Sameness Analysis
Unique Power of DI

What You Get Is Far More Than What You See

By Robert C. Dixon
University of Illinois

I was once asked to review a "Direct Instruction" program that was said to be unique in that it had developed completely independently of Siegfried Engelmann, I was paid rather handsomely for that review, considering that it took me only a short period of time to determine that this particular program was not, in fact, a DI program, at least in the sense that the teaching methods, the teaching materials, and the belief system of those involved were not those of DI. I asked why anyone thought that program might be DI in the first place, and was given a list of features: high levels of structure, accountability, group discussion, every error corrected, lots of practice, teacher-directed, modeling-leading-testing-cumulative review, and the like.

On the surface, such a list of features would appear to constitute a pretty strong case. The publishers of Engelmann's materials tend to emphasize features such as these. Direct Instruction workshops concentrate on such features. These features are obviously present in DI materials. And finally, it is features like these that both supporters and critics of DI attend to the most.

How is it possible, then, that materials embodying such features may very well not be DI? Am I making the simple-minded, a priori assumption that if Engelmann didn't have a hand in it, it can't be DI?

I admit the skepticism with which I approach instructional materials in which Engelmann did not have a hand. However, his involvement per se is not the criterion by which I would judge a program as DI. Rather, I am thinking of a criterion which many people could meet in theory, but which Engelmann uniquely excels at in practice, something I will refer to for the moment as "Instructional Design Objectivity." I am tempted to refer to "instructional design analysis" as "task analysis," but let's not go in too fast. The key to objective tasks, in all, is task analysis, and for very good reasons.

First, traditional task analysis doesn't analyze anything. Rather, it presupposes the forms of the tasks the students are to perform and then describes those tasks. This suggests a related problem with traditional task analysis: it's circular. It's done in order to help the instructional designer develop good instructional tasks, but its prerequisite is the existence of good instructional tasks to do the "analysis" on. It is as a no surprise to me that some behaviorists became frustrated engaging in such practice and decided to start calling themselves cognitive psychologists. I am also tempted to call what Zig does "content analysis." I don't know whether he objects to that label, but it has some problems. Primarily, content analysis suggests the kind of activity practiced by subject matter experts, the goal of which is more to do with proving the expertise of the expert than with instruction. I know about this subject-matter game because I tried (with little success) to play it when I first became associated with Engelmann.

The daunting rule of internal morphology, I would say, "accounts for this orthographic change in abord when it appears in isolation." Patiently (more or less), Zig would reply (or more). "I really don't give a friggin' good damn about that. What is it you want the student to DO?" "Content analysis" suggests that if one knows one's subject matter thoroughly, no more is required to organize that subject matter for instruction. If belief wasn't so widely held, it would be a great laugh.

Concept analysis isn't too bad because Theory of instruction does such a remarkable job of categorizing concepts and of building a complete learning hierarchy upon relationships among these categories of concepts. On the other hand, traditional concept analysis implies another activity that Engelmann never engages in when developing Direct Instruction: full phylology.

Concept analysis, as practiced by the "neo-behaviorists" schools of instructional design, is dependent upon first determining the meaning of any concepts covered that week (See Figure 1).

Figure 1

Week 1

<table>
<thead>
<tr>
<th>Mon</th>
<th>Tue</th>
<th>Wed</th>
<th>Thu</th>
<th>Fri</th>
<th>Gain</th>
</tr>
</thead>
<tbody>
<tr>
<td>83</td>
<td>55</td>
<td>35</td>
<td>26</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

Appropriate placement. The supervisor should check for appropriate placement of the group. The children should always be performing at a high enough success level that they can feel good about working hard. When children are "over their heads," they have difficulty staying on task and the teacher spends too much time correcting and firming.

Continued on Page 15

The Key to Effective Supervision:
Focus on Student Performance

By Mary Geaseon
University of Oregon

A premise of the Direct Instruction Model is that all children can be taught if they are provided with adequate instruction. The role of the supervisor is to help the teacher provide adequate instruction, so it follows that if the supervisor helps the teacher, the supervisor has helped the children to be taught. The measuring stick of the teacher's success, and of the supervisor's, is the academic success of the children. Supervisors must monitor teacher performance, and their own, by monitoring student performance.

Many supervisors and administrators feel they must approach a teacher's classroom armed with data forms. Data forms tend to be written only in terms of teacher behavior, not in terms of children's performance. Some supervisors get sidetracked. The ultimate focus of the supervisor's observation is student learning. In monitoring student learning as well as teacher performance, data forms are useful tools, but should not be the supervisor's only tool.

In classrooms where Direct Instruction programs are being taught, the supervisor and/or administrator has two expectations: (1) students will cover a lesson a day in each Direct Instruction program, and (2) students will perform at a high success level. These two expectations represent the outcomes the supervisor is looking for. All observations in the classroom are ultimately concerned with whether these two expectations are being met. These statements do not deny that we also want the children to be having fun and to feel good about learning.

If the observations yield the information that children are learning and at an acceptable rate, the supervisor has reason to reinforce the teacher. If, on the other hand, the children are not being taught as well as they could be, the supervisor offers practical suggestions for change. Teacher change equals change in student performance.

What a Supervisor Looks For

Time allocated. First, the supervisor should look at the teaching schedule to make sure that enough time has been allocated to be able to do a lesson a day. Children will not complete DESTAR (Reting) in one year if the teacher allocates 20 minutes a day for the program. If a particular group of children can't get a lesson on in one day, the teacher may have to schedule another period of teaching time for that group.

Lessons covered. After the supervisor has checked the lesson plans, he/she should help the teacher design a way to keep track of how many lessons are being covered. One way is to keep track of the lesson gain of each group on a weekly basis. For each group, the teacher would write down the number of the lesson that was worked on that day. At the end of the week, the teacher would write in the total number of lessons covered that week (See Figure 1).

Figure 2

Week 1

<table>
<thead>
<tr>
<th>Mon</th>
<th>Tue</th>
<th>Wed</th>
<th>Thu</th>
<th>Fri</th>
<th>Gain</th>
</tr>
</thead>
<tbody>
<tr>
<td>83</td>
<td>55</td>
<td>35</td>
<td>26</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

At the end of the week, the teacher would write in the total number of lessons covered that week (See Figure 1).

Continued on Page 10

DIRECT INSTRUCTION NEWS, SUMMER, 1984
DI at ABA

The Special Interest Group in Direct Instruction met at the Applied Behavior Analysis Conference in Nashville on May 28. The link between DI and the findings of teacher effectiveness researchers such as Jane Stallings, Carolyn Seltzer and Barak Rosenhine was stressed. The purpose of the meeting was to look at ways to disseminate ideas about direct instruction and effective teaching practices to the uninitiated.

Both Kathy Modern (of California State University) and I encouraged individuals to present at local and national conferences of mainstream educational organizations such as the Association for Supervision and Curriculum Development (ASCD), International Reading Association (IRA), National Council for Teachers of Mathematics (NCTM) and Council for Exceptional Children (CEC) as well as statewide conferences on Chapter J, supervision or curriculum.

In addition, several members of the group suggested that a linkage network be established for those interested in Direct Instruction, with one member serving as a representative for each state (or 2-3 state area). This person could inform ADI members of speakers, conferences and workshops on interest in the area.

Anyone interested in serving in this capacity should contact:

Dr. Donna Dwiggins
Lenor College
Box 209
Hickory, NC 28603

A motion was put forward to further discuss these issues at the ADI meeting in Eugene this August.

By Russell Gersten

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

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 110212, Eugene, Oregon 97440.

Copyrighted by ADI, 1984.

Editors .................................................... Wes Becker
Associate Editors for Research .................. Stan Paine
.................................................... Ed Kameenui
.................................................... Russell Gersten
.................................................... Craig Darch
.................................................... Robert H. Horner

Departments ............................................
Teacher-to-Teacher ................................. Jane M. Dougall
Administrators' Briefing ......................... Linda Carnine
Dear Ziggy ........................................................................
Ziggy Engelmann
Analyses of Curricula ........................................... Linda Meyer
Software Evaluation ........................................... Douglas Carnine
Microcomputers and DI ............................. Samuel K. Miller
Art Director ....................................................... Susan Jerde
Layout ........................................................... Wes Becker

Photography .................................................... Arden Munikies
Typesetting ................................................... Pan Typesetters
Printed .......................................................... Springfield News

From Ken Craig
University of British Columbia

A noteworthy occasion was celebrated during the XVIIth International Conference on Behavioural Science held in Banff, Alberta in late March. B. F. Skinner was honoured on the occasion of his 80th birthday. Toasting his good health and accomplishments, in the accompanying photograph, are Dr. Skinner's wife, their two daughters and two granddaughters, and Dave Sharretz, who organized this year's conference. The conference theme was "Behavioural Science in Education". Dr. Skinner's highly productive career has led to many innovations and advances in educational theory and practice, including teaching machines and programmed instruction, which are now firmly established as the basis of many curriculum strategies and computer-instructional programmes.

Next year's conference, March 17-20, 85, will address the theme, "Marriage and Families: Behavioural Treatment and Process". Rae Peters (Queen's University) and Bob McMahon (UBC) will be chairing the conference. Since 1969, the Banff Conferences have served psychologists by bringing together outstanding behavioral scientists and professionals in a forum where they can present and discuss current issues. The stimulating presentations, workshops and informal discussions held in the pleasant ambience of the Banff Centre, amidst the magnificent natural resources of Banff National Park (to say nothing about the skiing) have all made the Banff Conference very special occasions for delegates.

