academically-engaged time. The model-lead-test strategy allows the teacher to task-analyze the components and the students are reinforced until they meet criteria. A time management study conducted in 1978 by Bob Hammond, Director of Assessment and Evaluation, shows student-teacher interaction occurs 75 to 80 percent of the time. This satisfies one of the District's reading goals.

Transition

One problem associated with using a program based strongly on Direct Instruction is the transition of students from this setting into regular classes. The sequence of corrective reading classes (see Figure 1) weans the student from reliance on the strongly teacher-directed instruction (i.e., Decoding B) to a more self-directed program (i.e., Comprehension C). Introduction to Literature completes this transition sequence. These courses parallel content taught in regular English classes, but provide more structure for low-achieving students.

DI in the Content Areas

Direct Instruction techniques have been successfully used in many of the content areas. Teachers in social studies, science and English have asked for help from Special Services staff in the use of sequencing of skills, model-lead-test, time management, and behavior modification skills common in a Direct Instruction program. In addition, a program designed to use regular students as tutors, trained in the above skills, can be used in any needed area.

Evaluation

All reading classes are pretested and posttested on the Stanford Diagnostic Reading Test, Comprehension Battery, Brown Level. A raw score of 42 passes the district reading competency requirement. Mastery tests can also be used at the end of each semester. From the results of these criterion-referenced tests, weak areas can be detected.

The Corrective Reading Program has been very successful at Springfield High School. In 1980, out of 78 students enrolled, 78 passed the district reading competency; 62 of 62 students passed in 1981. (The students who were only in Decoding B were not included in the above numbers because the materials are not at competency level.) As mentioned, Direct Instruction techniques have transferred well into the content areas. The Special Services staff feels that much of the success of this program is due to the support and involvement of the total Springfield High administration and staff. Not only are the students getting help with reading and competencies, but are actually gaining in their areas of deficiency, so they can succeed elsewhere as well.

Got "Smart" Kids? Help Me

Direct Instruction proponents often say that DI is not just for low-performing students — that it is effective with average- and high-performers, too. Critics continue to doubt this. As a result, Louis Mensing, a teacher at Coburg Elementary School in Eugene, Oregon, is collecting information to support the effectiveness of DI with higher-performing students. He will use this information as the basis for an article which will appear in a future issue of the News. If you have any information on this topic (research reports, program descriptions, anecdotes, etc.) that you are willing to share, please send it by May 15, 1982 to:

Louis Mensing
Coburg Elementary School
91274 N. Coburg Rd.
Eugene, OR 97401

You will receive credit in the article for any information you send which is used. Thanks for any help you can lend.

"Dear Ziggy"

Dear Ziggy,

One problem that really bothers me in my classroom is the amount of disruption that is created each time I call a group to come and work with me or each time we change groups. It seems like ten minutes of the next period always go by before I can get everybody back to work again. I believe in the value of small-group instruction, but how do I handle the disruption caused by these transitions?

Ziggy Says:

There are two kinds of transitions — those involving a change of location *and* a change of activity (the type that you referred to in your letter), and those involving a change of activity *without* a change in location (e.g., moving from the teacher presentation to the teacher-directed portion of the take-homes in DISTAR lessons). Both can be handled in the same way when problems occur.

The goal of any transition is to get it over with as soon as possible without disruption. Because transitions unavoidably compete for time with instructional time, they must be kept to an absolute minimum duration. Otherwise, they will rob you of valuable teaching time and prevent you from being as effective as you can be. Therefore, it is worth spending some time to help the students get good at transitions. By *good*, I mean no more than two minutes for transitions from one place in the room to another and 30 seconds for changes in activity and/or materials only with no change in location. These should be your goals, and yes, they *are* attainable.

Treat transitions as any other skill to be mastered by: (1) signaling their onset and termination, (2) correcting "errors" of slowness or disruptiveness by modeling and testing on the correct perform ance and by repeating until firm, and (3) reinforcing transition behavior which is quick and quiet.

You might find that you have to send students back to their desks several times initially to practice doing it the right way; but if you model the behavior for them initially — and tell them that the *last* group of students you worked with could make the transition in only 30 seconds without disruption — you will soon have students who can make transitions and be ready to work in the new activity before you can say "Morphographic Spelling." The time you invest now in teaching your students to make efficient transitions will pay dividends for you with more minutes available for instruction within only two or three days. And remember the problem of never having enough time to finish a lesson or teach to criterion? Well, a quick transition solves *those* problems, too. Good luck.

Dear Ziggy,

I'm committed to teaching my students in small groups for reading, but I don't have an aide, and no matter how I arrange my schedule, I always have one or two groups of students at their desks while I'm teaching another group. These kids know what they're supposed to be doing during their seatwork time, and the work is *not* that hard, but they seem to think that this is their social hour — or worse. How can I do a decent job of teaching my groups with a classroom of rowdies like this? Help, this situation is driving me crazy!

Ziggy Says:

Let me answer by describing a scenario depicting how your classroom *might* look in about five days (if you decide to try this approach).

You are seated in one corner of the room, looking out over the entire class. One of your groups is seated in front of you in a semi-circle, facing the corner and situated within your arm's reach. Before the lesson started — in fact, before you went home last night — you (with the help of a student or parent volunteer) prepared work folders for each student, containing *more* than enough seatwork to last for the duration of the students' seatwork time. You don't really expect students to complete all of the work in their folders; you only expect them to finish the pages you have marked as required. The remaining pages simply provide extra practice on skills previously learned. You have cleverly selected work for the folders which will produce a minimum number of requests for assistance. To handle those requests which do arise, you have taped on each student's desk a small sign which reads, "Please Help Me." When the student needs help, s/he flips over the sign, then goes on to other tasks or other pages which s/he *can* do. At the end of your lesson, you circulate among students' desks for a few minutes, providing assistance to the students who have requested it during the lesson, then going on to your next group or to the next class activity. You have also encouraged students to go to the bathroom, sharpen their pencils, and get drinks of water *before* work time, so these disruptions are no longer a problem for you.

As you teach your lesson, you glance up periodically (perhaps every task or two initially and every minute or two eventually), scan the room for two or three seconds, and call out praise statements across the room to two or three students who are working well independently. While you are doing this, you gently rest your hand on the shoulder of the student in your group who is *so* easily distractable. He knows that you haven't forgotten about him, and the students at their desks — all the students, not just the ones you praised — learn that you continue to be aware of what they are doing, even though you are very busy with your lesson. Your group continues to do as well as ever; your seatworkers begin to do better than you ever thought possible. Try it — and watch it happen.

Savings for New Members

Normal membership covers the period from September 1 to August 31. To encourage new members to join during this period of growth, all new memberships received between April 15 and August 31, will be credited with membership for the following school year (i.e., through August, 1983).

DI at ABA

Since 1980, the Annual Conference of the Association for Behavior Analysis (ABA) has provided a national forum (in a central location) in which interested people could discuss issues pertaining to direct instruction from a variety of perspectives and in several formats.

This year's ABA Convention is scheduled for May 27-31, 1982, and will again be held at Milwaukee's Hyatt Regency Hotel. The direct instruction events scheduled for the Convention are summarized below. The theme of this year's symposium is "Bridging the Gap with Compatible Technologies."

Events Sponsored by the Direct Instruction Special Interest Group to be Held at the 1982 ABA Convention

Friday, May 28

9:00-11:00
Symposium: Direct Instruction and Precision Teaching. Doug Carnine, Ogden Lindsley, and others (Michael Maloney, chair)

11:00-12:00
Invited Address: Theory of Instruction. Wes Becker & Doug Carnine (Galen Alessi, chair)

1:00-3:30
Symposium: Direct Instruction — Joining Forces with Compatible Technologies. (Stan Paine, chair) Rob Horner, Jeff Sherman, Peter Lorimer, Marilyn Monteiro, Barak Rosenshine, Wes Becker, Doug Carnine, Sidney Bijou, Don Thomas & Galen Alessi.
Discussant: Robert Benjamin, *Baltimore Sun* (author, *Making Schools Work*)

3:30-4:30
Conversation Hour: Wes Becker, Doug Carnine, Galen Alessi, others

4:30-5:30
Direct Instruction Special Interest Group Meeting. (Stan Paine, Marilyn Monteiro & Galen Alessi, chairs)

Saturday, May 29

Group Poster Session on Direct Instruction (Marilyn Monteiro, Doug Carnine & Stan Paine, co-hosts)

Presenters:

Jane Howard, Marilyn Monteiro, Ed Kameenui, Peter Lenz, Paul Knight, Steve Enge, Michael F. Masters, David M. Keenan, David S. Snyder, Joetta J. Long, Elizabeth W. Slocum, Timothy I. McKinley, Cheryl E. Poche, Jon Boes, Richard Packer & Kathy Wright.

Workshop: Structuring Classrooms for Success — A Direct Instruction Approach. Stan Paine University of Oregon (tentative)

(See Winter DI Newsletter for more details)

The Association for Direct Instruction announces the

Eighth Annual Direct I

to be held August 16-20 in Eugene, Oregon.

This year the conference will be an extra special event. It will be held at the Eugene Hilton Hotel and Conference Center, located in Eugene downtown. The Hilton offers a number of extras . . . special room rates for participants, free transportation to and from Mahlon Sweet Airport, a health club for use of their guests, and free parking under the hotel. Participants may rent bicycles at the front door of the hotel and explore the miles of bike paths that have made Eugene a tourist attraction for many years. The downtown location is just steps away from Eugene's finest restaurants and shopping centers. After the conference, one may wish to extend their stay in Oregon and travel 60 miles to the West and visit Oregon's spectacular coastline or travel just 40 miles to the East for an unparalleled view of the Cascades!

In addition to repeating the wide range of training and informational sessions offered in previous years, this year the conference features several NEW SESSIONS including Law and Special Education, Theory of Instruction, and Administration and Management of the Total Direct Instruction Curriculum. The distinguished guest and Keynote speaker for this year's conference will be Thaddeus Lott, principal of Wesley Elementary School in Houston, Texas. Lott's work at Wesley School was featured in Robert Benjamin's book, *Making Schools Work*. Wesley School, which uses a comprehensive Direct Instruction curriculum, is widely recognized as one of the exemplary elementary schools in the United States.

Conference sessions are designed to further the technical competence and confidence of teachers, aides, supervisors and administrators whose goal is to prevent failure in the classroom and to promote educational excellence. Innovators, authors and trainers will share the latest information about Direct Instruction and provide intensive training on current DI programs.

The schedule for the five-day conference provides an excellent opportunity to share experiences with people from around the world who are interested in Direct Instruction. To help you renew old friendships or start new ones, a picnic has been planned for Monday afternoon.

Schedule

Monday, August 16

Registration — 8:00 am - 9:00 am
Opening Assembly — 9:00 am - 9:30 am
Siegfried Engelmann and Wes Becker will speak.
9:45 am - 11:30 am

- People who are new to Direct Instruction will learn basic presentation techniques and rationale.
- People experienced with Direct Instruction will go to a session that overviews the latest developments in Direct Instruction and receive information about new Direct Instruction programs.

Lunch break — 11:30 am - 1:00 pm
"A" Sessions — 1:00 pm - 2:20 pm
"B" Sessions — 2:30 pm - 4:00 pm
Get Acquainted Picnic (free to participants) — 4:30 pm

Tuesday through Thursday, August 17-19

"A" Sessions meet 8:30 am - 11:30 am
"B" Sessions meet 1:00 pm - 4:00 pm
The Association for Direct Instruction will have its Second Annual Meeting at 4:00 on Thursday, August 19th. Thaddeus Lott will address the Association members.

