Instructional Stages: Part One

— *New More Explicit Procedures* —

KU-IRLD Staff and Edwin S. Ellis

A s teachers have implemented strategies instruction over the past decade, our knowledge of effective strategies instruction has grown and expanded. While the eight instructional stages (formerly steps) remain the same (with a few minor name changes), the specific teacher and student behaviors comprising each stage are now more explicit. In this article and the two others to follow, we will present our expanded view of the factors which affect strategy performance, important instructional principles which are incorporated throughout strategy instruction, and the stages of the instructional process. These articles are abstracted from an article entitled "An Instructional Model for Teaching Learning Strategies" by E. S. Ellis, D. D. Deshler, B. K. Lenz, J. B. Schumaker, and F. L. Clark to appear in Focus on Exceptional Children in 1991.

"...we will present our expanded view of the factors which affect strategy performance, important principles which are incorporated throughout strategy instruction...."

Critical Factors Which Affect Strategy Performance

Although many factors affect the success or failure of strategy instruction, two critical domains are: (a) students' knowledge of skills and processes involved in using a strategy and information related to when, where, why, and how to use a strategy; and (b) students' motivation to learn and use the strategy. Effective strategy teachers incorporate features of these domains in their teaching by: (a) modeling how they select and use skills and strategies to solve problems and guide their own behavior; (b) linking new information to students' previous learning; (c) teaching the steps of the strategy and how, when, where, and why to use it; (d) providing extensive practice in a variety of materials and situations; and (e) teaching students to set goals, monitor progress, and use affirmations, self-coping statements, and self-reinforcement techniques.

Important Instructional Principles

Good strategy instruction incorporates procedures that are based on sound instructional principles and are powerful enough to enable students to learn a new strategy as quickly and as efficiently as possible. Some basic principles that have been found to facilitate this type of strategy instruction are the following:

Teach prerequisite skills before strategy instruction begins. Since most learning strategies are designed to enable students to use skills in a problem-solving context, those skills that are required for successful strategy use should be mastered *before* instruction in the strategy begins. By teaching the necessary prerequisite skills prior to strategy instruction, only those students who are prepared to benefit from instruction in a given strategy will be involved and instruction will be more efficient because prerequisite skills will not need to be covered during strategy instruction.

Teach regularly and intensively. Strategies need to be taught consistently which means daily exposure to strategies instruction. To ensure intensive instruction, both teachers and students should set daily, weekly, and semester goals related to strategy acquisition and generalization. Students should specify how much work will be accomplished and the

kinds of behaviors and attitudes they will try to incorporate as they complete the task. Teachers should set goals regarding how much to accomplish with each student within a given time period. Well-defined and ambitious goals tend to increase the intensity of instruction and the overall progress of students.

Emphasize personal effort.
Students need to understand that successful problem solving, in the simplest terms, is related to choosing a strategy that can effectively address the demand of the setting and then trying as hard as possible to use an appropriate strategy correctly. Teachers should teach their students that the formula for successful problem solving in an academic setting is:

Appropriately chosen learning strategy + Personal effort = Successful problem solving

Require mastery. Students are more likely to generalize a learning strategy when they can proficiently perform the strategy at the specified mastery levels. Two dimensions constitute mastery performance: *correct performance* of a given strategy and *fluent* use of the strategy. Initially, strategy instruction focuses on students acquiring and performing strategy routines correctly. After they have learned how to use the strategy correctly, the instructional emphasis must shift to increasing the speed and fluidity with which they use it.

Integrate instruction. While the instructional stages are arranged in a logical order, strategy instruction appears most effective when several of the instructional methods are integrated throughout the entire instructional process. For example, the generalization activities appear to be most effective if generalization is forecasted and emphasized in all the instructional stages. In addition,

strategy teachers need to recognize situations where earlier stages of the instructional process need to be reviewed, e.g., when a student would benefit from observation of another model or from additional rehearsal of the steps of the strategy.