Announcing the 7th Annual Kalamazoo Direct Instruction Conference

August 13-17th, 1984

For Further Information Write to:

Margie McGlintchey
Department of Continuing Education
Office of Conferences and Institutes
Western Michigan University
Kalamazoo, MI. 49008

The Editors are getting Lonely!
Please write us!
Becker Presents a 20-year Review of DI at the Banff International Conference

By Wes Becker

The setting was the ski resort town of Banff, Alberta, Canada. The occasion was the 16th Annual Banff International Conference on Behavioral Sciences, the topic was behavioral contributions to education, and the highlight was the opportunity to celebrate B.F. Skinner's 86th birthday with him and his family. (See related story and pictures on page 2.)

Each year, the Banff International Conference organizes a week-long series of presentations with a common theme—this year, the book is published covering the proceedings. With education the topic, a variety of offshoots of B.F. Skinner's remarkable contributions to teaching strategies were highlighted by most presenters. My presentation of DI was no different. Direct Instruction was built on the empirical base developed by Skinner and his students, although every skill 'dress' will not admit this. The empirical testing of programs at each step of construction, DI's emphasis on positive feedback, and the use of careful monitoring of student responses can all be traced to Skinner. My own conversion to educational psychology took place following my first contacts with students of Skinner who taught me behavior analysis. Doug Carnine has also been a strong supporter of behavior analysis from the start of his work with Engelmann 15 years ago.

Problems of the conference focused on the 60th anniversary of this Banff Conference, besides the birthday party, meeting Skinner's psychologist-daughter, Julie Varus, and the skiing, was the recognition being given to Direct Instruction. Doug Carnine (Teachers College, Columbia University) led off the conference and made a number of flattering references to DI. Cathleen Lindsey (University of Kansas) and Eugene Edgar (University of Washington) did likewise. By the time we got to my closing presentation, it somehow seemed that the conference had been a huge hit and it was for my presentation to be the climax.

I had spent much of January and February (on sabbatical) preparing my book chapter and presentation. It contains 20 pages of references, pages summarizing Engelmann and Carrol's Theory of Instruction, 9 pages of history, and 34 pages of data summaries. A lot has happened in Direct Instruction since Engelmann and Beretler started their preschool. Did you know that Engelmann has in current publication (excluding editions revised by revisions) 43 different DI programs? That is one book of a description. "To prove i am going to list them all the end of this article. I thought I would share with you here a little of the history relating to Siegfried Engelmann I presented at the Conference.

A Brief Early History of DI

Direct Instruction is primarily the product of one man, Siegfried Engelmann, although many others have helped him. Engelmann got into education in 1960 when he and his wife wanted to teach their children basic cognitive skills at home. This led to the book Great Your Child a Superior Mind (Simon & Schuster, 1966). This book reflects Engelmann's thinking from the early sixties. In it one can find many of the ideas that are distinctive to DI.

The Active Intervention of People in the Social Environment is Essential to Learning Verbal-Cognitive Skills.

In reviewing studies of the effects of environmental enrichment on intellectual development, Engelmann points out a correlation between the degree of active parent involvement and estimated IQs of such famous persons as Pascal, Goethe, and John Stuart Mill. Engelmann was excited with J.S. Mill. He had studied Mill's works as an undergraduate philosophy major at Illinois. Engelmann writes:

"From Mill's account you receive the picture of a boy—not a machine—who learned Greek at 3 and Latin at 8. Granted his performance is good, but notice the characteristics of this environment, evident from Mill's quote. The environment works throughout the child's waking hours; it takes pains to ensure that the child has learned his lessons; it carefully reduces the possibility of mistakes; it establishes a clear pattern for using what is learned; it forces the child when necessary; it establishes firm models for him to follow. This is an environment that will succeed with any health infant."

Engelmann had read books on learning theory and be respected the importance of reinforcement in learning. However, he does not consider himself a Skinnerian. But, like Skinner, he respected observations which could be demonstrated to control learning outcomes. "He didn't care much for the bull" in educational theories. With Skinner, he viewed the teacher as a behavioral engineer. Learning involves taking "one step at a time." Teaching involves "rules" that reflect what is common to different examples of the same thing. He understood that generalization to new examples involves identifying the samenesses that are common to the teaching examples. He understood that the child doesn't merely learn, but learns specific facts and relations.

In advising parents on how to teach samenesses, one can see the rudiments of Theory of Instruction. "The presentations, a transfer of concepts from irrelevant aspects of the situation." "Negative examples are selected to help rule out a minimum sequence of examples that will ensure that the learner learns what the teacher intends to be learned (the desired subject matter and the independent variable)."

In pursuing his philosophical underpinnings, Engelmann returns to John Stuart Mill and compares Mill's principles for knowing about causes (Mill, 1871). He notes that the Mill's principles of Agreement, Difference, and Complementary Variation are shown to parallel Engelmann's principles for showing a sameness, a difference, and correlated features or facts.

Engelmann notes that Mill's work could have been taken as a basis for a theory of instruction for 140 years, but it wasn't. Engelmann also notes that he did not refer to Mill's work in producing his theory of instruction. He noted the following only after the fact. "Logic, apparently, will stand the test of time. Engelmann's main principle states:

"To show samenesses across examples, juxtapose examples that are similar and not at the same time and measure that the examples have the same label."

Mill's principle of agreement states that "If examples are different except for a common feature and example are different except for the same for all instances, the only possible cause of the outcome is the common feature."

Engelmann's difference principle states:

"To show differences between examples, juxtapose examples that are minimally different and treat the examples differently. If positive and negative examples are treated in the same way in all but one, that difference must persist to a critical concept feature." Mill's principle of difference states that "If the positive and negative examples treated in the same way in all features but one, the single feature must be essential to the outcome." Parallel parallels could be given for Mill's principles of residues and concomitant variation.

Returning to the early 1960's again—outcomes of Engelmann's involvement in teaching was a job at the Bureau of Education for Research at the University of Illinois. This eventually led to his work in the Bereiter, Engelmann Preschool. In the fall of 1964, Bereiter decided to give up his job at individual preschool children because he found that no special strategies were working. Instead, it appeared that whatever he chose to teach could be taught. The problem became one of deciding what to teach. Engelmann's idea for a coherent program to teach it. Engelmann joined with Bereiter in 1984. "Parallel parallels could be given for Mill's principles of residues and concomitant variation from the Carnegie Foundation. Twelve low-income children who spent two years in the preschool (three hours a day) averaged a 26 point gain in Stanford-Binet IQ from 95 to 121 and preference for reading and math at the end of preschool. These promising results led to Engelmann's decision to participate in a nationwide experiment to see what works" in teaching those depressed children in kindergarten through third grade. This experiment became known as the Follow Through Project, a study in Head Start.

Before the start of Follow Through in late 1960, Engelmann left Illinois to take a position at the Ontario Institute for Studies in Education in Toronto. Since Engelmann had not had a Ph.D. and a faculty appointment, he needed a faculty member to serve as sponsor for the Ontario grant. I agreed to fill this role. When the opportunity to join the Follow Through Project arose in December, 1967, I became an active participant with Engelmann. Engelmann had a habit of writing in Philosophy. When we moved to Oregon in 1970, he was made an Associate Professor and later promoted to Full Professor. The Follow Through Project still continues after 16 years under Caroline's direction, but Engelmann's involvement continues on page 4.

Continued on Page 4
"Teach Your Child to Read in 100 Easy Lessons"

By Siegfried Engelmann
Phyllis Haddox
Elaine Bruner

One of the best-kept secrets in education is the book Teach Your Child to Read In 100 Easy Lessons. The title gives a pretty accurate portrayal of the program. The program consists of 200 lessons. Each lesson requires about 15 minutes. (The earlier lessons require less time; some of the later ones may run 20-30 minutes.) The child who completes the program will have a solid reading foundation—reading on a good middle-second-grade level and having a firm understanding of decoding and comprehending simple stories. The book, published by Simon & Schuster (1983), is a complete, stand-alone program for one-on-one reading instruction. It is based on DISTAR I and II, but it is simplified for teaching one child at a time. With one child, signals are not important, so they are spared, but simplified, in the script. Also, individual turns are eliminated, because they aren't necessary.

The sequence of skills in Teach Your Child is streamlined a bit so that the child can start making the transition to reading with traditional orthography or print sooner. And, the writing tasks found in the DISTAR workbooks are presented by the parent on a chalkboard or piece of paper.

Aside from these differences, the book presents the same basic program that is found in DISTAR I and II. But Teach Your Child to Read in 100 Easy Lessons is much less expensive than even one level of the DISTAR program. Teach Your Child costs $15, for the complete program, compared to about $208 for a DISTAR I kit, and $208 for a DISTAR II kit. The authors are Engelmann, Had- dox, and Bruner, authors of other Direct Instruction programs published by SRA. The program, like DISTAR, teaches letter sounds, blending skills, and the various attack skills that give the child flexibility in decoding. The program incorporates the DISTAR letters (including the joined letters) and a sequence of vocabulary and stories that is quite similar to the DISTAR sequence.