Friday, August 20

"C" Sessions — 8:30 am - 11:30 am
— 12:30 pm - 2:45 pm
Closing Assembly — 2:45 pm
Recognition Awards presentation and a summary session by Engelmann and Becker.

SESSIONS OFFERED

There are 29 sessions offered during the five-day conference. Participants may choose to attend three. Sessions are either training or informational sessions. The focus of training sessions is on specific teaching behaviors. Task practice is involved in each of these sessions. The goal of informational sessions is to provide the kind of detailed information needed to implement successful techniques or to understand the topic.

Sessions are scheduled in three time periods. Each participant may choose one session during each time period. So that no training session becomes too large to be effective, some multiple sessions are offered. More will be added as necessary. "A" sessions and "B" sessions offer approximately 10½ hours of class time each. "C" sessions offer 5-6 hours of class time (all day Friday). All sessions focus on current techniques and materials.

1. **Teaching the Beginning Reader:** How to teach beginning students to read and how to teach remedial students — those who read very poorly or not at all. This session will provide training in Word Attack Basics® (Decoding A of the Corrective Reading Series), DISTAR® Reading I, DISTAR Fast-Cycle and Teach Your Child to Read in 100 Easy Lessons, a new Direct Instruction program for teaching reading at home. Participants learn the basic information and skills needed to implement the programs — placement, acceleration, scheduling, grouping, presenting prereading exercises. ("A" & "B")

2. **Reading Mastery III, IV, V & VI:** These programs present a careful development sequence for teaching comprehension and decoding skills to students who have mastered the basic skills. Programs provide manageable procedures for meeting the full range of comprehension and decoding objectives. ("A")

3. **Teaching Beginning Language Skills:** For teachers of basic language in preschool through grade 2 and for teachers of students for whom English is a second language. Focus is on the language of instruction — polars, if-then, following directions, comparatives, prepositions, etc. — with emphasis on statement production. Includes a tract on how to apply concepts to new situations. Training on Espanol to English will be covered as will using Distar Language I and II with students for whom English is a second language. Participants will receive a Language I & II Teachers Guide. ("A")

4. **Teaching Reading Accuracy and Fluency:** How to teach students (grades 4-12 and adults) to accurately decode, increase rate, build vocabulary and reading for information in books, newspapers, and magazines. Training will be provided on Decoding Strategies® (Decoding B) and Skill Application® (Decoding C) of the Corrective Reading Series (SRA, 1978). Programs may be used developmentally or remedially. ("A" & "B")

5. **Teaching Oral and Written Language and Comprèhension Skills:** Developmental and remedial techniques for effective presentations with primary age students through adults. Based on Thinking Basics® (Comprehension A), Comprehension Skills® (Comprehension B) Concept Applications® (Comprehension C) and DISTAR Language III — Direct Instruction programs that include presentations of skills such as deductions, inductions, analogies, following instructions, vocabulary building, editing, writing and logical analysis. ("A" & "B")

6. **Effective Spelling Instruction:** Specific information and training on SRA's Corrective Spelling Through Morphographs® and the Spelling Mastery Series,® a new five-level basal spelling program that integrates the morphographic analysis with sound-symbol analysis and whole-word analysis. The series teaches the spelling of over 15,000 words. Designed for grades 2-6. Sessions explains the use of these programs in regular and special settings. ("A" & "B")

7. **DISTAR Reading II:** Training in DISTAR® techniques to teach students how to follow instructions, deduction skills, information reading and reading fluency. Participants receive Reading II Teacher's Guide. ("A")

8. **Overview and Implementation of All Direct Instruction Programs:** This session is designed to familiarize administrators and teachers with all of the currently available Direct Instruction programs. Time will be spent examinig the purpose and objectives of each program and the recommended implementation considerations such as: placement, group size, what types of students, grade level, transition to traditional programs and integration of each program with other DI programs. ("B")
NOTE: Participants taking this session should not enroll in "C" session Overview of DI Programs and Implementation Questions.

9. **Generalized Compliance Training:** Procedures for dealing with extreme behavior problems (autistic, severely emotionally disturbed, and unmanageable low performers). Specifies procedures for inducing compliance and for achieving generalizations of compliant behaviors to various settings. ("A")

10. **How to Evaluate Instruction** (with illustrations from DI research): The aim of this session is to provide the participant with a general model to follow in designing procedures for instructional program evaluation. The session covers material in Becker & Engelmann, Teaching III: Evaluation of Instruction (which participants will receive). Topics covered are "feasible designs," selection of norm referenced and criterion referenced tests, "major pitfalls," "background variables to consider." Available research on DI programs will be summarized and bibliographies provided. ("A")
NOTE: Participants in this session should not enroll in "C" Session, Research on Direct Instruction.

11. **Corrective Arithmetic:** Procedures for teaching students who lack understanding of fractions, decimal operations, basic work problems and equations. Also for firming addition, subtraction, multiplication, and division — facts, operations and story problems. Specific training on SRA Corrective Math and Math Modules. ("B")

12. **DISTAR Arithmetic I & II:** Rationale, teaching procedures, and role-playing practice in facts (addition, subtraction and multipication), problem-solving (addition, subtraction, multiplication, and division), fractions (reading, multiplying, and reducing), counting money, objects, and events, telling time, metric and standard measurement, ordinal counting equivalencies, and story problems involving many problem types. Participants will receive Arithmetic I & II Teacher's Guide. ("B")

13. **Solutions to Classroom Management Problems:** This workshop is designed for teachers in grades K-12 and for administrators interested in improving the behavior and motivation of students. The session focuses on practical strategies for correcting common individual and school wide problems such as talking back, excessive noise, failure to complete independent work, and cafeteria and recess problems. The session takes participants through step-by-step procedures for solving problems that currently exist in the classroom. At the end of the session, participants will be able to implement several strategies for changing behavior problems and increasing student motivation. ("A" & "C")

14. **Supervising Direct Instruction Programs:** Information for supervisors and administrators who have experience teaching direct instruction programs. Techniques for implementing DI, pre- and in-service training of teachers and aides and effective monitoring will be discussed. Participants will receive sample forms and charts useful in establishing an effective supervision system. ("B")

struction Conference

15. **Theory of Instruction:** Overview of a newly published book by Engelmann d Carnine. Basic principles for presenting concepts, teaching operations, sequenc- examples, providing repetition, and assuring generalizations of what is taught. amples relate to DISTAR Reading, Language and Math, also Corrective Reading. ")

16. **Using DI Techniques with Basal and Linguistic Reading Programs:** This ses- n will provide teachers and administrators with an understanding of the dif- ence between basal reading programs and Direct Instruction programs. Par- pants will then learn how to improve instruction in basal reading programs ough the use of DI techniques. Time will be spent on skills typically introduced in ginning reading through third grade reading programs with an emphasis on transi- n from DISTAR Reading II or III to a basal series. ("B")

17. **Introducing Library Books to First Graders:** Training based on a new gelmann-Becker program (I Love Library Books) for grade 1 that introduces a se- ence of 37 library books. Specified procedures are given for introducing cabulary and comprehension activities. Also procedures are given for reinforcing cific decoding and comprehension skills. The sequence of library books is keyed all reading basal series. ("C")

18. **DISTAR Reading Fast Cycle:** Training for teachers of bright and ready 5 and ear old children or older non-readers. How to teach Reading I skills (see #1) in less e. How to use Fast Cycle as a review of basic skills for children entering Reading Participants receive Fast Cycle Teacher's Guide. ("C")

19. **Teaching Facts and Fact Systems in the Content Areas:** Training on super- ctive procedures for using various topics in social studies and science. Based on new E-B Press program Your World of Facts, Level I. Training shows how to in- duce fact systems and how to firm even very low performers through the game mat that is part of the program. Procedures on how to develop visual-spatial plays for teaching difficult fact relationships. ("C")

2. **Cursive Handwriting:** Participants in this session will receive rationale and ning for Engelmann-Becker's Cursive Handwriting Program. Direct Instruction niques for teaching new letters, slant discrimination, cursive reading, rate work l other aspects of handwriting will be covered. ("C")

3. **Supplemental and Transitional Activities Related to Distar:** Information on icturing classrooms for independent activities. Suggestions for scheduling and nagement. Specific examples for seatwork, learning center games, and station ac- ties explained and demonstrated. ("C")

4. **Corrective Arithmetic:** Training. Seven modules — Addition, Subtraction, ltiplication and Division, Basic Fractions, Fractions, Decimals & Percents, and ios & Equations (new from SRA) provide concentrated skill development for cific student needs. Each program presents practice in facts, operations, logical lysis of problems, story applications, and cumulative reviews. Efficient presenta- is teach relationships between facts in addition-subtraction and multiplication- ision so that fact learning is accelerated. ("C")

25. **Research on Direct Instruction:** This session will define the special features of Direct Instruction, review the current research findings and provide participants with an up to date summary of research in Direct Instruction. Topics include pre-school studies, Follow-Through, and related primary-school studies, findings with special education populations and with secondary school students. Studies of DISTAR, Corrective Spelling and Corrective Reading programs are included. Directions for future research into the problems of vocabulary comprehension and mainstreaming will be discussed.

26. **Teaching the Extremely Low-Performing Learner:** Technical information on how to teach the severely or profoundly retarded learner. Techniques for establishing a basis of instruction, firming responses, expanding tasks, inducing generalizations and designing appropriate programs and schedules. Techniques for dealing with particular learning problems such as short memory, short attention span, echolalia, latency in responding, superstitious behavior during multiple step tasks, and highly restricted receptive language. Note: This session is not designed to deal with inappropriate behavior (Generalized Compliance Training has this focus), rather it is designed to provide information on teaching variables for low performers. ("C")

27. **Implementation Questions and Overview of all Direct Instruction Programs:** This session is designed so that teachers and administrators have an opportunity to ask questions regarding when to use which program, skipping schedules, placement, group size, transition... all the relevant details that are necessary for a successful Direct Instruction curriculum. ("C")

28. **Administration and Management of the Total Direct Instruction Curriculum:** A session for the Direct Instruction administrator. In this session Thaddeus Lott will describe the education program at Wesley Elementary School in Houston, Texas. He will explain the daily and long-term issues which must be addressed in creating an environment of educational excellence. Participants are encouraged to pose real-world problems and questions for discussion. ("C")

29. **Law and Special Education:** This session will present highlights of the current legal status and developments with regard to implementing P.L. 94-142 and related legal issues in the schools. ("C")

® Registered trademark of Science Research Associates, Inc.

Workshop Instructors

Instructors for the conference are consultants for the Association for Direct Instruction. All ADI instructors have demonstrated expertise at classroom management and behavioral techniques. Furthermore, all have demonstrated the ability to train other teachers so that these teachers are able to succeed with even the lowest performing children. Most of the trainers have served as site managers for the Engelmann-Becker Follow-Through model (University of Oregon), a program that is generally recognized as having the best trained and most effective staff of any large-scale model in the USOE Follow-Through Project. Instructors will include Siegfried Engelmann, Wes Becker, Jean Osborn, Leslie Zoref, Sam Miller, Gary Davis, Gary Johnson, Phyllis Haddox, Maria Collins, Jane Coté, Thaddeus Lott, and others.

EUGENE DI CONFERENCE PRE-REGISTRATION FORM

Where-When. To be held August 16-20, 1982, at the Eugene Hilton and Conference Center, in downtown Eugene, Oregon.

How to Pre-Register.* Please fill out application form. Enclose with check or school district purchase order for the proper fee. Send application to the Association for Direct Instruction. Pre-registration before July 1 guarantees space in preferred sessions. Any session with less than 20 participants may be cancelled.

