Strategram ™

The "Poetry" of Strategic Instruction

— *Part Two of the "Learning Through Apprenticeship Series"* —

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Throughout the process described in Strategram , Volume 5, Number 2, the apprentice must master the subtleties of learning with regard to problem solving, monitoring of success, reflection, and using each experience to build a cumulative knowledge base and "tool box" of useful strategies. While taught both directly and indirectly by the master learner, these cognitive and metacognitive skills must be a constant ingredient in the master's pedagogy. In addition, during a learning apprenticeship, strategy instruction must be viewed not only in linear fashion, as is easy to do if instruction is seen as movement through eight stages of acquisition and generalization, but as an opportunity to loop back through instructional stages and strategies whenever the teachable moment allows.

The apprenticeship relationship between learner and master allows the master teacher to engage in the artistic component of the teaching process. Perhaps this is what we might refer as the "poetry" of strategy instruction. Here, the master teacher takes advantage of the teachable moment. The master teacher does not ignore the immediate needs of the students as these needs relate to efforts to develop Good Information Processors, but uses real-life academic demands to enhance strategy instruction for both task-specific and cognitive/metacognitive strategies. For example, a strategy teacher might want to help students develop the writing skills and strategies necessary to meet the writing demands of content classes, and may be currently teaching the Sentence Writing Strategy. During that process, the teacher looks for the opportunity of the teachable moment at all times. Let's say a student has reached the point where he can write simple sentences which meet the criteria established in the Sentence Writing Strategy. However, the teacher notices consistent errors in subject/verb agreement. The teacher notices this as a teachable moment, an opportunity to loop back through the stages of acquisition, to create with the student a "quick and clean" strategy for subject/verb agreement, and to teach that new strategy to the student. In essence, the apprenticeship concept and SIM's stages of acquisition and generalization become an umbrella instructional strategy for teaching both task-specific and cognitive/metacognitive strategies.

Let's explore this cyclic or looping process further. The apprenticeship allows the master to "loop" or "spiral" instruction back and forth throughout instructional stages as the immediate context of instruction demands. This looping or spiraling may be approached informally over time by means of the master sharing with the apprentice the thought processes the master follows when working in one task area and the demands of immediate needs dictate a shift in strategy focus or instruction. Thus, through the learning apprenticeship strategy process, students learn to construct their own learning strategies as the need arises or the context of instruction changes. Constructing their own strategies is a skill that many students may miss if strategy instruction is too prescribed and static to deal with the immediate needs of the learner. In sum, the apprenticeship model has as its major outcome not only the development of

"Thus, learning apprenticeship seems appropriate as one way to implement strategy instruction."

individuals who are competent in skills and strategies, but, and more importantly, the development of individuals who know how to creatively solve problems and develop unique solutions to problems which were not previously encountered.

While recognizing that in the past the apprenticeship concept has been traditionally linked with skilled craftwork, I believe it holds promise for today's teachers, especially teachers working with students most challenged by a sometimes "unfriendly" educational environment. The learning

While looking to the past to solve present-day problems needs to be approached with caution, I can't help but wonder that perhaps the apprentice and master learner relationship might hold promise for the field of education, especially with regard to instruction in higher-order thinking skills. In fact, I believe the master and apprentice model is a logical extension of learning beyond basic skills and knowledge acquisition and is already current practice in many effective classrooms today. For example, I once had the opportunity to observe a master teacher at work with a class

feedback of the group. In addition, there was much teacher and student talk about what was being written and how to write it. More specifically, students were engaged in thinking aloud about the writing process, organizing their thoughts, writing initial drafts, revising and editing their work, reacting to the thoughts of and supporting others as they wrote, or

> **"...learning apprenticeship is used to teach students the cognitive and metacognitive skills which make SIM a true strategy system."**

preparing to "publish" their work. Their instructor was either modeling the writing and thinking process as he wrote with the students, engaging in corrective feedback sessions with the students, or receiving feedback *from the students* concerning the writing he was producing. In addition, students were working in cooperative groups reacting to and sharing their thought processes and knowledge related to a particular writing task. The roles of master and apprentice were shifting not only between students but the teacher as well. In short, this general education classroom version of learning apprenticeship had both the instructor and the students teaching and modeling cognitive and metacognitive attributes for the greater part of each class session in addition to direct instruction in skills and strategies supportive of individuals involved in the writing process. What was particularly interesting was that the real-life demands of the writing process drove the skill and strategy instruction provided by the instructor. For example, when a student was having difficulty generating an attention grabbing introductory paragraph, the instructor shared that one way he grabbed the reader's attention was to: 1) think of a personal experience similar to some aspect of the paper he was writing; 2) imagine

LEARNING APPRENTICESHIP
HOW do you do it?