The title implies that the book is for parents; however, it is also a handy classroom tool, which can be used:

1. By aids to teach individual children.
2. By parents whose children need work in addition to the classroom work.
3. By resource teachers who have only a few children in beginning reading.
4. By teacher trainers on a small budget who provide training in Direct Instruction.

Not only is the book far less expensive for one-on-one instruction or instruction with a group of two children; the book requires far less training. The script doesn't require as many behaviors from the teacher, which means that somebody can learn to use the book more quickly than the person would learn to present DISTAR reading.

Friday Workshop on Teach Your Child: At the Twelfth Annual Direct Instruction Summer Conference, a session that provides information and training on the book is scheduled for Friday, August 10 (D session). If you work with beginning readers, you will find this session useful. You will learn about ways that you can use the book to work more effectively with parents of children who are behind, and possibly make it in the classroom less frantic by providing aids or helpers with an inexpensive tool that permits them to work efficiently with individual children who need additional help or catch-up work.

Remember, the book carries with it all the field testing that went into the first two editions of DISTAR, which means that the sequence is manageable and effective. The bottom line: it makes the initial teaching of reading a smooth process for a wide range of children; it gives those who use it good information about what effective reading instruction is; and it costs only $15.

AD1 MEMBERS
You may purchase “TEACH YOUR CHILD TO READ IN 100 EASY LESSONS” for $12
(Plus $1.50 for Shipping & Handling)

Banff DI Continued from Page 3

with it is minimal. He continues to teach at the University of Oregon, training graduate students in Special Education, and to work with Caronie on a new video disk based curriculum for high school and junior college students in science and math. These new developments are a story in themselves and will be saved for another time.

Latest Versions of DI Instructional Programs

DISTAR

Reading Mastery

Corrective Reading

Spelling

Math Modules

Other
Bringing Serious Behavior Disorders Under Control

Geoffrey Colvin, Larry Sessions, Mark Agrin, Don Ordes
Natrona County School District J-1, Casper, Wyoming

The delivery of services to handicapped children has seen remarkable growth since the inception of PL 94-142. However, one small group of students still causes serious problems for school administrators, teachers, specialists and parents. These handicapped students have severe behavior problems (violent aggression, tantrums, self-injury, running away, eating nonedibles, smearing feces, and refusal to eat). They are a threat to others and a threat to themselves. Remediation has generally been ineffective. Many school districts have been compelled to provide alternative placements for these students, such as home-based instruction, out-of-district placement or institutional placement. These placements, while often expensive, are generally not effective in changing behavior so that the student can return home or move to a less restrictive environment. There is a great need nation-wide for a behavior technology that can be implemented within a school district that not only brings about behavior change, but ensures that the behavior change is generalized and maintained at school, at home and in the community.

The article describes a basic framework for developing and implementing such a program.

Model Program

A project to develop a model program for bringing these students under control at school, in the home and in the community was undertaken in the Natrona County School District in Casper, Wyoming. The project has three basic components:

1. Implementation of a behavior technology described in Generalized Compliance Training: A direct-instruction program for managing severe behavior problems (Engelmann & Colvin, 1983).

2. Development of procedures to ensure effective communication and collaboration between personnel at school and the parents.

3. Demonstration of the model with a handicapped student who has a long history of serious behavior problems (biting self and others, head banging and attacking others).

The procedural steps in the model are as follows: (1) demonstration that the student's behavior is resistant to normal interventions, (2) accurate assessment of the student's behavioral patterns, (3) implementation of procedural safeguards, (4) implementation of compliance training to extinguish inappropriate behavior and to teach appropriate behavior, (5) generalization of behavior control across people (parents, teachers, support staff) across settings (different classrooms, cafeteria, gymnasium, bus, etc., and home settings), and across tasks (self-help skills, academic skills and vocational skills), and (6) development of appropriate institutional programs.

Step 1: Documentation of the Severity of the Student's Behavior
It is important to establish that the student's behavior cannot be remediated through normal interventions either by: (a) attention to the details of good instruction (content, schedule, pacing, motivation, etc.) and/or (b) implementation of basic classroom management techniques (differential reinforcement, time-out, token economies, behavioral contracts, etc.).

Table 1: Assessment of Behavior Patterns in Baseline and Corresponding Annual Goals

<table>
<thead>
<tr>
<th>Baseline Level</th>
<th>(August 1982)</th>
<th>Annual Goal</th>
<th>(June 1983)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Home-based instruction</td>
<td>1. Full-day school program</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Under control/supervision of one person (father)</td>
<td>2. Under control/supervision of any legitimate authority</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Control by restraint</td>
<td>3. Control by voice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Rewards are mostly food</td>
<td>4. Rewards are mostly social (approval, praise)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Transportation is restricted to parents car with father driving</td>
<td>6. Uses appropriate school transport</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Functions only in one-on-one situations</td>
<td>7. Functions in a group</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Is prompt-bound on many basic self-help skills</td>
<td>8. Is independent on basic self-help skills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Displays limited independent work skills</td>
<td>9. Works independently on vocational tasks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Communicates basic needs inappropriately (biting/agitation/noises)</td>
<td>10. Uses simple communication to express needs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Has a very restricted diet of high calorie and high sugar content foods</td>
<td>11. Has a balanced diet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Is quite overweight</td>
<td>12. Is a reasonable weight</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Does not interact with peers</td>
<td>13. Interacts with peers</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Step 2: Consequence Procedures for Student's Hitting/Biting

<table>
<thead>
<tr>
<th>Major</th>
<th>Minor</th>
</tr>
</thead>
<tbody>
<tr>
<td>- No hitting, Loud &amp; sharp</td>
<td>- No hitting, Sharp warning tone</td>
</tr>
<tr>
<td>- 20-30 stand up/sit down in firm/sharp voice</td>
<td>- 4 stand up/sit down (2 each)</td>
</tr>
<tr>
<td>- Give command “No hitting” every 8-10</td>
<td>- Exit command to original context</td>
</tr>
<tr>
<td>- Exit command to original context</td>
<td></td>
</tr>
<tr>
<td>- Reinforce</td>
<td></td>
</tr>
</tbody>
</table>

Notes: Use voice only (prompt sharply only if he doesn't stand up or sit down).

1. If 2 minor behaviors occur close together, treat the 2nd as a major offense.

2. If hitting/biting occurs during consequence, raise voice for 2-3 stand up/sit down and increase the total to 10.

3. Give reminder in a positive tone of "No hitting" periodically after consequence.

4. If there is doubt between a minor or a major offense, treat it as a minor infractions.

The target student for demonstrating this model program met this requirement. He has a long history of serious behavior: smashing bus windows with his fist, biting himself and drawing blood, hitting his teachers, hitting himself and banging his head on a wall. He has had several school placements, none of which were successful in controlling his behavior. His father took early retirement so he could be home with him on a home-based placement. The student had been at home for nine years. He had attended A.J. Woods School (Casper, Wyoming) for evaluation and subsequent training.

Step 2: Assessment of the Student's Behavioral Patterns

The assessment phase is designed to determine the range of inappropriate behaviors exhibited by the student, the contexts that prompt the inappropriate behaviors, and the student's compliance level and skill level in various instructional areas. In addition, an analysis was made between the baseline performance of the student in a home-based instructional program and the performance level required for full integration in a school-based program. The results of this assessment are presented in Table 1.

Step 3: Procedural Safeguards

Because of the severity of the student's behavior and the potential risk of severe injury to himself and/or staff, a number of procedural safeguards were instituted:

1. The procedures were fully informed of the details of the procedures to ensure professional and to induce appropriate behavior.

2. Complete details were placed on the school district for implementation and maintenance of the program.

3. The building principal and staff were fully informed and trained in the procedures.

4. Continued monitoring of the program and regular evaluation meetings were scheduled.

5. Commitment from all staff and parents to collaborate and make joint decisions that will be recorded both at home and at school.

6. Contingencies were set up within the school so that any outbreaks of serious behavior could be dealt with immediately.

Step 4: Implementation of the Generalized Compliance Training Program

The Generalized Compliance Training Program was then introduced. The details of the full program are presented in the training manual (Engelmann & Colvin, 1983). Once the target student had met criterion on the compliance set, biting and hitting were targeted as major noncompliance. The procedures for dealing with biting and hitting are presented in Table 2. By June, 1983, these behaviors had virtually been extinguished.

Step 5: Generalization of Learned Behaviors

Since this student initially functioned in a highly restricted environment, careful programming has been necessary to gain control of his skills. The basic approach has been to identify the components of a task or context where the student has been performing (baseline) and then to identify the corresponding components of the targeted task or context. The student prior to entering A.J. Woods School (Casper, Wyoming) for evaluation and subsequent training.

Continued on Page 6

DIRECT INSTRUCTION NEWS, SUMMER, 1984
Selecting Seawork Materials for the DISTAR Classroom

The classroom teacher not only needs to be proficient in teaching DISTAR formats but also must select meaningful activities for students to do while they are at their desks. This article will describe various primary level seawork activities which I have found useful in my classroom. I have not included prices of the materials since these change, but I have included an address for each so that you can investigate them further.