Emphasize covert processing.
Throughout the instructional process, teachers need to deliberately discuss and demonstrate the covert processes involved in performing the strategy. Effective strategies teachers not only demonstrate the overt behaviors involved in the strategy, but they also teach students how to think about the strategy and the processes involved by telling them about and modeling those covert processes.

"Teachers should set goals regarding how much to accomplish with each student within a given time period."

Emphasize generalization in the broadest sense. Over time, the focus of instruction should shift from teaching students to use a task-specific learning strategy to meet the demands associated with a specific problem to a focus on how strategies can be used to address similar problems in other areas. Students should learn to be flexible and to adapt the processes involved in the task-specific strategy to meet a variety of needs in other problem situations.

A Model for Teaching Learning Strategies
The information presented in

the previous two sections provides the underpinnings for a model for teaching learning strategies. Specific instructional stages (see Chart on pg. 5) have been identified; the time required to implement the procedures associated with each stage varies from a single instructional period to several instructional periods or weeks for some stages.

Two instructional elements have been incorporated in each instructional stage to promote motivation and learning. First, each stage includes advance, lesson and post organizers. An advance organizer at the beginning of a lesson allows the teacher to gain students' attention, review previous learning, state the goals of the current lesson and their relationship to previous learning, personalize the lesson for students, and communicate expectations. Advance organizers were covered in detail earlier in Strategram (Vol. 1, No. 5). Lesson organizers occur throughout the instruction to cue organization, relate new learning to previous learning, and state expectations. Post organizers at the end of the lesson prompt students to review the content and check whether goals have been accomplished. Second, goals are set for each lesson and performance is evaluated at the end of each lesson.

The instructional stages and the key behaviors associated with each stage follow on page four. Stage 1 is explained below; Stages 2-8 will be included in other issues of Strategram this year.

Stage 1: Pretest and Make Commitments
The major purposes of Stage 1 are to have students *want to* make a commitment to learn the strategy and to establish a baseline related to how each student is currently performing in meeting the targeted setting demand. By identifying a specific setting demand encountered in many of their classes, establishing how they are performing with regard to this demand,

and explaining an alternative approach(es) or strategy(ies) for meeting this need, students are led to the following conclusions: (a) they are not meeting a particular setting demand in school and are at-risk for failure; (b) their failure is a function of not knowing the best strategy for the task at hand; (c) there is an alternative approach (strategy) that can be used to produce success once it is learned and applied through consistent effort on their part; and (d) other students with similar difficulties in school have experienced success after using the new strategy.

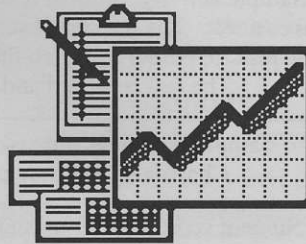There are two phases of instruction within this stage:

Phase 1: Orientation and pretest. The purposes of the orientation and pretest phase are to introduce students to the importance of jointly (i.e., the teacher and the student) determining *how* they are approaching a specific curriculum demand and to try to "figure out" what strategies are being used effectively and what current strategies/learning habits need to be modified or changed altogether. During this phase, students need to understand that their performance on the pretest will not affect their grade in the class and that deficits identified in the pretesting process are specific to the setting demand and are not indicative of generalized deficiencies or inadequacies in the student. During this phase, the teacher should:

1. Give students rationales for this instructional phase.
2. Provide an overview of the entire Pretest and Make Commitments Stage and relate it to the remainder of the instructional process.
3. Discuss how decisions will be made jointly regarding strategies instruction.
4. Assess how students perform relative to a specific setting demand. Include

observations of the students' strategic processes as well as analyses of the products resulting from these processes.

5. Use materials and tasks from the regular classroom.
6. Score the student's products, compare scores to the mastery criteria, and determine whether the strategy is appropriate for the student.