This form covers conference pre-registration only. This does not constitute pre-registration for college credit or room reservation.

Fees and Discounts. The conference registration fee is $100.00. Association members receive a 20% discount. Group reservations of 5 to 9 participants receive a 10% discount, groups of 10-19 receive a 20% discount. For groups of 20 or more call for a quotation. Ask for Bryan at (503) 485-1163. The member and group discounts cannot be used together. Choose the discount that will benefit you the most. The fee does not include lodging or meals with the exception of the picnic, and sweet rolls and coffee (etc.) each morning. All training materials are included in the fee.

Hilton Room Rates. The rate for a single is $30.00 a day. Doubles will be $40.00 ($20.00 per person), plus tax. If you are interested in staying at the Hilton please check "yes" on the pre-registration form. We will then put the hotel in touch with you. DO NOT SEND ANY ROOM MONEY TO THE ASSOCIATION. **Hilton rooms must be reserved before July 15, 1982.**

College Credit. An optional 1, 2, or 3 units of college credit through the University of Oregon are available at an additional cost of $24.00 for each unit. Persons interested in college credit should so indicate on the enclosed pre-registration form. We will send appropriate information on credit along with conference pre-registration confirmation.

Please print your name, address and phone clearly. Use an address at which we can reach you before the conference.

Name_____ Phone (_____)_____

Street _____

City_____ State_____ Zip_____

Have you had previous experience with Direct Instruction?_____

What taught? _____ How many years? _____

Please read the course descriptions (see Spring, 1982, DI News) carefully before choosing. "A" and "B" sessions may have different content from "C" sessions even though titles are similar. "A" and "B" sessions meet for 10½ hours of class time. "C" sessions meet for 5-6 hours of class time.

I would like to register for the following (list one "A," one "B" and one "C" session):

"A" _____

"B" _____

"C" _____

I am an Association for Direct Instruction member: ☐ Yes ☐ No
I will attend the picnic: ☐ Yes ☐ No
Please send college credit information: ☐ Yes ☐ No
I will be staying at the Hilton. Please have them contact me: ☐ Yes ☐ No
I would like to be doubled up with another participant: ☐ Yes ☐ No

PLEASE RETURN THIS FORM WITH YOUR CHECK OR DISTRICT PURCHASE ORDER TO:

ASSOCIATION FOR DIRECT INSTRUCTION
P.O. BOX 10252, EUGENE, OREGON 97440

For Office Use Only: Fee_____ Check_____ PO #_____ By_____

ADVERTISEMENT

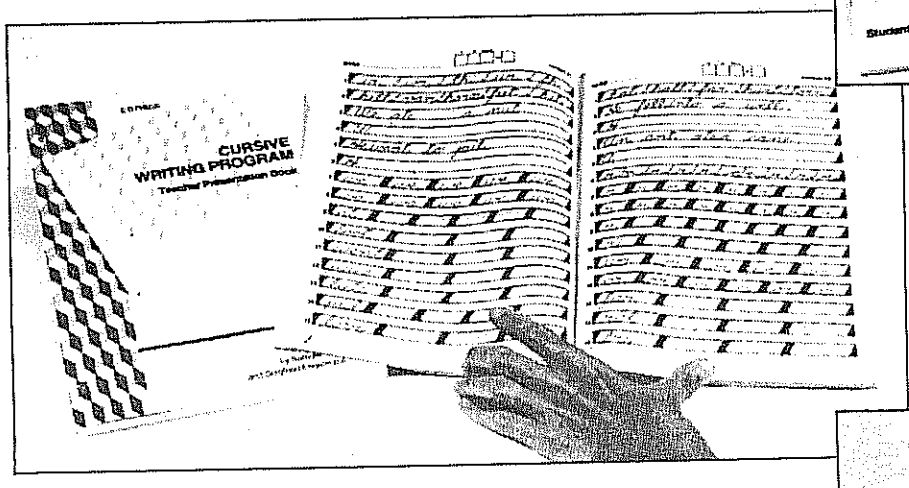
Direct Instruction Programs

from E-B Press

Cursive Writing Program

- 140 complete lessons.
- Specific teacher direction.
- Lots of practice for students.

Teacher Presentation Book **$25.00**
Student Workbook **$2.95**



The program teaches cursive skills as simple transformations of manuscript writing.

a becomes *a*, t becomes *t*, by changing the slant and adding tails. Prompts teach appropriate slant and form.

Practice with joined letters actually teaches the more complicated letters.

Practice with *ai* teaches *a*.

Practice with *ct* teaches *d*.

Simple stroke descriptions direct students and teachers.

No great memorization load on students.

Fully field-tested and effective.

DISTAR® Continuous Progress Tests

A breakthrough in simplifying behavioral objective diagnosis and remediation. Available for: DISTAR® Reading 1 and 2, Language 1 and 2, Arithmetic 1 and 2.

- Individually administered.
- Specific remedies specified.
- Criterion referenced measures of skills and sequences taught in the DISTAR programs.
- Results show the lesson number each student has achieved for each skill, simplifying IEP's.
- Document that specific instructional objectives are achieved.

The essential core of a quality-control management system identifies problems with individual students and with the teaching of specific skills.

Tutorial Series

Progammed Time Telling
Sounds, Symbols, and Blending
Word Endings
Math Combinations
Number Skills
Carrying and Borrowing
Functional Decoding and Vocabulary Building

I Love Library Books

Level I

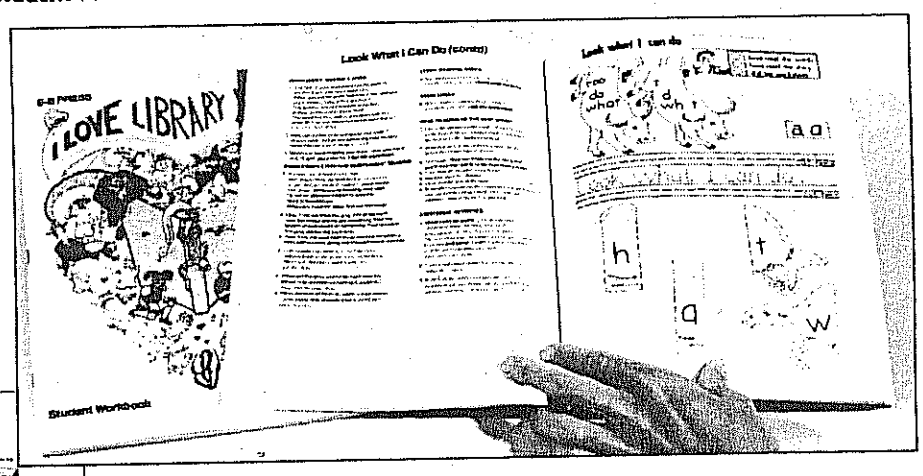
- An exciting program for introducing popular library books to first graders.
- Thoroughly field tested and effective.
- Lessons keyed to all major basal reading programs.
- Complete worksheet and teacher-presentation material for 37 popular books.

The program is based on a computer analysis of the words that appear in the different library books and the words that are introduced in every major basal. You simply select the books that you wish to introduce and then refer to the program, which tells exactly when it is safe to introduce the book. The worksheet for the introduction presents all the new words the children need to read the book (never more than 10 words) and comprehension activities for the major concepts and vocabulary of the book.

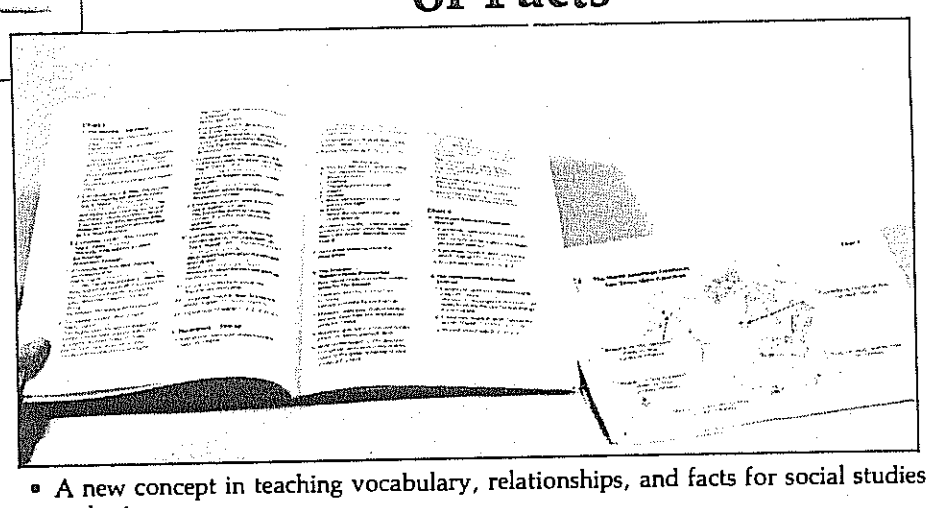
The teacher-presentation material tells exactly how to present the worksheet exercises to the children.

With this program, you can introduce library books so that the teaching is easy and virtually all your first graders learn to love library books.

Teacher Presentation Book $25.00
Student Workbook $1.95



The World of Facts



- A new concept in teaching vocabulary, relationships, and facts for social studies and science.
- Program requires very little teacher-directed time.
- Uses a game-type format that assures important facts and relationships are taught.

Ideal as both a stand-alone program or as an introduction to the key facts and relationships presented in social studies and science texts.

Module 1 teaches 10-20 key facts and relationships for each of 25 topics, including Western Hemisphere, solar system, the human breathing mechanism, continents and oceans of the world, game birds of North America, parts of a tree and a flower, and the internal combustion engine.

Module 2 introduces a broad range of topics, such as characteristics of mammals, climate and climate regions of North America, geological areas, and industries that are associated with climate regions.

Module 3 focuses on plant physiology, plant classification, diet, different systems of the human body (circulatory, skeletal, nervous) and food chains.

Subsequent modules of the program will introduce the full range of traditional science concepts as well as study skills and procedures for students to make up their own "visual-spatial" charts on various topics.

*available Dec. 1981.

Teacher Presentation Book **$20.00**
Student Workbook **$2.00**

Send for free E-B Press Catalog:

Engelmann-Becker Corporation
P.O. Box 10459
Eugene, Oregon 97440
or call (503) 485-1163

Generalized Compliance Training (Part 2)

Frequently Raised Questions and Issues

By Geoff Colvin, Engelmann-Becker Learning Center

Editor's Note: This is the second of a o part series on Generalized Com- iance Training. The first part was ported in the last issue of DI NEWS by m Wiehermann.

Generalized Compliance Training ocedures have been used for the past years. They have been dramatically ective in eliminating a broad range of rsistent inappropriate behaviors such violent aggression, tantrums, self- ury, running away, teeth-grinding, f-stimulation, self-induced vomiting, d refusal to eat most foods. The pro- am has been effectively implemented d maintained in the learner's homes; sidential facilities for handicapped per- ns; preschools; public schools; and ivate facilities. The effectiveness of the ocedures across a wide range of haviors and in a variety of settings, d the nature of the procedures, have ompted a number of questions. In this per I will address some of the most itical and frequently asked questions.

eoff Colvin

Who is Generalized Compliance raining designed for?

The procedures are designed for the ighly non-compliant learner and arners who have persistent inap- ropriate behaviors that are resistant to ood teaching and basic behavior anagement. We have found that as any as 9 out of 10 students labelled as on-compliant or out-of-control do *not* eed compliance training. These udents' behaviors can be improved rough better instruction or simply rough a more consistent management rogram.