The most useful pencil and paper materials that I have found are the seaworks developed by California, DISTAR teachers. Skills covered in these materials include: sound sequence and delete, cut and paste, and simple story reading. There is at least one worksheet for each DISTAR Reading sound and lesson. Additional seaworks review skills taught in the DISTAR Language program. If you are interested in obtaining specific information regarding these materials, write:

Ms. Cheri Conaway
4890 E. Armstrong Rd.
Lodi, CA 95240

Another source of seaworks which can be used to supplement the DISTAR Reading program is Explode the Code (Books 1 & 2), available through Educators' Publishing Service (72 Moulton Street, Cambridge, Massachusetts 02138). This material utilizes clear, simple illustrations and consistent directions throughout. This is an advantage for the teacher who cannot interrupt a reading group to help the other students with their seawork. Books 1 and 2 provide practice on short vowels and each unit progresses from easy to more difficult skills. Before selecting Explode the Code, however, be aware that the sequence of sounds is different from DISTAR Reading and that the books are not parallel with DISTAR orthography. One suggestion would be to delay the use of a specific page until students have learned all the sounds on that page.

Unsed DISTAR seaworks can be given as supplemental seawork as well. A number of previously read takehome stories can be combined into a book for students to read and illustrate.

Compliance Continued from Page 5

Step 6: Developing Instructional Programs

The major components in developing instructional programs were:

1. Provision for transition between the completion of training and instruction.
2. Identification of range of skills (language, motor skills, discrimination ability).
3. Selection of appropriate content (emphasis on personal, self-help, and communication).
4. Design of programs to facilitate independent work.
5. Introduction of group instruction.
6. Facilitation of social interaction with peers.

Summary

The present project was designed to field test a model program for changing a student's serious behavior problems at home, at school, and in the community. Specifically, a handicapped student with severe behavior problems had been on home-based instruction with his parents. The model program was instituted to bring the student's severe behavior under control and to integrate the student into a full day program at A.J. Woods School in Casper, Wyoming. The major components of the model are a behavior technology, Generalized Compliance Training, and effective communication and collaboration procedures between the A.J. Woods Staff and the parents. By June, 1983, the student's serious behavior was virtually under control and he was in a full day instructional program.

Program Description:

This leadership training program in special education views the effective instructional leader as one who must be knowledgeable and expert in the special, day-to-day skills of teaching. The program will combine intensive training in empirically derived principles of instruction with ongoing practice experience in applying technology to special education settings. The goal of the program is to develop leaders in special education and computer technology who are experts in providing concrete, specific solutions to the problems encountered in classrooms serving handicapped students, in training teachers of the handicapped, and in designing research instructional procedures for the handicapped. Training is based on the Direct Instruction Model, an approach associated with empirically proven success with disadvantaged and handicapped students.

Program Objectives:

1. Variables of instructional design that are proven to be effective in educating handicapped students.
2. The capabilities, limitations, applications, and possible effects of using computers in educating handicapped students.
3. Research design, evaluation, and field testing with emphasis on field-based, applied research.
4. Graduate students will receive guided experience, over a three-year period, in applying functional knowledge of instructional design and computer-assisted instruction, including the following:
   a. Evaluation of the quality of existing software based on empirically derived principles of instruction.
   b. Adaptation of existing software based on empirically derived principles of instruction and/or development of sound educational software for use with handicapped students.
   c. Field testing of educational software intended for software based on field test results.
   d. Training of teachers and administrators in procedures for the evaluation of, selection of, and application of educational software with handicapped students.
5. Research on the use of computers with handicapped students, including computer-assisted instruction and computer-assisted monitoring.

Graduate Support:

Positions are now available at a .33 GTF level. This is approximately $2700 - $3000 per academic year. Tuition is also paid for you. These are initial support levels for the 1984/85 academic year. (September - June).

ADDRESS INQUIRIES TO:

Dr. Douglas Carrine
College of Education
Exceptional Learner Program
University of Oregon
Eugene, OR 97403
(503) 868-3355

Reference

A self-study design in which the teaching is performed by the learner and the feedback is self-administered.

In this self-study model, the learner actively engages with the material and assesses their own progress through self-reflection and self-evaluation.

The self-study design is highly flexible and can be adapted to various learning styles and preferences.

However, the self-study model may not be suitable for all learners, particularly those who require more structured guidance or external validation.

It is important to consider the individual needs and preferences of the learners when deciding on the most appropriate learning model.
Direct Instruction programs have become extremely popular at the secondary level. Special education and remedial teachers in junior and senior high schools are increasingly recognizing the value of scripted presentations, careful sequencing, and systematic review. As good as they are, however, DI programs—whether as published, aren’t always able to meet the many instructional needs of teachers who use them or the individualized needs of students who learn from them. The skills necessary for students to survive at the secondary level are often more numerous and complex than those necessary at the elementary level. Furthermore, teacher expectations are usually more varied in secondary schools and student skill deficits more diverse.

One way of accommodating these additional demands and variations in expectations is to develop supplemental materials for published DI programs. By building on already existing DI materials, teachers start with a good foundation. By creating materials to extend or apply already acquired skills, a teacher can facilitate the development of these skills. Furthermore, by designing components to teach additional or related skills, the teacher can meet the individualized needs of students or prepare them for the idiosyncratic expectations of specific teachers.

Described below is a supplemental teaching program, entitled Teaching Vocabulary Words and Applied Test Taking Skills (Perkins, 1981), for use with Skill Application: Corrective Reading, Decoding C (SRA, 1979). This supplemental program is appropriate for low performing readers in grades 5-12 who have been tested as eligible for Corrective Reading, Decoding C and are receiving instruction in that program. It can be effectively used with remedial readers in regular classrooms as well as headlong and disadvantaged students receiving resource room assistance.

The purpose of this supplemental program is to provide remedial reading teachers with a program to provide the extra training and practice needed by some students in order to master the skills taught in Decoding C. It is designed to teach students effective test-taking skills, thus facilitate the performance on tests in the regular class and on district-wide standardized achievement tests.

Program Overview

Why Develop?

The Skills Application, Corrective Reading Decoding C Program (SRA, 1979) is widely used in remedial and resource classes at the secondary level. Low performing readers typically receive instruction from a remedial, language arts, or special education teacher. Decoding C has proven to be an excellent remedial reading program, the vocabulary strand producing a relatively little cumulative review. In addition, there are very few opportunities for students to apply the vocabulary words taught. For many low performers, the result of this inadequate review and application has been a failure to remember meanings for the words taught. For most of these students, this means the words are never incorporated into their speech or into their writing.

In addition, many remedial readers and resource room students at the secondary level exhibit considerable anxiety when placed in test-taking situations. This is probably brought on by years of failure in such situations, accumulating throughout their school careers. It seems that for a large portion of these students, the anxiety and resultant failure is more a function of inaccurate test-taking strategies, than inadequate acquisition of the knowledge being tested.

The supplemental program Teaching Vocabulary Words and Applied Test Taking Skills (Perkins, 1981) was developed to help remedy the two problems described above. Part of the program provides independent practice activities for vocabulary words introduced in Decoding C, culminating in periodic review tests requiring systematic review of the words taught. The other part of the program focuses on developing students’ test-taking skills by teaching specific strategies for answering different types of test questions.