Phase 2: Awareness and commitment. The purposes of this phase are to make students aware of what was learned about them as learners as they were observed performing tasks and through the analysis of the products that they produced and to give them a general idea of the strategy that they can choose to learn as an alternative to their current approach to the task. Students will make commitments related to learning the new strategy, and the teacher will make a commitment to students to teach the strategy in a manner that will promote the student's mastery and generalization of the strategy.

1. Review the results of the pretest. Discuss the student's performance according to *categories* of strengths and weaknesses.
2. Briefly describe the alternative strategy and its potential benefits.
3. Describe what is required (in terms of time, energy, and commitment) to learn the strategy.
4. Describe the kinds of results other students have achieved after learning the strategy.
5. Ask the student if he/she is

> **"Students will make commitments related to learning the new strategy, and the teacher will make a commitment to students to teach the strategy..."**

willing to make a commitment to learn the new strategy.

6. Explain the commitment the teacher is willing to make to effectively teach the strategy.

Check-out the chart on page 4!!!

Stage 1: Pretest and Make Commitments

	Key Behaviors	Sample Statements/Materials/Activities
Phase 1: Pretest and Make Commitments	**Give rationales for this phase of the instructional process.**	"We will do the Pretest to determine how you _____ _____ now, to help us decide whether you would benefit from learning a strategy for _____."
	Provide overview of the entire Pretest Stage and how it is related to other stages.	"After you take today's test, we will decide whether you need to learn a strategy and whether you are willing to make a commitment (to learn it). If you are, then we will begin the instruction. First, I will describe the parts of the strategy and model it. Then, you can learn the steps and practice using them."
	Discuss how decisions will be made regarding instruction on strategies; discuss student role.	"After we know how well you take tests, we will decide together how well you do and whether a learning strategy to take tests would help."
	Assess how students perform relative to a specific setting demand, including observations of student's strategic processes and products.	Sample activity: Student reads a chapter, writes sentences, or takes a test. The teacher observes how long it takes to complete the task, the order in which the student completes sections, etc. The test is scored and error analysis completed.
	Use materials and tasks from the regular classroom.	Sample materials and tasks: Regular science textbook. Chapter test from regular social studies class.
	Score student products, compare scores to mastery criteria, and determine appropriateness of strategy.	Student score = 69%, mastery criteria = 80%, student would benefit from strategy. Student score = 100% completed sentences, uses only simple sentences; mastery = 100% complete sentences, 50% complicated; student would benefit from strategy.
Phase 2: Awareness and Commitment	**Review results of pretest; discuss performance relative to categories of strengths and weaknesses.**	"On this pretest, the score was ___. All of the sentences included capital letters and periods. Sentences two and five were run-on sentences."
	Describe (briefly) the alternative strategy and its benefits to success at school, home, and work.	"The Sentence Writing Strategy can be used to write complete sentences including simple and even compound-complex sentences. You can use it anytime that you need to write anything for school assignments, on the job or letters and notes at home."
	Describe what is required (in terms of time, energy, and commitment) to learn the strategy.	"Most students learn this strategy in ___ weeks. You will practice writing sentences as I teach them. I know if you decide to learn this strategy and work hard that you learn this strategy and improve your writing."
	Describe the kinds of results others have achieved.	"Other students who have learned this strategy have improved their writing." Communicate results by stating pre- and post-test scores or showing pre- and post-test products.
	Ask the student if he/she is willing to make a commitment to learn the new strategy.	"Would you be willing to learn a strategy to help you improve your writing?" "Will you make a commitment to learn a strategy to help you _____ _____?"
	Explain the commitment the teacher is willing to make.	"I will teach you the steps and show you how to use it. I will give you feedback about your use of the strategy to help you to improve your use of it."

This chart may be reproduced.