How does Generalized Compliance Training relate to "good management" procedures?

Compliance training is best nderstood as part of a continuum in anagement. In this continuum:

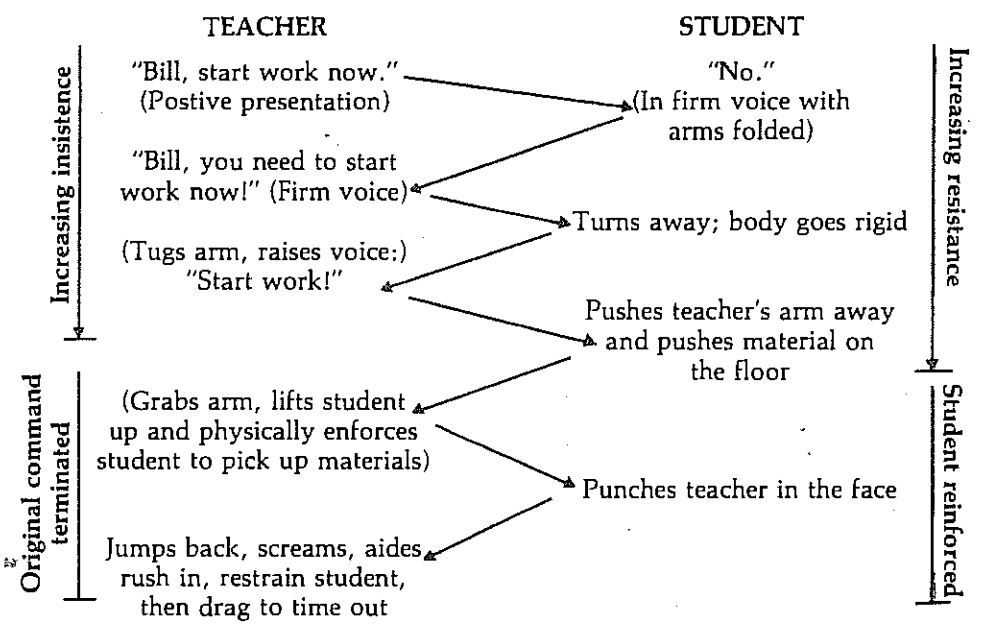
Step 1 is an instruction intervention.
Step 2 is a basic management intervention.
Step 3 is a Generalized Compliance Training intervention.

Instructional interventions use such procedures as selecting or designing instructional materials that lead to success, consistently showing that good performance is reinforced, using appropriate pacing, and following a schedule that maximizes instruction time and minimizes "wait" time.

Basic management interventions use additional techniques for students who still exhibit inappropriate behavior when good instructional procedures are being followed. These additional procedures include demonstrations that appropriate behavior has positive consequences and inappropriate behavior leads to negative consequences.

No students should be placed in *Generalized Compliance Training* unless both the instructional intervention and the management intervention have been appropriately implemented *and have failed.*

Figure 1: Establishing Non-Compliant Behavior



What is non-compliance?

Non-compliance is defined as an inappropriate interaction between an authority person (parent, teacher, aide), and a learner. The interaction is always initiated by the authority person (expressed as a command). For example, the teacher says, "Start work," and the learner says, "No," and sits with arms folded. The rule for determining whether behavior is non-compliant is to ask two questions:

Did I give a command?
Did the learner comply?

If a learner gets frustrated with painting a picture and throws the brush on the floor, then the behavior is not non-compliant (since no command was given). However, if the student was asked to start work and the student threw the brush down on the floor, then the behavior would be considered non-compliant.

Figure 2: Continuum of Parallels Between Teacher Behavior and Learner Behavior

NON-COMPLIANCE SET					COMPLIANCE SET
NEGATIVE					POSITIVE
Teacher's Voice					
Very Harsh Loud	Harsh	Flat	0	Pleasant	Enthusiastic
Teacher's Prompts					
Full Physical Assist	Tug Push		0	No Prompts[1]	
Teacher's Tasks					
Only "Stand up" and "Sit down"			0	A Range of Tasks Excluding "Stand up" and "Sit down"[2]	
Teacher's Reinforcement					
No Reinforcement			0	Social Reinforcement Always Provided	
LEARNER					
NON-COMPLIANCE			0		COMPLIANCE

Footnotes: [1] Minimum prompting may be used with a very low-functioning student.
[2] "Stand up" and "Sit down" may be used with a very low-functioning student.

This distinction is important; not *all* inappropriate behavior is labelled as non-compliant. The program is designed to extinguish non-compliance early. Other inappropriate behavior is not targeted until later — students (and trainers) become very confused if inappropriate behavior (un-commanded behavior) is targeted early.

What causes non-compliance?

Non-compliance behavior is a *learned behavior* and is usually quite predictable. It is best understood as a chain of behavior that takes place in a series of interactions between an authority person and a learner in which the learner is ultimately reinforced for non-compliance. Figure 1 presents a series of interactions between a teacher and a typical non-compliant learner. The teacher presents a command and the student non-complies by saying, "No," and refusing to move. As the teacher becomes more insistent, the student becomes more resistant until the student punches the teacher in the face. At this point the interaction *changes.* The teacher no longer presents the original command ("Start work"); rather, the student is physically removed. The student, however, has won by effectively removing the demand situation of starting work.

The learner is reinforced when the original demand changes. Consequently, the whole chain of non-compliant behavior has been strengthened. In subsequent interactions, the learner may only have to show small signals of resistance to be effective in having the command removed. Or more typically, the authority person will avoid direct commands and use subtle strategies to "seduce" the learner to perform a task.

Given that non-compliant behavior is reinforced by the removal of commands, it is clear what must be prepared to extinguish the non-compliance. The learner must be shown through unambiguous demonstrations that only compliance will be reinforced and that any *inappropriate behavior* exhibited by the learner to terminate the command will no longer be effective.

What are the essential components of the training procedures?

To teach generalized compliance, we control the tasks that we present to the learner, the consequences that follow the presentation of the tasks, and the way we present the task (particularly the tone of voice that we use and the physical prompts that we provide). The strategy that we use is designed so that the teacher's behavior parallels the degree of non-compliance or compliance exhibited by the learner. If the learner is highly compliant, the teacher's behavior is highly reinforcing. If the learner's behavior is highly non-compliant, the teacher's behavior is highly aversive. If the learner's behavior is moderately non-compliant, the teacher's presentation mode is moderately aversive.

Figure 2 shows the continuum for the range of possible learner behaviors and the corresponding parallels in teacher behaviors.

(Continued on page 14)

Generalized Compliance Training

(Continued from Page 13)

The bottom continuum shows the learner behavior, ranging from highly compliant to vigorously non-compliant. The teacher behaviors vary in terms of the specific tasks that are presented, the voice that the teacher uses when presenting tasks and consequences, the use (or non-use) of positive reinforcement, and the use of physical prompts (to insure that the learner produces the response that is called for by the tasks the teacher presents).

The teacher presents a unique set of tasks when the learner is non-compliant. These tasks are "Stand up" and 'Sit down." "Stand up" and "Sit down" are presented only when the learner has non-complied. These tasks are ideal for dealing with non-compliance because: (a) they can be presented rapidly and provide the learner with "massed practice"; (b) they can be physically prompted if the learner does not comply; and (c) they become relatively aversive if repeated trials on these tasks are presented. Therefore, this set of tasks, "Stand up" and "Sit down," becomes distinctive and strongly associated with non-compliance. The tasks that are presented when the learner is being compliant are highly variable, ranging from "Touch your nose" to "Go close the door and then bring your book back to your desk."

The voice that the teacher uses ranges from very pleasant (for compliance) to extremely harsh (yelling) for severe non-compliance. The general rule about the use of the voice is that the voice parallels the learner's compliance. If the learner is moderately non-compliant, the voice is flat and non-reinforcing. If the learner is vigorously resisting, the voice is extremely harsh. (The worse the behavior, the worse the voice.)

The use of reinforcement also parallels the learner's responses. If the learner is being non-compliant and is being presented with "Stand up" and "Sit down," no reinforcement is provided, even if the learner complies with the instruction. Likewise, the use of prompts parallels the learner's responses. If the learner is non-complying more urgently, more urgent prompting is provided. These prompts range from mildly aversive physical prompts — a tap or a mild tug on the learner's arm — to very vigorous physical prompts (a hard tug that brings a learner to a standing position, or a vigorous push that returns the learner to the chair,)

By using this range of teacher behaviors, we can clearly show the learner what causes the teacher to be both reinforcing and aversive. Once the learner has this information (which is very dramatically conveyed by the changes in the teacher's behavior), the learner is provided with a choice. The learner knows the consequences for non-compliance, and the consequences for compliance.

Is Generalized Compliance Training an application of the principles of Direct Instruction?

Yes. The Generalized Compliance Training procedures are designed to *teach the concept of compliance.* The principles used to teach this concept are no different than those used to teach any concept. For example, if we wanted to teach the concept "black" we would present the learner with a series of examples composed of a variety of objects that are black and some that are not black. We would firm the discrimination by presenting examples to demonstrate that the only difference between positive and negative examples is that the positive examples are black. Similarly, to teach the concept of compliance, we present the learner with a series of tasks and provide unambiguous information that compliance leads to positive consequences and non-compliance leads to negative consequences.

The rule for teaching a generalization for any skill is to juxtapose examples that differ greatly and treat each example in the same way. We teach the generalized concept of compliance by: (a) selecting tasks that show a wide variation in persons presenting the tasks, time of day, task duration, task form and content, setting, proximity to trainer, and immediacy of reinforcement; and (b) showing the learner that all of the tasks presented are the same, i.e., that compliance leads to positive consequences and non-compliance leads to negative consequences.

Do you have any data?

The last chapter of the text *Generalized Compliance Training* (Engelmann & Colvin, in press) presents a number of case studies to document the procedures. I have selected three studies for this article. The first two subjects were seriously non-compliant, while the third subject was relatively compliant, but had a very firm, highly inappropriate behavior of breaking and tearing objects when unsupervised.

Case Study #1.

Subject 1 is a 15-year-old male whose primary diagnosis is deaf-rubella syndrome and right congenital cataract. According to his parents, he was a happy child until he began his schooling. At his third school placement (a residential facility for deaf students), his behavior had reached a severe, persistent level. His repertoire included hitting his nose until it bled, scratching his arm until he drew blood, screaming, ripping his clothes, and vomiting. He was declared out of control and was placed in a TMR public school program in 1980.

In this setting, he exhibited his former "tantrums" (screaming, ripping his clothes, hitting his nose, scratching his arm, and vomiting). The average frequency of the tantrums was 4.5 per week with an average duration of one hour.

The compliance program was introduced on September 23, 1980. The time required to establish the non-compliance and compliance sets (Figure 3) was 1½ hours. The subsequent frequency and duration of the tantruming averaged one tantrum every 3 to 4 weeks with an average duration of 5 minutes for the remainder of the term. For the remainder of the school year, his tantrums occurred once every 6 weeks with an average duration of 2 minutes.

Case Study #2.

Subject 2 is a profoundly retarded, severely epileptic male. In the past three years, he has had three different school placements and is currently out of the school system. He has been excluded from the school system because of severely aggressive, non-compliant behavior. In the context of a demand situation, the subject would typically resist by biting, hitting, or pinching the teacher. He frequently would throw himself on the floor and attack anyone who tried to force him to stand or resume the previous position.