Analyze Your Own "Cognitive & Metacognitive Approaches to Learning & Problem Solving

Aspire to Constantly Exhibit Your "Good Information Processor" Characteristics for Students

Describe & Model Strategic Learner Thinking Processes Throughout Instruction

Encourage & Expect Students to Acquire and Deploy Strategic Learner Behaviors

apprenticeship approach to strategy instruction encourages the learner to make the leap from passive acquisition of facts, skills, and strategies to application of knowledge, skills, and strategies to real-world tasks and problem-solving situations. Thus, learning apprenticeship seems appropriate as one way to implement strategy instruction so that the goal of development of independent, life-long learners is achieved.

of creative writing students. This class operated in sharp contrast to many of the surrounding classes in a number of ways. One of the first things I noticed was that all students were engaged in the actual craft of writing. Second, the teacher emphasized *dialogue* as the primary method of instruction. Dialogue is when one offers thoughts and assumptions to others expecting those thoughts and assumptions to be enhanced by the collective

that he was telling a friend about the experience; 3) "embellish" the original story to make it even more interesting, and; 4) write it down as a part of the introduction to the paper. The instructor then modeled precisely how he did this, asked the student if the student liked and understood the approach, and then guided the student through the process of creating his own attention grabbing device. In about 30 minutes, the student had learned and applied a new strategy to an authentic task.

Obviously, this approach to instruction could be seen as an organizational nightmare by those who are using an approach in which lecture or teacher-led direct instruction is the primary method of instructional delivery. Indeed, learning apprenticeship certainly could be difficult to accomplish at the initial level of strategy instruction and student awareness. It might be most effective for those students who are familiar with the strategic learner concept and are ready to regularly apply a learning strategies approach to successful completion of content-course tasks. However, that doesn't mean that instructors should wait until initial strategy instruction has been completed. The initial focus of strategy instruction may be on task-specific strategies, but instruction can be delivered by means of a learning apprenticeship environment. Further, so called teachable moments, as

discussed earlier, allow the focus of strategy instruction to include cognitive and metacognitive strategies. Perhaps the learning apprenticeship, while implemented throughout the instructional process,

becomes more powerful for those students who have learned several strategies and are generalizing or about to generalize strategies to real content class demands and other authentic assignments.

LEARNING APPRENTICESHIP
WHAT is it?
Master Learners Working with Apprentice Learners by:

Constantly Modeling Cognitive & Metacognitive Strategies for Apprentice Learners by Thinking Aloud

Capitalizing on Teachable Moments

Problem Solving Collaboratively with Apprentice Learners

Co-Constructing Strategies with Apprentice Learners

Using the Acquisition & Generalization Methodology as a Holistic Instructional Strategy

A STRATEGIC LEARNER APPRENTICESHIP

Recently, I have had the opportunity to develop and implement a program designed to realize the power of SIM by means of the learning apprenticeship concept. Specifically, SIM has formed the theoretical backdrop for the creation of an intervention for at-risk learners at the university level called the Strategic Learner Apprenticeship. This intervention has, at its core, instruction in specific learning

strategies such as Theme Writing, Sentence Writing, First-Letter Mnemonic, and Paraphrasing Strategies among others. In addition to and after initial SIM strategy instruction in one or two strategies, instruction in how to create new learning strategies, designed to meet the specific demands of the student's university-level courses, is offered. In most instructional sessions, learning apprenticeship is used to teach students the cognitive and metacognitive skills which make SIM a true strategy system.

The masters, in this case, are called *strategic instructors*. Strategic instructors teach students learning strategies and co-construct new strategies with students which meet the immediate content demands of the

student's university courses. For example, when a student was having difficulty deciding which of the professor's comments to include in his lecture notes, the strategic instructor and student co-constructed a notetaking strategy which included recognizing instructor cues that signified the importance of elements of the lecture material. During the co-construction activity, the strategic instructor took care to constantly think aloud and share his thinking processes. As part of the instructional sequence, the student tape recorded an actual lecture and watched and listened as the strategic instructor modeled the notetaking strategy and shared his thought processes. Later, the student assumed ownership of the notetaking strategy. Thus, strategic instructors share and model the thought processes they utilize when problem solving and completing academic tasks. In sum, their focus is on teaching strategies and on teaching how to use strategies when necessary to learn content material. In this learning apprenticeship, whenever opportunities present themselves for overt demonstration of cognitive and metacognitive skills in the instructional process, strategic instructors think aloud and model

their own problem-solving processes. In another example, during corrective feedback, instead of only pointing out what the student did right and what she needs to correct relative to a particular strategy, the instructor thinks aloud and models the process she is using to locate the students errors. Thus, demonstrating cognitive and metacognitive processes can be accomplished during any stage of strategy instruction.