Sandy Stanley's "Prepositional" Bees

Sandy Stanley of Coon Rapids, Minnesota uses the "Bee in a Bottle" visual on page 6 to teach prepositions to her seventh grade English classes as a prerequisite for training in the *Sentence Writing Strategy*. "The students easily remember '*A bee flies____ the bottle*', and can insert a preposition in the blank. For the questioning student "super bee" can go <u>through</u> the bottle." Certain prepositions that do not match the visual (i.e., at, with, etc.) will have

Sandy Stanley
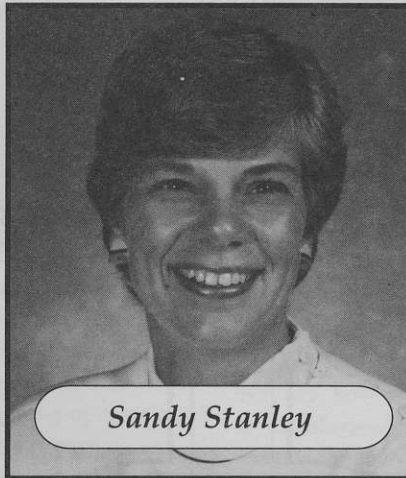
to be memorized.

Students in Sandy's class have made an easier transition to correct pronoun usage within the prepositional phrases, and correct placement and

punctuation of the phrases. "We can then take a 'kernel sentence' and expand on it or 'pop' it into a bigger and better sentence."

In strategies classes, Sandy also includes the "bee" sheet as one of her helpful hints for 'non-English' teachers. Any tool that helps them will undoubtedly help their students. Other reminders that Sandy distributes are:
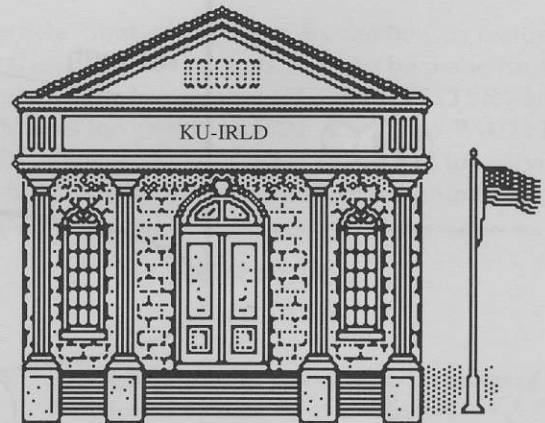"not is not a verb"
"never is never a verb"
"if in doubt leave it out"
(for misuse of commas).
Thanks to Sandy for sharing her tips and ideas!