At the close of the 1980-81 school year, the classroom teacher (senior high school TMR class) presented data showing the severity of the subject's non-compliance over the last few weeks of the year. This teacher and teacher's aide had attempted to use a form of compliance training in which the subject was required to stand-up and sit-down on command. The data (baseline in Figure 4) represent the number of minutes the subject resisted and fought the classroom staff before he would stand up and sit down eight consecutive times. The decision was made that the subject could not function in a public school setting.

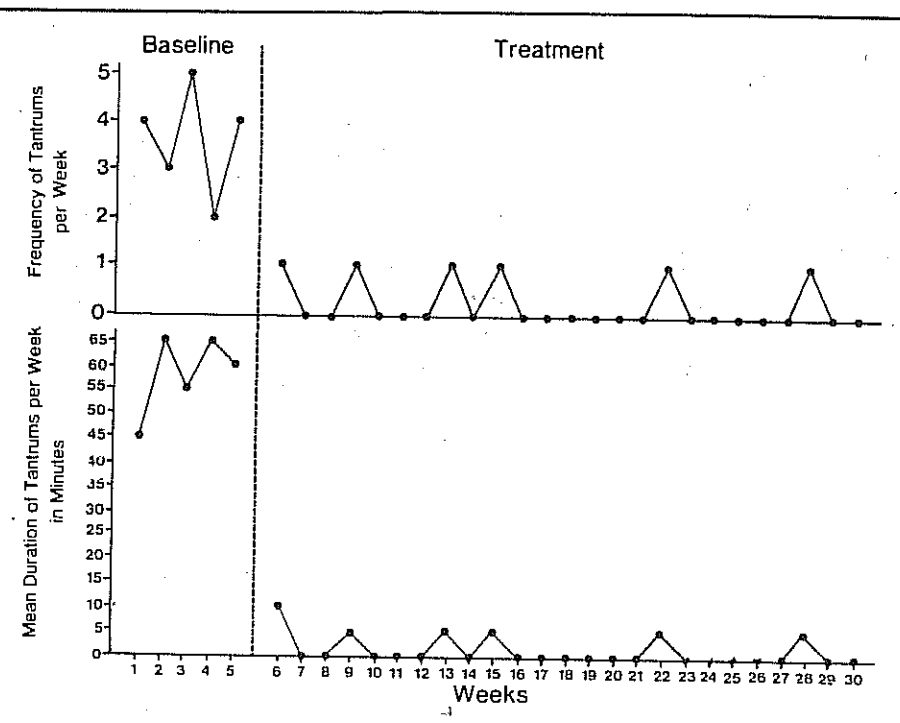
The subject was eventually placed in our charge for extensive compliance training. This training commenced 4 months after the baseline data were presented at the meeting. The training data, beginning 8/24/81, show a dramatic reduction in non-compliance. The problem in the previous program was that the subject was punished for non-compliance, but not reinforced for compliance in any comparable way. That is, the non-compliance set was in operation, but the compliance set was never effectively established. Once he learned the basic relationship that compliance is reinforced, the incidence of non-compliance decreased very significantly, as indicated by Figure 4.

Case Study #3.

This subject is an 11-year-old male who has been diagnosed as hyperactive, autistic, psychotic, and schizophrenic. The primary problem was breaking and tearing objects. He had no toys because he consistently broke them; he had not worn pajamas to bed for five years because he would tear them; he had no furniture or pictures in his bedroom, as he would break them; he had torn pieces off the fence, ripped out electrical wiring under his home, torn out bathroom fittings, and torn out the back of the TV. The breaking and tearing behavior occurred when he was unsupervised. The parents had the practice of tying him to his bed by means of a belt and rope following bouts of breaking and tearing.

The data in Figure 5 show the number of torn/broken items at home and at school. The mean number of items broken or torn per day was 5.1 (2.8 at home and 2.3 at school). This number reduced to virtually zero at each site after compliance training was introduced. The data also show that the reduction in breaking and tearing did not occur at school until the program had been introduced there (i.e., generalization did not occur at school as a function of the program being implemented effectively at the home by the parents).

Figure 3. Case Study #1



Has the program ever failed?

No. Every learner we have worked with (or supervised) has shown *dramatic improvement.* In a few cases, there have been short-term regressions, all of which could be traced to clear departures from the procedures specified in the program. Some of the departures included:

1. Failure to conduct the pre-correction at the scheduled times (the learner had been doing well so the procedure was dropped).
2. Failure to expand the compliance set, i.e., there is too big a gap between tasks presented in pre-correction and tasks required in particular activities, such as lunch.
3. Failure to immediately consequate major non-compliances.
4. Demurring on the criterion for compliance.
5. Failure to distinguish between non-compliance and the learner's inability to perform the task (or follow directions).
6. Failure to obtain cooperation from the home.

How are the procedures modified for the higher-performing student?

The typical profile of the higher performer who is a candidate for Generalized Compliance Training shows that the learner:

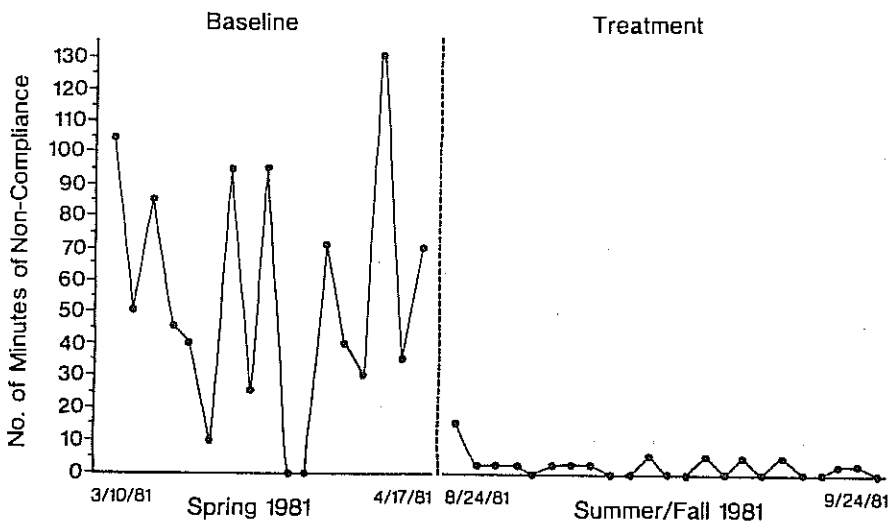
1. Is capable of performing reasonably well in most situations;

2. Produces highly inappropriate behavior at a relatively low rate; and
3. Is highly non-compliant in many situations that place direct demands on the learner.

The learner may steal, may have terrie aggressive outbursts, or may go rough "cycles" of being extremely sruptive. In all cases, however, the havior tends to occur at a relatively w frequency. While we can work with lower performer for only a few inutes and discover the inappropriate havior, the higher performer may nceal the disruptive behavior for some ne, leaving us initially with the imession that, "This kid is all right." Onwhen the right buttons are pressed do observe the highly non-compliant havior or the disruptive behavior. If interact with the learner in a tradinal situation, the rate of these haviors may be quite infrequent cause the format of instruction is

1. Drop the initial assessment and the task assessment. Assume that the learner is capable of performing on a wide variety of tasks, including sophisticated academic work.
2. Begin instruction by requiring the learner to read a *statement of commitment* that refers very directly to the learner's problems and what the learner is going to work on.
3. Require the learner to read this statement of commitment on a regular, daily basis (at least two times a day and preferably three times a day).
4. Consequate any non-compliance (any refusal to perform or obvious resistance) in the same manner that is used for the lower performers.
5. Relate the learner's performance to the statement of commitment.
6. Use academic tasks as the primary source of compliance-set tasks; however, particularly during initial instruction, introduce a variety of other tasks that can be completed quickly.

Figure 4. Case Study #2



signed so that we do not "press the ht buttons." If we confront the learner y presenting direct tasks that require mpliance), we will probably be able to serve the behavior much more quick- because these techniques provoke the havior.

The typical mistake that teachers ake in dealing with these higher permers is to try to treat the disruptive havior as a rational product. The rner typically has no more control er this behavior than the lower permer has. Although this learner may highly articulate and apparently ranal in most situations, rationality apes the learner in situations that ve habitually been associated with n-compliance. In these situations, the rner does not respond like a rational rson, but exactly in the same out-ofntrol way that the lower performer exits.

A final point about the higher permer. They are usually referred for atment not because they are nonmpliant, but because they are "antiial," or because they exhibit highly ppropriate behaviors. In fact, wever, their basic problem is that y are non-compliant — a fact that is y easily demonstrated.

f the learner is quite young and can't read well, we do not modify the proam. If the learner is older and is able of reading well, we introduce se program modifications:

7. As the learner improves, change the statement of commitment so that it reflects the improved performance of the learner.

The statement of commitment is the central component of the modified program. The specific features of this statement are:

1. It should refer to the learner's inappropriate behaviors.
2. should refer to the appropriate haviors as something the student is learning to master.
3. It should be written in the first person so that when the learner reads it aloud, a commitment is being made.
4. It is not a contract. The terms are imposed.
5. It has to be read in an appropriate way.

Below is an illustration of a statement of commitment, designed for a 13-year-old boy who had not been able to stay in school for a complete year since grade 1. Although the boy is very intelligent and is not always disruptive, he produced incredibly violent outbursts, during which he was abusive, aggressive, and generally out-of-control.

Some of the points in the statement of commitment are based on the learner's behavior. For instance, he indicated that he hated to read fiction because he was interested only in facts. Also, he often changed the subject during a conversation to talk about violence. For instance, if the topic was race driving, he might observe, "Yeah, the part I like the best is when they crack up. You see a guy go flying out of his car and splat — bashed to a pulp, bleeding all over the place..." etc.

Statement of Commitment

1. I am learning to control my impulses. I am teaching myself to like the work that I must do. I recognize that I will be spending most of my adult life working and that working can be challenging. So, I am learning to like work.
2. I am learning to do what my teachers tell me to do. I am learning to be a good actor. I don't always agree with my teachers. I don't feel that they are always right. But I understand that they are my boss. I understand that I will have a boss for most of my life. I understand that I have to learn to do what the bosses say.
3. I am learning to act in a way that will make people like me. I try to talk about things that interest them. I try to say things that will make them feel good. I try to like them.
4. I am learning how to be consistent in the way I think and act. I realize that when I talk about violence I am talking about fiction. I do not like fiction. I like facts. So I am teaching myself not to talk about violence, fictions, and not to think about pretend fantasies.
5. Here are some of the other rules that I'm learning to follow:
   - I do not talk about violence.
   - I look at people when I talk to them.
   - I don't touch my face or squint when I talk to people.
   - I work for long periods of time without becoming disruptive.
   - I try to stay on the topic that is being discussed. If the topic is math, I talk about math. If the topic is things that I like to do, I talk about things that I like to do.