Program Components and Use

Vocabulary weekbooks. The program provides daily worksheets to allow for independent practice on vocabulary words taught in Corrective Reading Decoding C. The weekbooks are correlated with the lesson words and provide exercises which allow the student to practice the words taught in the lesson. The vocabulary weekbook allows students to practice the words taught in the lesson and in the Clement exercises. The weekbooks can be used to provide extra practice for students who need it. The weekbooks can also be used to help students who are having difficulty with the vocabulary words. The weekbooks are correlated with the lesson words and provide exercises which allow the student to practice the words taught in the lesson. The weekbooks can be used to provide extra practice for students who need it. The weekbooks can also be used to help students who are having difficulty with the vocabulary words. The weekbooks are correlated with the lesson words and provide exercises which allow the student to practice the words taught in the lesson. The weekbooks can be used to provide extra practice for students who need it. The weekbooks can also be used to help students who are having difficulty with the vocabulary words. The weekbooks are correlated with the lesson words and provide exercises which allow the student to practice the words taught in the lesson. The weekbooks can be used to provide extra practice for students who need it. The weekbooks can also be used to help students who are having difficulty with the vocabulary words. The weekbooks are correlated with the lesson words and provide exercises which allow the student to practice the words taught in the lesson. The weekbooks can be used to provide extra practice for students who need it. The weekbooks can also be used to help students who are having difficulty with the vocabulary words. The weekbooks are correlated with the lesson words and provide exercises which allow the student to practice the words taught in the lesson. The weekbooks can be used to provide extra practice for students who need it. The weekbooks can also be used to help students who are having difficulty with the vocabulary words. The weekbooks are correlated with the lesson words and provide exercises which allow the student to practice the words taught in the lesson. The weekbooks can be used to provide extra practice for students who need it. The weekbooks can also be used to help students who are having difficulty with the vocabulary words. The weekbooks are correlated with the lesson words and provide exercises which allow the student to practice the words taught in the lesson. The weekbooks can be used to provide extra practice for students who need it. The weekbooks can also be used to help students who are having difficulty with the vocabulary words. The weekbooks are correlated with the lesson words and provide exercises which allow the student to practice the words taught in the lesson. The weekbooks can be used to provide extra practice for students who need it. The weekbooks can also be used to help students who are having difficulty with the vocabulary words. The weekbooks are correlated with the lesson words and provide exercises which allow the student to practice the words taught in the lesson. The weekbooks can be used to provide extra practice for students who need it. The weekbooks can also be used to help students who are having difficulty with the vocabulary words. The weekbooks are correlated with the lesson words and provide exercises which allow the student to practice the words taught in the lesson. The weekbooks can be used to provide extra practice for students who need it. The weekbooks can also be used to help students who are having difficulty with the vocabulary words. The weekbooks are correlated with the lesson words and provide exercises which allow the student to practice the words taught in the lesson. The weekbooks can be used to provide extra practice for students who need it. The weekbooks can also be used to help students who are having difficulty with the vocabulary words. The weekbooks are correlated with the lesson words and provide exercises which allow the student to practice the words taught in the lesson. The weekbooks can be used to provide extra practice for students who need it. The weekbooks can also be used to help students who are having difficulty with the vocabulary words. The weekbooks are correlated with the lesson words and provide exercises which allow the student to practice the words taught in the lesson. The weekbooks can be used to provide extra practice for students who need it. The weekbooks can also be used to help students who are having difficulty with the vocabulary words. The weekbooks are correlated with the lesson words and provide exercises which allow the student to practice the words taught in the lesson. The weekbooks can be used to provide extra practice for students who need it. The weekbooks can also be used to help students who are having difficulty with the vocabulary words. The weekbooks are correlated with the lesson words and provide exercises which allow the student to practice the words taught in the lesson. The weekbooks can be used to provide extra practice for students who need it. The weekbooks can also be used to help students who are having difficulty with the vocabulary words. The weekbooks are correlated with the lesson words and provide exercises which allow the student to practice the words taught in the lesson. The weekbooks can be used to provide extra practice for students who need it. The weekbooks can also be used to help students who are having difficulty with the vocabulary words. The weekbooks are correlated with the lesson words and provide exercises which allow the student to practice the words taught in the lesson. The weekbooks can be used to provide extra practice for students who need it. The weekbooks can also be used to help students who are having difficulty with the vocabulary words. The weekbooks are correlated with the lesson words and provide exercises which allow the student to practice the words taught in the lesson. The weekbooks can be used to provide extra practice for students who need it. The weekbooks can also be used to help students who are having difficulty with the vocabulary words. The weekbooks are correlated with the lesson words and provide exercises which allow the student to practice the words taught in the lesson. The weekbooks can be used to provide extra practice for students who need it. The weekbooks can also be used to help students who are having difficulty with the vocabulary words. The weekbooks are correlated with the lesson words and provide exercises which allow the student to practice the words taught in the lesson. The weekbooks can be used to provide extra practice for students who need it. The weekbooks can also be used to help students who are having difficulty with the vocabulary words. The weekbooks are correlated with the lesson words and provide exercises which allow the student to practice the words taught in the lesson. The weekbooks can be used to provide extra practice for students who need it. The weekbooks can also be used to help students who are having difficulty with the vocabulary words. The weekbooks are correlated with the lesson words and provide exercises which allow the student to practice the words taught in the lesson. The weekbooks can be used to provide extra practice for students who need it. The weekbooks can also be used to help students who are having difficulty with the vocabulary words. The weekbooks are correlated with the lesson words and provide exercises which allow the student to practice the words taught in the lesson. The weekbooks can be used to provide extra practice for students who need it. The weekbooks can also be used to help students who are having difficulty with the vocabulary words. The weekbooks are correlated with the lesson words and provide exercises which allow the student to practice the words taught in the lesson. The weekbooks can be used to provide extra practice for students who need it. The weekbooks can also be used to help students who are having difficulty with the vocabulary words. The weekbooks are correlated with the lesson words and provide exercises which allow the student to practice the words taught in the lesson. The weekbooks can be used to provide extra practice for students who need it. The weekbooks can also be used to help students who are having difficulty with the vocabulary words. The weekbooks are correlated with the lesson words and provide exercises which allow the student to practice the words taught in the lesson. The weekbooks can be used to provide extra practice for students who need it. The weekbooks can also be used to help students who are having difficulty with the vocabulary words. The weekbooks are correlated with the lesson words and provide exercises which allow the student to practice the words taught in the lesson. The weekbooks can be used to provide extra practice for students who need it. The weekbooks can also be used to help students who are having difficulty with the vocabulary words. The weekbooks are corre
implement their mastery tests to work uninter-
rupted. The word finds can also be used for
special class challenges (e.g., who will be the first one to find a word that is not on the list
for given to students to take home. Illustrations accompanying
these words areal will be found in the week's
reading in Decoding C and help students to
the word find activities to their
reading assignments.

Word knowledge tests. Approximately
every 20 lessons, a word knowledge
test is provided using a format similar to
that which appears on standardized
tests. The purpose of the word
knowledge tests is to encourage long-
term retention of the vocabulary words
learned. The tests replicate some of the
activities found in the week's reading in
Decoding C and help students to
the word find activities to their
reading assignments.

Word knowledge tests. Approximately
every 20 lessons, a word knowledge
test is provided using a format similar to
that which appears on standardized
tests. The purpose of the word
knowledge tests is to encourage long-
term retention of the vocabulary words
learned. The tests replicate some of the
activities found in the week's reading in
Decoding C and help students to
the word find activities to their
reading assignments.

Field Testing

The Teaching Vocabulary Words and
Applied Test Taking Skills program was
developed by the first author and was
field tested with five different classes
of junior high remedial and resource room
students. The results of the first level of the
program were analyzed by the second author.
In future programs, this test will be
expanded to include supplementary items and
questions designed to assess students' abilities to use the
vocabulary words in their daily lives.

Field Testing

The Teaching Vocabulary Words and
Applied Test Taking Skills program was
developed by the first author and was
field tested with five different classes
of junior high remedial and resource room
students. The results of the first level of the
program were analyzed by the second author.
In future programs, this test will be
expanded to include supplementary items and
questions designed to assess students' abilities to use the
vocabulary words in their daily lives.

Field Testing

The Teaching Vocabulary Words and
Applied Test Taking Skills program was
developed by the first author and was
field tested with five different classes
of junior high remedial and resource room
students. The results of the first level of the
program were analyzed by the second author.
In future programs, this test will be
expanded to include supplementary items and
questions designed to assess students' abilities to use the
vocabulary words in their daily lives.

Field Testing

The Teaching Vocabulary Words and
Applied Test Taking Skills program was
developed by the first author and was
field tested with five different classes
of junior high remedial and resource room
students. The results of the first level of the
program were analyzed by the second author.
In future programs, this test will be
expanded to include supplementary items and
questions designed to assess students' abilities to use the
vocabulary words in their daily lives.

Field Testing

The Teaching Vocabulary Words and
Applied Test Taking Skills program was
developed by the first author and was
field tested with five different classes
of junior high remedial and resource room
students. The results of the first level of the
program were analyzed by the second author.
In future programs, this test will be
expanded to include supplementary items and
questions designed to assess students' abilities to use the
vocabulary words in their daily lives.

Field Testing

The Teaching Vocabulary Words and
Applied Test Taking Skills program was
developed by the first author and was
field tested with five different classes
of junior high remedial and resource room
students. The results of the first level of the
program were analyzed by the second author.
In future programs, this test will be
expanded to include supplementary items and
questions designed to assess students' abilities to use the
vocabulary words in their daily lives.

Field Testing

The Teaching Vocabulary Words and
Applied Test Taking Skills program was
developed by the first author and was
field tested with five different classes
of junior high remedial and resource room
students. The results of the first level of the
program were analyzed by the second author.
In future programs, this test will be
expanded to include supplementary items and
questions designed to assess students' abilities to use the
vocabulary words in their daily lives.

Field Testing

The Teaching Vocabulary Words and
Applied Test Taking Skills program was
developed by the first author and was
field tested with five different classes
of junior high remedial and resource room
students. The results of the first level of the
program were analyzed by the second author.
In future programs, this test will be
expanded to include supplementary items and
questions designed to assess students' abilities to use the
vocabulary words in their daily lives.

Field Testing

The Teaching Vocabulary Words and
Applied Test Taking Skills program was
developed by the first author and was
field tested with five different classes
of junior high remedial and resource room
students. The results of the first level of the
program were analyzed by the second author.
In future programs, this test will be
expanded to include supplementary items and
questions designed to assess students' abilities to use the
vocabulary words in their daily lives.

Field Testing

The Teaching Vocabulary Words and
Applied Test Taking Skills program was
developed by the first author and was
field tested with five different classes
of junior high remedial and resource room
students. The results of the first level of the
program were analyzed by the second author.
In future programs, this test will be
expanded to include supplementary items and
questions designed to assess students' abilities to use the
vocabulary words in their daily lives.

Field Testing

The Teaching Vocabulary Words and
Applied Test Taking Skills program was
developed by the first author and was
field tested with five different classes
of junior high remedial and resource room
students. The results of the first level of the
program were analyzed by the second author.
In future programs, this test will be
expanded to include supplementary items and
questions designed to assess students' abilities to use the
vocabulary words in their daily lives.

Field Testing

The Teaching Vocabulary Words and
Applied Test Taking Skills program was
developed by the first author and was
field tested with five different classes
of junior high remedial and resource room
students. The results of the first level of the
program were analyzed by the second author.
In future programs, this test will be
expanded to include supplementary items and
questions designed to assess students' abilities to use the
vocabulary words in their daily lives.
Effective Supervision

The supervisor can check for a high success level in a number of ways: (1) by looking at the results of a criterion-referenced test, such as the Peabody Individual Achievement Test (PIAT) to see if each child is performing between 80% and 100%, or (2) by taking into account the teacher's request for instruction, looking for 80% or higher on first-time responses (correct responses). The teacher can also look at students' independent work performance, looking for 80% or higher on worksheets and 97% or higher on oral reading.