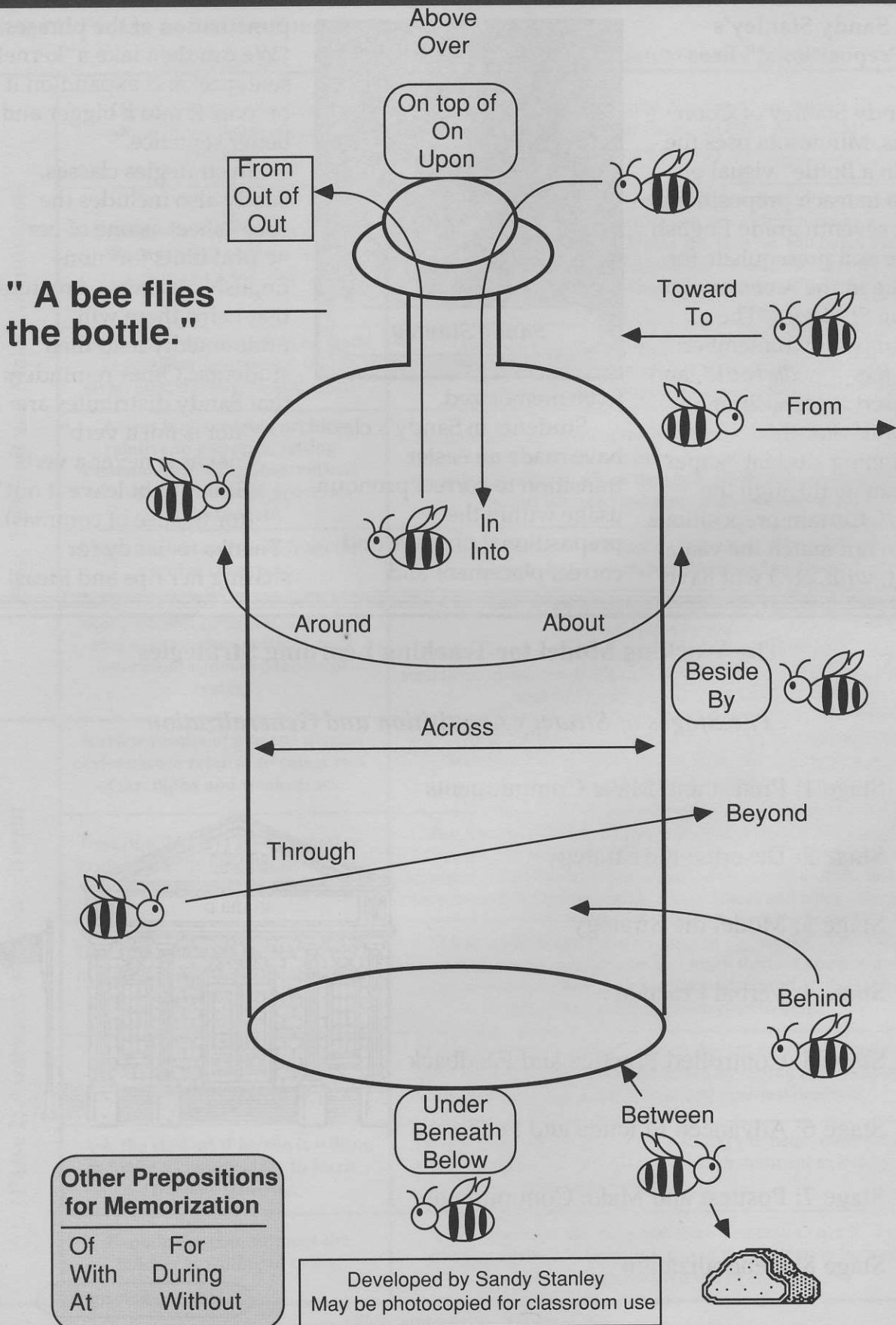
The Working Model for Teaching Learning Strategies

The Stages of Strategy Acquisition and Generalization

Stage 1: Pretest and Make Commitments

Stage 2: Describe the Strategy

Stage 3: Model the Strategy

Stage 4: Verbal Practice

Stage 5: Controlled Practice and Feedback

Stage 6: Advanced Practice and Feedback

Stage 7: Posttest and Make Commitments

Stage 8: Generalization

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Above
Over

On top of
On
Upon

From
Out of
Out

**" A bee flies _____
the bottle."**

Toward
To

From

In
Into

Around

About

Beside
By

Across

Beyond

Through

Behind

Under
Beneath
Below

Between

**Other Prepositions
for Memorization**

Of	For
With	During
At	Without

Writing for Strategram
by
Mary Lee, Editor
Strategram

Three years ago the Core Staff at the Institute for Research in Learning Disabilities established **Strategram** to provide a means of communication between teachers in the field and the Institute. **Strategram** is to be the main means of providing updates on the strategies, classroom tips, new techniques for implementation, and answers to questions about the Strategies Intervention Model (SIM). In order to fulfill the purpose of **Strategram** we need your help!

There are many ways in which you can contribute to **Strategram**. Some of these are:

1. Providing feedback about articles you enjoyed or changes you would like in **Strategram**.
2. Submitting general articles that could be published that would be of interest to the readers.
3. Asking questions about implementing SIM. These questions may be answered in a special section called the Mailbag.
4. Sharing classroom tips or supplemental materials that you have found helpful in teaching SIM. Charts, graphs, visuals and useful forms are especially welcomed.
5. Submitting manuscripts for use as general articles.