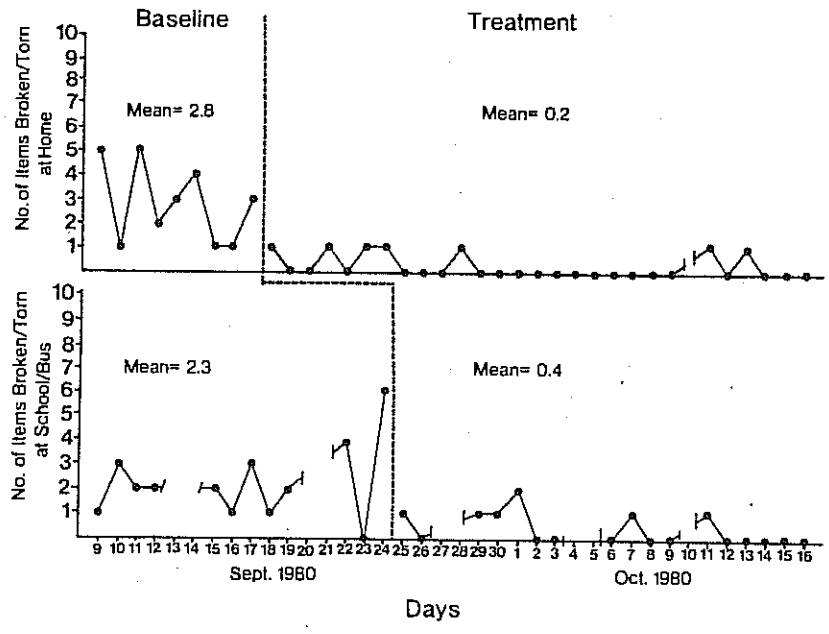
Who should implement the program?

The procedures are very precise and must be closely followed if they are to work. We therefore recommend that personnel trained in these procedures implement the program. A skilled teacher who has sound management skills could implement the program if a trained person is available for consultation. A simple rule is that is the program is implemented and the learner does not show substantial improvement the first day, the program should be terminated immediately, for something is seriously wrong.

What administrative steps should be taken to implement the program?

1. Parental or guardian consent based on complete understanding of what tasks and contingencies are scheduled for the learner must be obtained.
2. Complete disclosure and consent from the school district for implementation and maintenance of the program, especially subsequent placement of the student, must be obtained.
3. Independent observation by a school official of the learner's non-compliance assessment and documentation that "good teaching" techniques have been used and have failed with the learner, must be provided.
4. Continued monitoring of the program must be conducted by a school official (or agency officer), with the understanding that the program is to be discontinued if it does not change the learner's behavior relatively quickly.
5. The building principal and staff of program must be informed (i.e., have a general perspective).
6. Commitment from teacher and parents to participate in the program and to make appropriate setting changes must be obtained.

Figure 5. Case Study #3



What are the teachers' reactions to the Program?

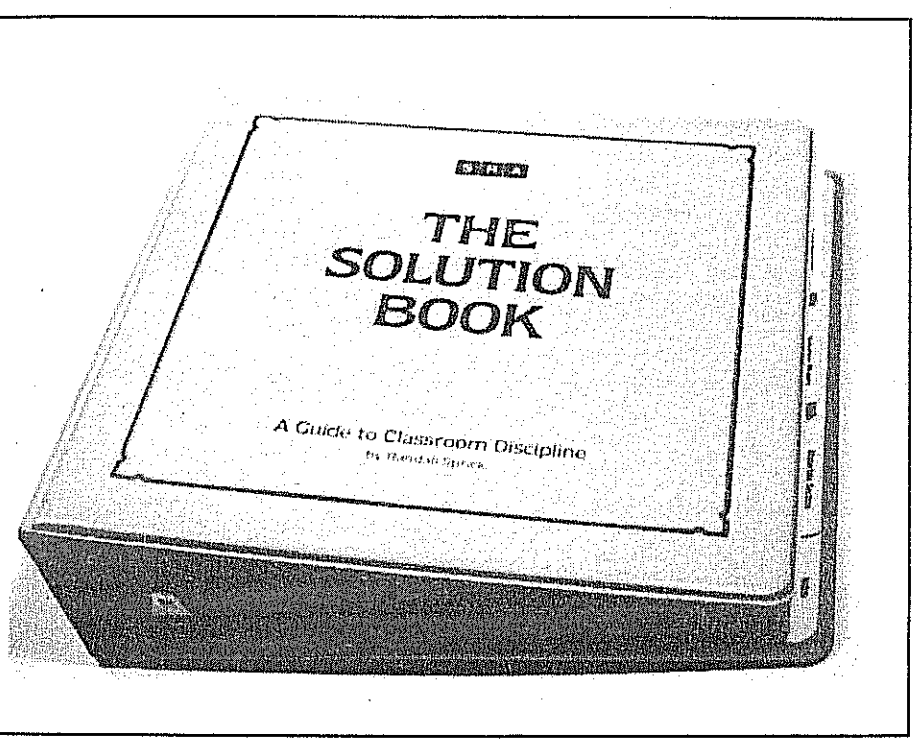
There are generally three reactions from the teachers during the initial phases of the program:

1. They are amazed at how quickly the learner's behavior comes under control.
2. They realize that they have consistently overestimated the learner's skill level. Previously, there was no basis to reliably analyze the learner's inappropriate

(Continued on page 20)

BOOK REVIEWS

Sprick, Randy. The Solution Book: A Guide to Classroom Discipline. Chicago: Science Research Associates, 1981, $34.95.



The Solution Book is an unusually practical, three-part reference book on classroom management for elementary teachers. The first section of *The Solution Book* consists of nine booklets on topics important to the teacher who wants to set up and maintain a positive, organized learning environment. The emphasis throughout these booklets is on the prevention of misbehavior. The second section comprises one hundred "solution sheets." Each solution sheet outlines specific, easy-to-follow procedures for dealing with a behavior problem found commonly in elementary classrooms. The last section contains a variety of reproducible materials that teachers will find useful for organizing themselves and managing students.

I implemented parts of *The Solution Book* in my second grade classroom of lower-performing students in the 1980-81 school year and have used many more of its suggestions in this current school year. The remainder of this review, therefore, is based not upon what I think *The Solution Book* could do for teachers, but upon what it has done for me and other teachers I know who have used it.

All nine topic booklets in Section I of *The Solution Book* contain valuable information and procedures for establishing a well-organized, positive classroom environment. The first booklet, "Getting Started at the Beginning of the Year" (Booklet A), presents a wealth of ideas for preventing a large variety of misbehavior from ever getting started in the first place. The next three booklets (B-D), on effective reinforcement, punishment, and ignoring, cover the basic strategies for increasing and maintaining desirable student behavior, and for decreasing misbehaviors. A unique feature of these booklets is that they emphasize *teaching* students appropriate behaviors, as opposed to assuming that students know how to behave, but simply aren't motivated to do so. I have found particularly that my strategy of ignoring student misbehavior is far more effective when the students themselves have been taught (not just told) to ignore such behaviors themselves.

The fifth booklet (E) is called, "Increasing Positive Interactions and Improving the Student's Self-Concept." This booklet features an objective, easily followed procedure by which a teacher can analyze and improve the quality of interactions between the teacher and each student. More specifically, the procedure shows the teacher the ratio of positive to negative interactions with students, the distribution of positive and negative interactions, whether or not the positive interactions are varied and contingent upon student performance, and how to improve weak areas. The conscientious use of this booklet alone is certain to significantly improve the atmosphere of any classroom. In addition, many of the other ideas presented throughout *The Solution Book* can be implemented more quickly and effectively if the teacher has first established the kind of positive classroom atmosphere that this booklet advocates and shows us how to attain.

Booklet H, "Establishing a Discipline Plan," provides teachers with a systematic means of organizing and implementing the basic techniques discussed in booklets A-E. An additional, highly useful feature of this booklet is the section on developing a simplified version of the teacher's discipline plan for use by substitute teachers.

Booklets F and G cover more advanced management procedures in situations including small-group instruction, large-group instruction, independent seatwork, learning centers, and peer tutoring. In a self-contained classroom without an aid, I teach three DISTAR Reading Groups, two DISTAR Arithmetic groups, a DISTAR Language group, Level A of Spelling Mastery, and the E-B Press Cursive Writing program. I was not able to manage this much of an instructional load until I implemented the techniques for *teaching* students to work independently, found in Booklet F of the *Solution Book*.

The ninth booklet, "Survival Skills for Teachers," is an invaluable resource forideas on both stress and time management for teachers. The teacher who utilizes the techniques in this booklet will have taken a big step toward the prevention of "teacher burnout."

Each of the one hundred "solution sheets" in Section II of *The Solution Book* covers a specific problem encountered frequently in classrooms and around the school, and provides brief, specific, time-tested solutions to each problem. A range of solutions is presented for each problem, insuring that the teacher can select one that is appropriate to students' grade level and any other special circumstances. Although the topics covered are too numerous to list completely, a sampling follows:

> Careless Errors on Written Work, Cheating, Lost Paper and Pencils, Talking Bank to the Teacher, Tattling, Name Calling, Violent Behavior, The Apathetic Student, Lack of Motivation on Tests, Crying, Lying, Tardiness, Swearing, Cafeteria Problems.

Obviously, the successful solution to any one of these problems can be of great value to the teacher and students alike. The nine booklets in Section I of *The Solution Book* help the teacher establish a classroom environment where such problems rarely arise, and the solution sheets guide the teacher toward solving such problems, should they arise anyway.

The Materials Section of *The Solution Book* consists primarily of aids designed to help the teacher motivate students and to recognize student achievement both socially and academically. The remaining materials are for the teacher, to be used in conjunction with techniques presented in Section I for goal setting, self-evaluation, and record keeping. All the materials in Section III are reproducible without the permission of the publisher.

In the introduction to *The Solution Book*, Randy Sprick quotes Emerson as saying, "The secret of education lies in respecting the pupil." From my experience with *The Solution Book*, it is apparent that Dr. Sprick has a high regard not only for pupils, but for those who are charged with teaching them as well.

by Susan Dixon

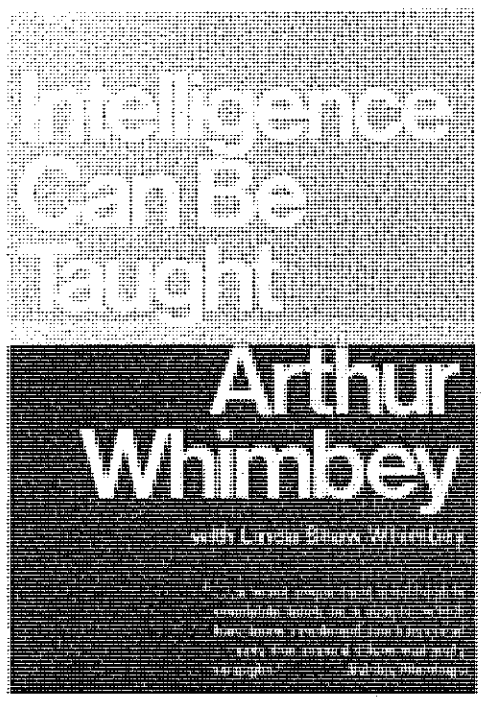
Whimbey, Arthur, and Whimbey, Linda Shaw. Intelligence Can Be Taught. New York: E.P. Dutton, 1980. (paperback, $5.95)

Intelligence Can Be Taught is crammed with information that is supportive of a Direct Instruction (DI) approach. The title reveals that Whimbey agrees we can teach school-age children better and make them smarter. To do this, Whimbey suggests greater use of what he calls cognitive therapy, which has a lot in common with DI. In fact, Whimbey constantly refers to the University of Illinois' former Bereiter-Engelmann preschool (the birthplace of DI) as a cognitive therapy approach, replete with 8 pages of description and 10 pages of a sample lesson (taken from Bereiter and Engelmann's *Teaching Disadvantaged Children in the Preschool*).

Whimbey's suggested instructional techniques correspond most closely to Engelmann and Carnine's *cognitive routines* (Engelmann and Carnine, *Theory of Instruction*, in press). For column multiplication problems, for instance, a DI teacher might ask: read the problem ("count by 17, 53 times, equals how many?"); what do you do first ("count by 7, 3 times"); where do you write 2 tens ("above the tens place"); etc. When skills like this are initially made overt, the teacher can effectively correct a student mistake as it happens, rather than guessing where the error occurred after a student has attempted the entire problem. And obviously, the immediate feedback benefits the student, too.