The supervisor can continue to use these procedures to monitor whether students are being moved on to new lessons before they have mastered the material. When the students are "over their heads", they should be moved back to a lesson where they can be more successful.

Physical arrangement. The supervisor should check for physical arrangements, organization of materials, and use of time that enhance the teacher's ability to teach well. Are all children seated so they can see the teacher and the material used for presentation? Are the lowest performers sitting closest to the teacher? Are the teacher's materials close by and organized so that no time is wasted in transition from task to task?

Peer review. The supervisor should look to see if the teacher is getting frequent responses from the children. The corrector could consider response rate (pacing) by doing the following. During a five-minute period, mark how many times each child talks at each time the students respond orally. Divide the number of tallies by 5. A response rate of 2 to 7 responses per minute means the teacher is talking too much, too slowly, or is somehow wasting time. Approximately 10 responses per minute indicates an effective response rate.

Student errors. The supervisor should watch the children. He/she should pay attention to student errors and what the teacher does to "firm" the children's skills. It is possible for a Direct Instruction teacher to "look" technically perfect and still have children who are not firm. The teacher's pacing is great, the signals are precise, and, every time an error is made, the teacher does a correction; however, the teacher allows the children to move on to the next lesson while they are working at a 60% success level.

This type of teacher can feel an uncanny

suspecting supervisor who watches the teacher's presentation and forgets to attend to the children's performance. This type of teacher is likely to blame the teacher who has poor signals. The supervisor should watch for the following: Does the teacher pay attention to each error and immediately tell the answer? After telling the answer, does the teacher repeat the question? After the question is repeated again? Does the teacher go on to something else and then come back to the missed task or to see if the students can perform correctly following a delay? Does the teacher repeat the format that students made errors in before going on to the next format? Does the teacher check all written work and provide a correction for each item that is missed?

Student errors also occur because of the teacher's presentation skills. When a supervisor sees student errors, the supervisor must try to determine if the errors are caused by poor signals, inappropriate scaffolding time, or other teacher behaviors.

On-task behavior. The supervisor should check whether all students are working all the time and whether the teacher takes steps to teach students to attend and work hard. When the teacher is asking for written responses, the supervisor must watch to see if all students are answering and if they are answering together.

For those who are just beginning to use the Direct Instruction Model of teaching, the supervisor can get started by using a simple checklist (See Figure 2). And remember, keep your eye on the kids.

Figure 2

What to look for in a Direct Instruction classroom:

1. Time allocation for each group.
2. Amount of content covered.
3. Supervisor observes student errors. The supervisor must try to determine if the errors are caused by poor signals, inappropriate scaffolding time, or other teacher behaviors.
4. Physical arrangement, organization of materials.
5. Time wasting in transitions.
6. Frequent responses.
7. Student errors.
8. On-task behavior.

Editor's note. If you have questions to be answered, ideas to share or articles on supervision you would like to share, please write to us at Executive Editor, ADNI News.

10 DIRECT INSTRUCTION NEWS, SUMMER, 1984
Trainers Announced for 10th Annual Direct Instruction Conference in Eugene

This year's DI conference will again be held in the new Eugene Hilton and Conference Center. The dates are August 6th-10th. If you have not yet sent in your registration, an extra form has been provided on this page. If you need course descriptions, call Bryan at (503) 885-1293 or write him at the Association of DI/VEWS. The announcements that went out with the last issue of DI/VEWS did not have the names of trainers and presenters. Those that have been assigned are listed below.

A sessions are for 1 1/2 hours on Monday, Tuesday and Thursday. D sessions are for 4 hours on Friday. Sign up for one or both.

1. (A) Introduction to Direct Instruction — Phyllis Haddox
2. (A) Fine Tuning of Teaching Skills — Ziggy Engelmann
3. (A) Administrator's Perspective on Computer and Video Disk Technology — Doug Carnine
4. (B) Teaching the Beginning Reader — Phyllis Haddox
5. (B) Reading Mastery, Levels III, IV, V & VI — Gary Johnson/Gary Davis
6. (B) Teaching Beginning Language Skills — Kim Weihman
7. (C) Teaching Oral & Written Language, & Comprehension Skills — Phyllis Haddox (Note: this has been changed from a B to C session)
8. (B) Advanced & Corrective Arithmetic — Jerry Silbert
9. (B) Overview & Implementation of All Direct Instruction Programs — (Not yet assigned)
10. (B) Generalized Compliance Training — Geoff Colvin
11. (B) Introduction to Logo — Sam Miller
12. (B) Solutions to Classroom Management Problems in Grades K-6 — Randy Sprick
13. (B) Transition from DISTAR to a Basic Reader — Marilyn Sprick
14. (C) Reading Mastery 1 & II — Marilyn Sprick
15. (C) Teaching Reading Accuracy & Fluency — Gary Johnson
16. (C) Effective Spelling Instruction — Maria Collins
17. (C) DISTAR Arithmetic 1 & II — Jane Dougall
18. (C) Teaching the Extremely Low Performing Learner — Geoff Colvin
19. (C) Classroom Management — Secondary Level — Randy Sprick
20. (C) Evaluating Instruction & Summary of DI Research — Wes Becker
21. (C) Supervising Direct Instruction Programs — (Not yet assigned)
22. (C) Theory of Instruction — Bill White
23. (C) Evaluating & Implementing Instructional Software — Sam Miller
24. (D) Teaching Facts & Fact Systems in the Content Areas — Gary Davis
25. (D) Promoting Direct Instruction in Your District — (Not yet assigned)
26. (D) Helping Classroom Teachers with Management Problems — Randy Sprick
27. (D) CURRICULUM Writing — Mike Coye
28. (D) Supplemental & Transitional Activities Related to DISTAR — Jane Dougall
29. (D) Language 1 for ESL — Annemiek Coily
30. (D) Teaching Expressive Writing & Language Skills — Jerry Silbert
31. (D) Research on Direct Instruction — Wes Becker
32. (D) Direct Instruction & Mainstreaming — Lynn Anderson-Inman
33. (D) Overview of Recent Developments in Computers & Direct Instruction — Sam Miller
34. (D) Structuring Your Classroom for Academic Success — Sam Paine

Join Us In August
Dr. Robert Hornor will discuss his research on "Teaching for Generalization" at our annual meeting.

CONFERENCE REGISTRATION FORM

Where-When. To be held August 6-10, 1984, at the Eugene Hilton and Conference Center, in downtown Eugene, Oregon.

How to Pre-Register. Please fill out application form. Enroll with check or school district purchase order for the proper fee. Send registration 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 or more 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) 485-1293. 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 coffee each morning. All training materials are included in the fee.

Hilton Room Rates. The rate for a single is $36.00 a day. Doubles will be $44.00 (52.00 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.

College Credit. An optional 1 or 2 units of college credit through the University of Oregon are available at an additional cost of $25.00 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 you can reach us before the conference.

Name ________________________________ Phone _________
Street ________________________________
City ______________________ State ______ Zip ______

Have you had previous experience with Direct Instruction?

What taught?

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

"A"

"B"

"C"

"D"

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

Person's name (if known)

(i) If this is blank we will provide you with a name and address)

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 ______

DIRECT INSTRUCTION NEWS, SUMMER, 1984
A Program for Success,
Reading Mastery, Levels 1-6

Learning Initial Skills
Reading Mastery (Distor Reading) I & II uses a proven phonics method that features step-by-step instruction for all decoding skills.
- Fast and efficient teaching of all beginning reading skills
- Systematic introduction of letters and sounds
- Word attack strategies that allow students to decode thousands of new words
- Oral and written exercises teach basic comprehension

Building New Skills
Reading Mastery Levels III & IV teach students the skills needed to read for information in content area textbooks.
- Vocabulary and fluency are built continuously
- Complex sentence forms are introduced gradually
- Informational text provides the background knowledge needed for comprehension and shows students how to use that knowledge
- Comprehension skills are applied to a variety of contexts

Mastering Advanced Skills
Reading Mastery V and VI prepare students for the challenges of adult reading. These levels feature classic stories and novels of established literary value.
- Extensive independent reading
- Careful teaching of inference and reasoning
- Development of critical reading skills through analysis and interpretation
- Proficiency in reference and writing skills

Reading Mastery Fast Cycle I/II is an accelerated beginning reading program. Fast Cycle provides a one-year program which teaches all the basic skills taught in Reading Mastery: Distor I and II.
- Students decode more than 1100 regularly spelled words plus more than 200 irregular words
- Comprehension skills are part of every daily lesson
- Spelling lessons accompany the reading program
- Mastery tests are part of the new Fast Cycle program

Return the coupon before January 1, 1985, and SRA will send you a complimentary Series Guide. It describes each program level, and contains an expanded Scope & Sequence Chart, plus placement tests to help you determine appropriate placement in Reading Mastery.

Why wait? Reading Mastery helps you teach your students the skills needed for success.