With the exception of your comments to us about **Strategram**, submissions to **Strategram** fall into one of four categories. These categories are: General articles, Spotlight or For the Classroom articles, Special articles, and the Mailbag.

General Articles

These articles deal with broad aspects of implementing the *Strategies Intervention Model*, classroom management, or the teacher's role in communicating with administrators, parents or students. These articles also feature specific techniques for classroom application. The length of General articles should be approximately one thousand to fifteen hundred words.

The author should identify points that he/she wants emphasized. These points can be emphasized in we call "blow-ups." A 'catchy' main title and subtitle should be included with each General article.

Spotlight /For the Classroom Articles

One of the most popular segments has been the "Spotlight." Spotlight and For the Classroom articles are designed to share classroom tips. Worksheets, puzzles, games or ideas from students would be appropriate for this category.

In order to submit an activity it is helpful if you include something that has been used regularly in the classroom. Please include: a detailed description of the activity, how it is to be used in the classroom, any materials needed, documentation of success, and any visuals that can be reproduced.

For Spotlight articles, please include a two to four hundred word summary of the education, background and current position of the submitter, along with a three by five inch photograph (preferably black and white). A daytime phone number of the submitter is also needed.

Special Articles

These articles are approximately two hundred and fifty to five hundred words long. Content for special

≡ From the Editor's Desk: ≡

Correction on Vol. 3, No. 1

The article "Strategic Banners" by Bonita Cox featured several examples of banners that can be made for the classroom. The banner titled **"GOOD WRITERS USE PENS"** was incorrectly labeled. The **'S'** in **WRITERS** should be colored yellow rather than blue. Identifying it in this way will preserve the pure mnemonic.

Subscription Information

Your subscription entitles you to ALL six issues of the current volume being published.

The current volume is Volume 3, and the publication period is from September 1990 to August, 1991.

When you subscribe, allow 6-8 weeks for processing and mailing.

articles may include: book reviews, data on SIM implementation, and solutions to any implementation problems.

Mailbag

The mailbag section is our "Dear Abby" column. Any questions that you would like to have answered by the IRLD staff may be submitted to the Mailbag. Other teachers frequently have similar questions and therefore also benefit from answers to these questions We would also like to hear about any "good news" that you have. These can be used to motivate administrators, teachers, parents, and students to commit to learn a strategy.

Things to remember when submitting articles:

1. All articles cannot be accepted for publication due to space and topic constraints.

2. IRLD staff review all articles to ensure they are consistent with elements of SIM.

3. Articles and pictures cannot be returned.

4. Revisions to articles are made at the discretion of the IRLD staff and the editor. An attempt is made to contact and discuss major changes with the author.

5. Please remember to include your name, address, and telephone number along with your submission.

Communication is a two way street and others will mostly certainly benefit from your ideas. So keep the lines open by contributing to **Strategram** NOW!! Send submissions to **Strategram**, University of Kansas Institute for Research in Learning Disabilities, Room 3061 Dole Human Development Center, Lawrence, Kansas 66045-2342.

Keep those cards and letters coming!!!
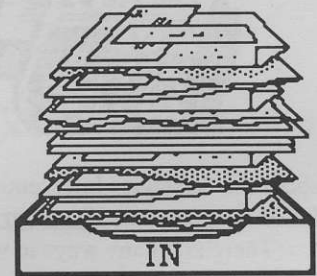
CLD Award to Frank Kline

The Council for Learning Disabilities announced that the 1990 award for Outstanding Research in Learning Disabilties has been awarded to Dr. Frank Kline, Wichita, Kansas. Dr. Kline's research on feedback routines for instructing students with learning disabilties was conducted in collaboration with The University of Kansas Institute for Research in Learning Disabilities. An example of Dr. Kline's work can be found in Strategram Vol. 2, No. 4.

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