Engelmann's cognitive routines are more advanced technically than those suggested by Whimbey. Engelmann stresses strategies that work for a variety of problems. Also, he carefully fades teacher guidance so the student can function independently. Whimbey's method is less systematic, less deductive.

(Continued on p. 17)



Submission Guidelines for Articles to be Published in the DI News

Article Type	Article Description	Submission Guidelines
Special Features:	Full-length descriptions about people, places and things.	5-10 pages, double-spaced, typewritten text (including tables, figures, references, and pictures.
1. Topical features:	Articles about various topics related to DI.	
2. Personal profiles:	Articles about people working on DI.	
3. Project profiles:	Articles about DI projects (implementations) in various locations.	
Research Studies	Articles about research in DI.	5-10 pages, double-spaced, typewritten text (including tables, figures, references, and pictures).
Surveys	Surveys of the DI News readership on various topics and issues related to DI, with reports of the survey results printed in the issue following that in which the survey questions appeared.	Questionnaires: 1 page, double-spaced typewritten text (including statement of purpose and 1-10 questions. Reports: 1-5 pages, double-spaced, typewritten.
News Items	Informative pieces which relate DI-relevant news to the readership.	1-3 pages, double-spaced, typewritten text.
Columns:		
1. Dear Ziggy	Question-and-answer advice to the "effectiveness-lorn."	Submit 1 page letter to "Dear Ziggy" describing the problem situation as clearly and concisely as possible.
2. Teacher-to-Teacher	Topical advice and information on DI issues written *by* teachers *for* teachers.	Submit topic ideas to column editor.
3. Administrator's Briefing	Topical advice and information on DI issues written *by* administrators *for* administrators.	Submit topic ideas to column editor.
Regular Features:		
1. Letters-to-the-Editor	Comment, inquiry from the readers.	Submit 1 page letters to the editors stating your point or your question as clearly and concisely as possible.
2. Dissent	Respectful disagreement with the principles or procedures of DI, expressed to communicate alternate views of the field, to encourage readers to think issues through for themselves, and to maintain a sense of openness and fairness about the DI News.	Submit 2-4 pages, double-spaced, typewritten text (including figures, tables and references); you may also submit *brief* dissents (1-2 pages) as letters-to-the-editor.
3. Employment Exchange	Information about DI related jobs available, jobs wanted, or exchange possibilities at all levels.	Submit information (including nature of the position, location, contact information, and deadline) to the editors.
4. New Programs	Descriptions of newly developed DI instructional programs.	Submit 2-4 pages, double-spaced, typewritten text (including tables, figures, references and/or pictures).
5. Research Summaries	Short articles or abstracts summarizing recent research related to DI.	Submit 2-6 pages double-spaced, typewritten text (including tables, figures, and references).
6. Book Reviews	Reviews of recently published books related to direct instruction or effective schooling	Submit titles of books for possible review to the editors, indicating whether or not you would like to do the review.
7. Recent Publications	Brief notes announcing the recent publication of books, chapters, or articles related to DI.	Submit 1 page (or less) note to the editors, giving the complete reference for the publication.
8. Conference Notes	Announcements about recent or forthcoming professional meetings, workshops, conferences, and conventions related to DI.	Submit information to the editors, giving complete information about dates and locations of the conferences and aspects related to DI.
9. Membership Report	Brief descriptions of membership composition, characteristics, trends, and growth in ADI.	Submit suggestions for types of information you feel would be helpful or interesting for us to obtain from a report about our membership.
10. Advertisements	Ads for various DI programs, books, or other materials; conferences, workshops or other training; and consultation, evaluation, or other services.	Submit camera-ready copy to the editors in full, half, or quarter page sizes. Charge: $200 per page, $125 per half page, $75 per quarter page.

Intelligence (Continued)

But give Whimbey credit. Making thought overt is a powerful tool. Other authors famous in their own right (Rudolf Flesch, Ray Hyman) suggest that such overtization augments the development of meritable insights in writing and science. Whimbey provides examples of how his introspective methods have been successfully applied to early childhood education, preparation for college boards, training police, and many other areas — although I don't recognize common techniques across all the programs he mentions.

This book is worthwhile to read just as a sound explication of the environmentalist position on intelligence, and as a guide to the kinds of reading comprehension skills we must learn to teach better. (Whimbey thinks that advanced reading comprehension is a primary expression of intelligence.)

Whimbey is a bit naive about the amount of good teaching and hard work required to make kids smarter. He seems to think that a course or two in "learning-to-learn" and "how to solve problems" will produce wonders. (I'm reminded of Rudolf Flesch's claim that phonics-first beginning reading programs will solve practically all literacy problems. I'm generally pro phonics-first... yet some phonics-first programs, such as Distar, are better-designed than others... and even good programs can be sabotaged by weak teachers. It is not quite as easy as Flesch thinks.)

Whimbey similarly is out of touch. Children become intelligent by learning how to solve arithmetic story problems, how to spot poorly suported suppositions, how to compute percentage problems accurately, how to identify predicates in sentences. We can boost intelligence and critical thinking by teaching individual subject areas as well. Whimbey purports that general critical thinking skills be taught first, hoping they will transfer to specific areas. His efforts might match the futility of some Special Educators' attempts to improve handicapped students' skills in vague, global areas such as "visual perception" and "auditory sequencing." Whimbey's preoccupation with teaching general thinking skills is apparent when he implicitly castigates the Bereiter-Engelmann preschool for covering specific content material in arithmetic and reading. Whimbey fails to see similarities in design and purpose among the DI Reading, Arithmetic, and Language programs; and he fails to recognize that it is necessary to teach sets of related specific skills to lay the basis for more generalized principles.

Yet this book is brimming with tantalizing notions. There's mention of: a well-designed science program that can effectively teach a range of students, from the young and gifted to the older and disadvantaged; research exposing the lies of speed reading companies; similarities between physical and mental skills; how, when first learning a skill, learners must carefully attend to cues that later go unnoticed. *Intelligence Can Be Taught* engages more that it enrages. It is well worth the time it takes to peruse the 200 pages.

by W.A.T. White

Ms. Killion 'n' Kid's Say Thanks For Programs That Work

(Story on page 19)

March 31, 1981

Dear Dr. Carnine,

I am a student at Wesley Elementary. I know you made Distar Math. I liked it very much. I'm in 5th grade and I did Kit II in Distar Math. I was good and I liked it. It's fun doing all these books. I hope the next book you make is just as good as Kit II.

Your friend,
Clyde Satterfield

March 31, 1981

Dear Dr. Carnine,

My name is Debbie Harris. I like math and we are finished with Math Kits I, II, and III. We were wondering if you have any Corrective Math? We would like you to come see us do a lesson in our Corrective Reading books, if you can.

Yours truly,
Debbie Harris

March 31, 1981

Dear Dr. Carnine,

We have had Distar Math. It was great! Now I want to see Corrective Math. I'll bet it is even better! When I was in Distar Math I had Kit II. If I had Corrective Math, I would do them all! It might be hard at first but I will get the hang of it! Could you send me some information?

Yours truly,
Cynthia Thomas

March 31, 1981

Dear Dr. Carnine,

My name is Tonya Jones and I attend Mable B. Wesley Elementary School. I've completed Math Kit II. I was just wondering if you had a math kit or some thing because our textbooks are not fun. Please reply.

Yours truly,
Tonya Jones

March 31, 1981

Dear Dr. Carnine,

I know you helped Dr. Engelmann with the Math Kit. Ya'll did a good job. The thing I'll say is, Synonites. I can dig that. When I was in the book, I thought it was hard, but when I studied it wasn't so hard. I liked being in it because I thought I would get better in math.

Yours truly,
Robert Williams

March 31, 1981

Dear Dr. Carnine,

We have completed your Math Kit and we loved it very much, but we loved the take homes the best! (Ha) We went crazy to see our first Distar take home. (Ha) When you publish another Kit would you let us know?

Your friend,
James Holmes

March 31, 1981

Dear Dr. Carnine,

My name is Petrina Lewis, and I'm new; however, I did Distar Math Kit II. What's coming out next? When the visitors come, they think it is wonderful. And I'm only nine years old. I don't have much to say, but I enjoyed the Math Kit II!

Your friend,
Petrina Lewis

March 24, 1981

Dear Dr. Carnine,

I really like your Distar Arithmetic Kit III and I think it is fascinating. I wonder if you have made any more books because I am going to be in the 5th. grade in a couple of months.

And if I compared your book with a regular book, you'd probably win! So, if you have any more books please write me back and tell me about them.

Your friend,
Daniel Burkett

March 24, 1981

Dear Dr. Carnine,

I'm glad you helped Dr. Engelmann do the kits. We completed Distar Kit II in the 3rd. grade. I am very happy that I passed to the 4th grade and I hope I pass to the 5th. Do you have any materials we could use in the fifth grade?

Your friend,
Kenya Powell

ntinued from page 5, Basal Reading Study)

See How You Compare. Answer the Questions for Yourself.

sted enough in instruction to return questionnaire. Table 6 gives part of questionnaire, with the means for h item marked with a dot, and the ge of responses indicated with a bar. ou want to compare yourself to the rage traditional teacher in grades 4 ough 6, answer the questions and npare your responses with the dots.

A Final Word

This study made me feel very sad, not so much because the results surprised me, but because the tapes of the teachers revealed both concern and a lot of raw talent. Most of the teachers who volunteered for this study were clearly intelligent people who were trying very hard to do an important job. Their verbal responses and the questionnaire responses suggest that these teachers are quite aware of the more obvious learning problems that their students experience. They know, for example, that students tend to confuse the title or the first sentence with the main idea. They simply don't know how to avoid this problem, how to teach in a way that will help solve it; and how to provide explanations and examples that correct the problem. As it is, their talent, their potential to be super-teachers, is unfulfilled, in the same way that the potential of their students is.

Table 6

Questionnaire and Responses

ction 1

What reading program do you use? (If you use more than one, list the one you use most and answer the questions based on that program.) .....

What grade do you teach? .....

How many students do you have for reading? .....

How many years teaching experience do you have? .....

How would you describe your reading class? ..... low, avg, high

How would you describe the teaching instruction in your class? ..... whole, small group, individual

How many hours per week do the students spend in reading instruction?

How many hours per week do you spend actually teaching reading? ....

ction II

In oral teacher directed activities how closely do you follow the procedures that are specified in the teacher's guide? .....

If a good student makes a mistake on an orally-presented reading activity, what percentage of the time will at least one other student repeat the same mistake? .....

If a low student makes a mistake, what percentage of the time will at least one other student repeat the same mistake? .....

During an average lesson, what percentage of the student responses will be incorrect? .....

As a generally acceptable guide, what percentage of the students *should* be able to master any particular skill in this reading program? ..

What percentage of the mistakes made during oral presentations do you correct? .....

Indicate the percentage of time you use each of these corrections:

- Call on another student .....
- Tell the student the answer is wrong and repeat the question .....
- Tell the answer and then repeat the question .....
- Tell the answer, repeat the question, then repeat the question to the whole group .....
- Ignore the mistake and permit the students to discover a natural consequence of their error .....

Most reading programs make general comments about praising and reinforcing students for correct responses. What percentage of the student responses do you reinforce in some way? .....

What percentage of the time do you call on individual students to answer questions (rather than the whole group or class)? .....

In what percentage of the lessons do worksheet exercises for a topic appear the same day as teacher activities for that topic? .....