Send To: SRA
Attn: Karen Suhadolnik
155 North Wacker Drive
Chicago, Illinois 60606

I'd like to review Reading Mastery
☐ Please send a complimentary Reading Mastery Series Guide
☐ Please have my SRA Representative contact me.
Name ________________________________
Position ________________________________
School ________________________________
School Address ________________________________
City __________________ State ______ Zip ______
Phone ________________________________

12 DIRECT INSTRUCTION NEWS, SUMMER, 1984
The Value of Student Errors

By Robert H. Hornet
University of Oregon

The profession of teaching contains an inherent source of humility: student errors. Indeed, few teachers who have not wondered how a particular student could have performed so miserably after receiving such striking instruction. Such questioning is the beginning of good teaching.

Direct Instruction is recognized as one of the leading approaches based on the assumption that student errors are a function of the instructional approach—not the student. Teachers who use DI are trained to analyze student error patterns and to use that information to develop instructional programs aimed specifically at remedializing student errors. This healthy philosophy of immeasurable use to teachers of students with severe handicaps, all too often the errors of severely handicapped students are attributed to their handicaps, rather than to how they were taught. One of the major contributions of DI and other behavioral approaches to education has been to focus attention on the errors that students make and the relationships between error patterns and the instructional programming these students need. Thus DI has emphasized efforts to design DI programs for severely handicapped students with particular focus on the nature of the error patterns in program development.

Errors are of particular relevance for teachers of students with severe handicaps for two reasons. First, the curriculum for these students is undergoing massive change. The old workbooks, beath, and art supplies once common in TMR classrooms are being discarded in favor of functional objectives and community relevant materials. Education for students with severe handicaps (especially older students) is moving into the streets, both literally and figuratively. Student education is being directed at community-based skills. This has created a major focus on teaching generalized skills and the use of DI techniques. It has also emphasized the importance of attending to student errors. A severely handicapped student who makes the wrong colored blocks does not receive the same level of attention as the same student who begins crossing a street at the wrong time. Suddenly, errors have become important.

The community is a demanding and uncommunicative environment. Teachers are looking to the technology of Direct Instruction for strategies to teach community skills, and avoid costly errors.

The second reason why errors are important to teachers of severely handicapped students is the greater burden teachers are bearing for program development. Unlike math, reading, and language, which are the same across the country; shopping centers, traffic conditions, and social demands vary greatly from community to community. While a DI program on reading can provide all the skills needed for any student in any part of the country, the similar package for teaching street crossing does not. Teachers of severely handicapped students, therefore, need to be program developers. They need to design programs that are functional in their own locales, and to design programs that are particularly sensitive to the errors of students.

Why errors?

Among the first traits apparent to the teacher is an awareness of errors is that errors are not random. Few motivated students perform with unpredictable error patterns. This is especially true when watching students perform in "generalization settings" after having successfully completed training. Why is it that the student who can perform all the purchasing behaviors in the simulated classroom "store" is unable to emit those same behaviors when shopping in the community?

Errors occur for many reasons, but two are of particular significance for severely handicapped students: (1) prior history, and (2) incomplete instruction. Many severely handicapped students enter instructional programs with extensive histories in how to make errors. When a woman with severe retardation to cross streets, a trainer that she would cross an intersection, and look back and forth, until someone told her to cross. Her prior history instructed her that crossing involved waving your head left and right until someone said to cross. She has been seen standing in a local store to purchase groceries relied on his prior history when it came to paying for items in a nonraised store. When he paid for the items during instruction, he would look at the cash register, identify the dollar amount, and count the one dollar bills that totaled one more dollar than the amount on the cash register. While he performed this routine, he appeared to be making an impossibly difficult task during training, a generalization test in a different store resulted in the student handling all his money to the cashier and letting the cashier take the appropriate amount; a behavior he had learned several years earlier with his mother. Prior history affects error patterns. When teaching community-based skills to severely handicapped students it is as important to pre-test to identify the behaviors (error patterns) a student brings into the instructional setting.

Errors also occur as a direct function of inadequate or incorrect training. The most obvious examples of this phenomenon are with students who do not receive training with appropriate training examples. One teacher, concerned for the safety of her students, conducted street crossing training only with quiet streets controlled by stop signs. Although students become adept at crossing these streets they made a range of predictable errors when presented with busy intersections controlled by traffic lights. The DI procedures for selecting and sequencing teaching examples are focused on avoiding errors of this type.

Teacher Skills to Avoid and Correct Errors

All teachers are taught to collect information on the "correct" responses of their students. In fact, most programs are designed around students reaching a certain "percent correct" criterion. The thesis of this article is that errors are equal, if not greater, importance for teachers who are building their own programs and training in community settings. Error data need to be gathered to index not the percent of errors (this adds nothing to the percent correct already collected), but the types of errors that students perform and the conditions in which errors occur. Just as with math, reading, and language errors; the types of mistakes made when street crossing, grocery shopping, or bus riding are of critical importance for good teaching.

Careful attention to the prediction of student behaviors will result in the following types of adaptive teacher behaviors:

1. Design programs to minimize errors. Attention to potential student errors will lead to much more comprehensible programming. Teachers who design programs that not only teach appropriate behaviors, but avoid teaching error patterns, do their students a distinct service. Avoid teaching errors by defining the full range of stimulus conditions in which the student can be expected to perform (i.e., the application universe). Select teaching examples that sample the range of relevant stimulus variation in the instructional universe. Include negative examples that teach students when not to respond, as well as positive examples that include the range of response variation the student will be expected to perform. These basic guidelines for building DI programs have served teachers well when building and using material to teach math, reading, and language. They are equally valid for teachers designing community-based programs for severely handicapped students.

2. Correct errors as soon as they are made. A basic teaching standard is to correct errors as soon as they occur. With severely handicapped students, it has also proven valuable to mass prac-
Organizing A Successful Microcomputer Inservice

By Mike Caley

Scenario One:
It's Friday afternoon, 4:00 p.m., and a group of teachers has gathered at their local school district Education Center after a long day and week of teaching. Their purpose: to be enlightened on the intricacies of computer use. As they nervously speak with enough microcomputers among themselves they notice that while their numbers continue to grow the number of the students attempting to discuss the issue in the Northwest and the author of several books about how to use computers in the classroom. Mike is also an experienced Direct Instruction teacher and supervisor. He has authored several Direct Instruction curriculums and is a member of the National Instructional Computer and School software developers and will be a trainer at the Eugene Instruction Conference this summer.

problems the students encounter. The students know the class is a learning little and feeling frustrated.
If you have been involved during the past few years you should be made a computer inservice for teachers, these scenarios may be familiar to you. As an instructor of the classes I teach stories similar to these in literally every class I teach. I also hear that most teachers are not impressed with the loosely organized “discovery learning” approaches to computer inservice. As an advocate of the Direct Instruction approach to teaching throughout my career, I find their reaction predictable. As computer neophytes, teachers want direction, not hints; they want instruction, not facilitation. The following section will provide general guidelines for conducting a successful inservice for the inservice teacher who wishes to organize and teach an introductory computer class for teachers.

Prior to conducting an inservice session:
1. A contact person in the school district or agency for which the training is being provided must be identified. This person should be familiar with the inservice inservice and able to solve problems. The instructor has a computer hooked to a large screen monitor. In the middle of the screen a small triangular shape that he identifies as Logo’s “turtle.” This information is an important piece of the information presented throughout the remainder of the course. Students are challenged to brainstorm possible ideas about how to instruct the computer to make the turtle move to draw a picture of a box. Their suggestions are entered into the computer by the instructor. This process takes the better part of an hour. As students begin to see how Logo’s commands, many of them recognize that the discovery approach is an important force in the development of gaining basic knowledge about computer programming. They are directed to their individual computers to learn about Logo; the instructor acts as a “facilitator,” asking questions and giving hints on possible solutions.

5. As an instructor, it is your responsibility to preview and become familiar with each piece of software used in the inservice. This would be an unnecessary piece of advice; however, personal experience confirms that instructors often attempt to demonstrate programs without adequate preparation to do so. It is both embarrassing for the instructor and frustrating for the students when the “expert” is not able to deal with the little problems that arise from the software being demonstrated.

6. It is also important to have demonstration software and other materials organized prior to their use. Certain software may require the use of peripheral equipment. If so, the time to hook up to a demonstration computer is now while an anxious group of students looks on and waits. This setup, not out of memory, demonstrations, slides, or a film presentation can be accomplished before the class begins or during the time provided for independent work following a demonstration.

7. Have all necessary print materials organized in such a way that they logically follow the teaching demonstrations. An effective format for organizing print materials is one that sequences adolescents with: (1) an introduction or brief overview of course rationale and organization, (2) computer software and its components, (3) course objectives and/ or credit requirements, (4) an agenda for the entire course, and (5) step-by-step instructions for the completion of activities in the course.

8. Arrange early (at least an hour before the scheduled starting time) to check the physical arrangement of the computer lab. You should use this time to load a program into each machine and ensure that the computers are operating properly. Being early also lets you collect your thoughts, organize your notes, and aide you focus on last-minute details that can make the class more successful.

Having attended to pre-class concerns brings you to the point of meeting your students and teaching them. An important point to keep in mind is this: Unlike children, who generally seem willing to take the initiative and punch buttons until something works, teachers, when initially exposed to computers, have a marked tendency to be intimidated by their lack of knowledge about them. They are therefore reluctant to accept the possibility of appearing stupid in front of other teachers. Therefore, you should try to reduce the stress level for all students. Some suggestions for achieving this follow:

1. Make it clear to the students that it is okay to be inexperienced. The purpose of the course is to provide them with computer experience.