There are places in the program where it says to help or guide the students. In what situations is this appropriate? (Check all that apply) .

- Students have just learned the skill — 79%
- Students rarely use the skill and tend to forget it — 55%
- Students need the help or they will never master the skill — 59%
- Students have never really been taught the skill — 54%
- Students must answer an open-ended question — 35%

How would you describe the teacher directions of your program?

- General statements of what to do — 19%
- Specific steps you are to follow — 19%
- Specific steps you are to follow and some direction on what to say — 47%
- Detailed scripts of exactly what to say and do — 15%

Table 6 (cont.)

13. What kind of mastery testing is specified in the program? .....
    - Repeated items from student workbook — 5%
    - Items similar to those in student workbook — 58%
    - Items not similar to those in student workbook — 5%
    - Standardized tests specified — 16%
    - No mastery testing specified — 9%
14. What kind of follow-up activities are specified for students who do poorly on the mastery tests? .....
    - No follow-up exercises specified — 23%
    - Lessons to be repeated — 13%
    - Supplemental exercises, the same for any student below mastery level — 34%
    - Supplemental exercises, different for different mastery test results — 21%
    - Lessons to be repeated with specified criterion for those lessons — 4%

Section III

1. About how many lessons in the level you teach focus on this skill? ....
2. About how many minutes long are lessons or parts of lessons that focus on the main idea? .....
3. What percentage of the students knew main idea before the lessons? ..
4. What percentage of the students master main idea? .....
5. Here are some typical types of main idea exercises. Put a P by those that are in the program you use. Put a U by those that you think are particularly useful in teaching main idea. You may mark both P and U for any items .....
    - Students underline main idea sentence when it is topic sentence.
    - Students decide if first or last sentence tells the main idea.
    - Students indicate which of three sentences tell the main idea.
    - Students decide if paragraph contains a main idea sentence and, if so, they underline it.
    - Students write their own main idea sentence.
    - Teacher goes through paragraph one sentence at a time and asks if that sentence tells the main idea.
    - Teacher asks students to tell the main idea and then has students try to find a main idea sentence in the paragraph.
6. Indicate the percent of students that have these problems:
    - confuse main idea with title — 30%
    - think that main idea is first sentence — 42%
    - think main idea must be a sentence that comes from the text — 46%
    - cannot pick out the correct main idea sentence if it does not contain any phrase from the passage — 42%
    - cannot generate main idea sentence — 36%
    - other — 24%
7. How closly do you follow the specified directions in your program for teaching main idea? .....
8. Indicate how you generally change your program's specific activities for teaching main idea. (Check all that apply.)
    - I skip the following percentage of specified activities: .....
    - I add the following percentage of activities: .....
    - I change the following percentage of specified activities: .....
9. If you change specified activities, how do you change them? (Check all that apply) .....
    - Provide more directed teaching — 71%
    - Provide more review — 55%
    - Do more testing — 7%
    - Give more examples — 79%
    - Give harder examples — 25%
    - Give easier examples — 32%
    - Spend more time on teaching the main idea — 59%

illion 'n' Kids Say Thanks

Math phobia? Not at Wesley Elemen-y School in Houston, Texas! Here, rraine Killion and several of her col-gues have been using Direct Instruc-n since 1975 under the leadership of addeus Lott, Jr., the school principal. Wesley is located in Acres Homes, a v-income, semi-rural community on uston's north side. In 1975, test scores re well below national averages and ny students could not read, even after ars of reading instruction. That fall, ngs began to change when Lott was med principal. He was instrumental in aning up the school, restoring cipline, and introducing his staff to star®. Now, there are *no* non-readers d test scores are well *above* the na-nal average. Lott is a no-nonsense ad-nstrator; his philosophy is that it is uch too expensive to ask taxpayers to y for education they're not getting." e strength of Direct Instruction, Lott s, is that "it teaches to mastery each y. Distar shows us that every kid can learn, if he's taught."

These letters show that Wesley students can not only read, they can write as well — in beautiful penmanship and with excellent clarity and self-expression. And, judging from what they say, they are not too bad on math, either. Their only problem, it seems, is that they are running out of Direct Instruction programs.

Many people deserve credit in a success story such as this — Lott for introducing and administering the program, the developers for putting the program together, the kids for putting forth their best effort — but perhaps none are more deserving than the teachers: Lorraine Killion and the other teachers these students had before her. Not only did they give the students their academic skills, they also helped them learn to love learning and the knowledge it brings. They have truly taught their children well!

Killion's Kids

Compliance Training (Continued from Page 15)

responses. The inappropriate responses could have arisen from: (a) non-compliance; (b) failure to understand the directions; or (c) the learner may have been unable to produce the response called for. It is only after compliance has been established that we can reliably assess the learner's skill level.

3. They are sometimes overwhelmed by the intensity (fast pacing, high structure) and precision of instruction required to teach the newly compliant learner.

What are the alternatives to compliance training?

When working with highly non-compliant learners, we can expect the initial training to be stressful. These learners use every non-compliant behavior in their repertoire to terminate the demand situation. However, once they learn that compliance is the only way to terminate the negative context and that compliance leads to reinforcement, the improvement in behavior and skill are very dramatic. Now, some people question the "humanness" of the initial training where the learner is quite agitated and the trainer is aversive. Let us consider the alternatives:

1. We may continue with an abortive program that serves no one (neither the learner, the teacher, nor the parents) and is often quite punitive.

2. The school district (or agency) has to provide an aide, one-on-one, to literally shadow the learner all day.

3. Medication is nearly always prescribed which never solves the problem. The medication merely serves to dull the learner (which gives the teacher and parents some respite). However, once the medication wears off, the learner's behavior is generally worse. Stronger dosages are then prescribed and the fruitless cycle continues.

4. Finally, the learner may be placed in an institution (where the probability of effective treatment is close to zero).

My own position is that the cost of extinguishing the non-compliant behavior is minimal compared with the significant gains to be made by the learner.

Concluding remarks

This two-part series was designed to present an overview of the Generalized Compliance Training procedures and to respond to commonly raised questions and concerns. The specific details of the training procedures are considered beyond the scope of these two articles. The training details are presented in a text that Zig Engelmann and I are writing, which should be available early next year. If a reader requires additional information about the program, availability of trainers for consultation, or possibilities for receiving training, please feel free to contact Zig, Kim, or myself at:

Engelmann-Becker Corporation
PO Box 10459
Eugene OR 97440

Eighth Annual DI Conference (Continued from Page 1)

At the Annual Direct Instruction Conference, participants attend the sessions they sign up for and they don't jump sessions. They understand that they will work hard. And before very long, they discover that their hard work is strongly reinforced by learning as much during one week as they would probably learn during an entire college year that offered the same courses. The faces of newcomers on the first day of Conference is interesting. Their eyes, their expressions, and their reluctance to laugh suggest that they are very serious and somewhat intimidated. By the end of the week, their faces and behaviors have changed a lot. They are relaxed, happy, and eager to go into the classroom. I realize that this description sounds a little romantic, but it's accurate. And I'm sure that the 1982 Conference will be the highlight of this year for me and the other trainers.

We are interested in serving teachers and kids — that's our life. Our life becomes very frustrating when we don't feel that we are doing all we can, when conditions don't permit us to do the job the right way. But when the conditions are right — when you feel that you are really able to train or convey the information — everything seems worthwhile. And after the Conference is over, both the trainers and the participants leave with a nice, warm feeling — the kind you get when your home basketball team wins a tournament. It's great.

So if you want to spend a week as productively as you could possibly spend one (which means that you'll get more out of it than you could out of virtually any other week's experience), come to the Summer Conference. We can't promise perfect weather, but we can promise accomodations that are a far cry from those in 1975. This year, the Conference will be held during the week of August 16-20 at the new Eugene Hilton Hotel. The guest rooms are very pleasant and the Conference facilities are excellent.

Although there will be physical differences between the Eighth Annual Conference and that first one in 1975, many things are going to be the same. We will have some of the best trainers in the world, and some of them will be the same ones who perspired freely during the first Conference — Wes Becker, Phyllis Haddox, Randy Sprick, Gary Johnson, Jean Osborn. The goals and standards that we held in 1975 will also be the same for 1982. We're going to provide the best Conference that we can design, and our focus will be singular — on providing you with the most information and practice that we can efficiently communicate during our time together. Yes, you will work hard, but you'll leave the Conference a better teacher than you were when you register that first day.

If you haven't attended one of our conferences, give it some serious thought. The Eugene area is beautiful — not far from the ocean, the Redwood forests, Crater Lake, and awesome mountains. Fun activities abound because the Eugene area may be the outdoor capitol of the world. And during the Conference, it won't be all work. We'll have a picnic together, and after the Conference day is over, there's plenty of daylight left for tennis, water skiing, sightseeing, or whatever. In other words, going to the Conference may be part of a vacation, which can legitimately be treated as a tax-deductable, business expense. So consider the side advantages associated with the Conference, but if you decide to come, come primarily for the Conference. It's worth a trip to Eugene.

Join the ASSOCIATION SAVINGS for New Members!

Normal membership covers the period from September 1 through August 31. To encourage new members to join during this period of growth, all new memberships received between April 15 and August 31, 1982, will be extended through the following school year (i.e., through August 31, 1983).

Options: 1. Association membership, includes *DI News* subscription.
2. *DI News* subscription only.

It is still not too late to become a charter member of the Association. Categories include:

a. Student membership... $7/year (includes DI News and a 40% discount on all ADI sponsored items and events)

b. Regular membership... $15/year (includes DI News and a 20% discount on all ADI sponsored items and events)

c. Sustaining membership... $30 or more/year (helps to insure our survival)

ADI sponsored products and events include books and other materials published or marketed by the Association (DI Reading, DI Mathematics, Theory of Instruction, Research on Direct Instruction), the Annual Direct Instruction Training Conference, and on-site training/consultation available from ADI staff or contractors.

The *Direct Instruction News* is published four time a year (Fall, Winter, Spring, Summer).

To join the association, clip out this form and mail it in.

ASSOCIATION FOR DIRECT INSTRUCTION
P.O. Box 10252, Eugene, Oregon 97440

CHECK ONE

☐ 1. I WISH TO RECEIVE THE NEWS. A CHECK FOR $5 IS ENCLOSED.
2. I WISH TO BECOME AN ASSOCIATION MEMBER. ENROLL ME AS A:
☐ A. STUDENT MEMBER ($7 ANNUALLY)
☐ B. MEMBER ($15 ANNUALLY)
☐ C. SUSTAINING MEMBER ($30 OR MORE INITIALLY)

NAME: _____

MAILING ADDRESS: _____

Advertising Policies and Rates

The Direct Instruction News will publish advertisements for materials (programs, books), training (conferences, workshops), and services (consultation, evaluation) related to direct instruction. All proceeds from the sale of advertising space will be used to help pay publication costs incurred by the News. Ad sizes and corresponding costs are as follows:

Full page: $200
Half-page: $125
Quarter-page: $75

Dissent

The editors believe that publishing polite dissent is critical to any forum which strives to be fair and open, which encourages readers to think through issues for themselves, and which wants to avoid unrestrained dogmatism. Therefore, we welcome expressions of dissent on various direct instruction issues — either from those who consider themselves direct instruction professionals or from those who view the field from another perspective. You may submit your views as either two to four page formal dissents or, in briefer form, as letters-to-the-editors.

The DI Philosophy

- THERE IS A VIABLE TECHNOLOGY OF TEACHING
- TEACHERS ARE RESPONSIBLE FOR CHILDREN'S LEARNING.
- EVERY CHILD CAN BE TAUGHT.