2. Address students by their names when you talk to them. Use name tags to help students associate their name with their computer or monitor. Since students will be doing their work facing the computer, you will often be approaching them from behind to monitor their progress or answer questions. In some cases, you may find yourself standing in front of someone’s shirt or sweater is of little use.

3. Guide students through written materials and give them a quick ex-
given concept. What makes this practice little is the fact that there are few concepts that have a "THE MEANING". The problem is that one could consider a concept as simple as "illusion." Now imagine a dinner party of medical doctors and engineers; that these doctors could sit down for dinner and agree to the last person on earth that any concept exists. The fact is, that room full of subject matter experts couldn't agree on THE MEANING. Direct Instruction assumes that the range for any given concept is mutable and is dependent upon a range of concrete examples. The examples (and non-examples) themselves define the concept. If the range of the examples changes, the definition changes. Without such a concrete means of "drawing the line" on concepts, it is utterly impossible to develop either instruction or assessment tools that teach or assess anything specific. I don't think "concept analysis" works.

My last temptation is to call Engelmann's instructional design the original "Direct Instruction." The beginning of the design of Direct Instruction is always at the end: what will students be able to do when they leave this program? I'm not talking here about behavioral objectives. Those are a product of the administration of kind of deals with examples of what students will do. The difference is significant.

Although DI analysis begins with "what," it doesn't end there, which makes "outcome analysis" seem inadequate. The essence of Engelmann's analysis is expressed in a few critical paragraphs from Engelmann and Carr’s Theory of Instruction. In those paragraphs, two attributes of learners are postulated: (1) the capacity to learn any quality from examples, and (2) the capacity to generalize on the basis of sameness of quality.

Engelmann begins his analysis by finding sameness across the examples of what students will be able to do when they finish a program. Those samenesses, in turn, generate example sets for each sameness, sets which in turn give a point of view analysis of examples. That process continues backward, indefinitely, until the learner’s capacity that the most relevant materials are not to be instructed, that the learner brings to the instruction. This is an important part of the content analysis. Descriptions of examples, regardless of how precise they may be, are always ambiguous and subject to multiple interpretations. Even in my over-simplistic description above, it is possible to recognize that the great difficulty with this process is the objective, accurate identification of sameness of quality across examples, and I am aware of absolutely no one who has demonstrated Engelmann’s ability to make this identification of sameness of quality, always objectively, always devoid of preconceived notions, free from any influence of one’s own, even in the early stages of knowledge acquisition. Engelmann has: (1) recognized the critical need for identifying sameness of quality, and (2) has consistently demonstrated his unique talent for SUCCESSFUL outcomes.

If the objective of instruction is to communicate sameness of quality to learners, then the basic question is: when does the design skill of identifying sameness of quality is of paramount importance, far more important than any other consideration, to say, or any other single aspect of instructional design.

We might say, with the design of DI into three phases: analysis (maybe I should call it "sameness analysis"), constructing communications (the actual building of the instruction) and specification of delivery behaviors. These phases are sequenced in order of importance that any given phase is dependent upon the successful completion of any previous phases. The construction of clear, effective communications—designing formats, sequencing examples and formats, etc.—is completely dependent upon the precise identification of sameness of quality, which is the outcome of a successful analysis. Or in other words, an attempt to construct instruction without the precise identification of what is to be communicated is a waste of effort, to say the least. Similarly, attempting to specify delivery behaviors—the signaling of teachers, the branching of computers or video disks, the layout of textbooks, the form of a problem or a question of some value alone, is certainly of limited value unless it is performed by some concrete standards. The days in which anyone needs to defend DI against ignorance are numbered. Where others me no one who has become so enamored with the obvious features of DI, the delivery behaviors, they have drawn attention away from the critical importance of the phases that precede specifying delivery behaviors. Worse yet, the success of DI seems to be encouraging people toward the sinister form of flattery: imitation. Unfortunately, primarily the delivery features of DI are being imitated.

It situation weren’t serious in its potential impact on students, it would be a joke. We could pull people off the street and within a few hours "teach" them to write scripts, indicate margins and student responses, require corrections for every error, require one hundred percent performance, etc. We might talk quickly, to keep steps small, and possibly even be repeating once in a while. But what would those trained scripts produce if we don’t train them to specify signals for how? What would the feedback in the corrections relate to the tasks? One hundred percent performance on what? Fast pacing of what? Small steps through what? Reinforcement? It’s quite possible to have a great deal of form in teacher behavior and very little worthwhile substance. That form is not DI, not unless it is overlaid on DI substance, effective instructional communications, constructed from a prerequisite analysis of sameness.

What we get from DI programs is something more valuable than what we readily see, namely an incomparable analysis (maybe I should just call it DI analysis), followed up by meticulously designed communications. That’s what makes DI DI, what distinguishes Direct Instruction from direct instruction, and what I think makes Engelmann the leading practitioner of instructional design. If DI is going to grow outside of Engelmann’s direct influence, then it is going to have to do so by actually imitating those things man does carefully, things of far greater import than types of words in the base of the Engelmann-Bekker Corporation.

Call for Papers

This newsletter is intended to be a consumer-oriented publication. You, the reader, are considered the consumer. Therefore, we very much want your input in future issues. The editors invite your contributions of manuscripts, comments, ideas, inquiries, or information suitable for publication in the DI News. Any item relevant to the subject of Direct Instruction is appropriate for the News. A working list of the types of items the News will publish, along with submission guidelines for each, appears in this issue. All submissions will be edited for length, readability, and technical accuracy prior to publication. Issues will be published in fall, winter, spring, and summer. Please submit (postmark) all items no later than the first of September, December, March, and June.

Call for Award Nominations

The Board of Directors of the Association for Direct Instruction is seeking nominations in four categories: (1) elementary teaching; (2) secondary teaching; (3) research; and (4) leadership. Each year, ADI honors people who have made distinguished contributions to educational excellence in one of four categories: (1) elementary teaching; (2) secondary teaching; (3) research; and (4) leadership. Last year’s honorees were: Karen Garner, Beaverton, Oregon; Nancy Woodfin, Eugene, Oregon; Tina Rosen, Olympia, Washington; and Alex Mauss, Sydney, Australia, respectively.

The awards seek to recognize those who have distinguished themselves by their continuing commitment to excellence in education for all students. Through this recognition, ADI Board of Directors hope to encourage others to what can be accomplished when commitment and Direct Instruction technology are put together.

Nominations are selected by the ADI Board of Directors from nominations submitted to them. You may nominate candidates in any one of the four categories. NOMINATIONS MUST BE RECEIVED BY JULY 1, 1984. Send letters of nomination to ADI BOARD OF DIRECTORS, 707 E. LEAVENWORTH, ST. LOUIS, MO 63103. What is your nominee to have done to earn your nomination? Please provide an address and phone where we can contact you for more information if needed.

More capable and deserving persons will be nominated than can be recognized this year. However, we welcome all nominations.
1984 CONFERENCE

August 6-10: 10th Annual Eugene Direct Instruction Conference

All conference sessions are designed to increase the competence of Regular and Special Education Teachers, Aides, Supervisors and Administrators whose goal is to promote excellence in all areas of education.

★ New sessions on Computers in Education
★ Updated Training on Revised Direct Instruction Programs
★ College Credit available for both conferences
★ 20% Discount for ADI Members (40% for student Members)
★ Group Discounts available

For more information write or call:
Bryan Wickman
Association for Direct Instruction
P.O. Box 10252
Eugene, OR 97440
(503) 485-1293

Join the ASSOCIATION
Those joining now receive membership through August 31, 1985

OPTIONS:

a. Student membership...$7/year (includes DI News and a 40% discount on ADI sponsored conferences and 20% discount on publications).

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 per year (helps to ensure our survival).

d. DI News subscription only...$5/year (outside of North America & Hawaii...$10/year).

ADI sponsored products and events include books and other materials published or marketed by the Association (DI Reading, DI Mathematics, Theory of 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 times a year (Fall, Winter, Spring, Summer).

To join the association, clip out this form and mail it in, with your check in U.S. funds only.

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

CHECK ONE
1. 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)
   □ 2. I WISH TO RECEIVE THE NEWS ONLY. A CHECK FOR $5 (OR $10 OUTSIDE NORTH AMERICA & HAWAII) IS ENCLOSED.

NAME:

MAILING ADDRESS:

Generalized Compliance Training
By Siegfried Engelmann & Geoff Colvin
NON-MEMBERS $20
(MEMBERS $16
(ADD $1.50 PER BOOK FOR SHIPPING)

Teach Your Child to Read in
100 Easy Lessons
By S. Engelmann, P. Haddox & E. Bruner
NON-MEMBERS $15
(MEMBERS $12
(ADD $1.50 PER BOOK FOR SHIPPING)

– ORDER AS IN AD BELOW –

Theory of Instruction
By Siegfried Engelmann & Douglas Carnine
NON-MEMBERS $25
(MEMBERS $20
(ADD $1.50 FOR SHIPPING COSTS)

DI Reading or DI Mathematics
NON-MEMBERS $30
(MEMBERS $24
(ADD $1.50 FOR SHIPPING COSTS FOR EACH BOOK)

Send U.S. Funds To: Association for Direct Instruction
P.O. Box 10252
Eugene, Oregon 97440

DIRECT INSTRUCTION NEWS, SUMMER, 1981