Instructors in the learning apprenticeship utilize a teaching routine which embodies both the characteristics of strategy instruction and the apprentice model. Specifically, strategic instructors analyze their own cognitive and metacognitive approaches to learning and thinking and constantly exhibit Good Information Processor characteristics in academic interactions with their students. In addition, strategic instructors work with students to co-construct new strategies when necessary and add these strategies to the student's existing strategy knowledge base. In turn, this expanded strategy base can be used to successfully complete immediate and future academic tasks. Also, strategic instructors expect and encourage students to acquire, adapt,

deploy and generalize strategic learner behaviors and learning strategies to the student's immediate content class demands. Finally, strategic instructors provide only as much support as the student truly needs and remove the scaffold of support as students attain independent, life-long learner status.

To summarize, this issue of *Strategram* reflects the Institute's desire to continually reflect upon SIM and move forward toward implementation of a systems approach to learning strategy instruction. One possibility for a comprehensive approach to strategy implementation, learning apprenticeship, has been offered in the spirit of practitioner and

Prize Match

by
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PURPOSE: This game helps students review for tests and other important information in a fun way!

MATERIALS NEEDED:
√ Prize match transparency
√ (Color in numbers with different colors using a transparency pen, write in prizes, and cover prizes with dark colored construction paper.

√ Blackboard/chart to record team or individual names plus points.
√ Available prizes.
√ Review sheets from which to ask questions.

DIRECTIONS:
1. Make a transparency using the example provided on page 5.
2. Decide on categories. It is possible to have just one category (i.e., States and Capitals; Synonyms and Antonyms; Steps of a Strategy). Create questions relevant to the categories selected.
3. Divide the students into teams. Students can play individually, but at least three people are

needed to play.
4. The students decide on a team name (stress appropriate names).
5. Pick one person from each to answer the first question. Use a different person each time. Team members may help answer the question, but one specific person acts as the spokesman.
6. Questions asked can be fill-in-the-blank or true/false.
7. Have the spokesmen stand up with their hands behind their back. With eyes closed they pick a number between 1 & 5 and bring the hand with that number of fingers from behind their back to
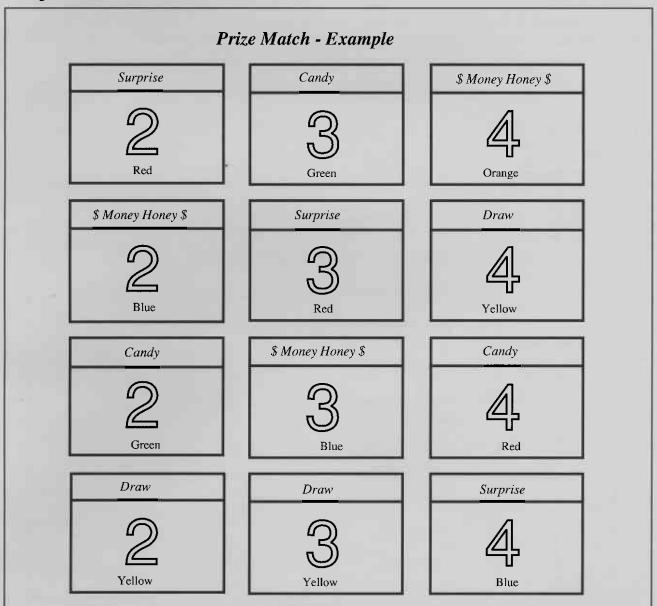
the front. REMEMBER that the students must keep their eyes closed until you tell them to open them (this helps prevent cheating). This will determine the number of questions they will answer.

8. The student with the highest number wins the opportunity for his team to answer questions unless two or more people have the same number of fingers then they cancel one another out. Then the person with the next highest number would win the opportunity.

9. The student answers the same number of questions as he/she held up in fingers.

10. The students win one point for each correct answer. The team can pick numbers up to the total points they have earned. For example, a team with a total of 5 points could pick a red two, and green three.

11. The object of the game is to match the prizes hidden under the numbers. When this occurs the team receives that specific prize (e.g., Candy may be located under the red 2, blue 3 and the green 4.) As in Concentration, if prizes don't match, the prizes are concealed again and another round begins.

12. The team can PASS or PLAY!!! For example, a team with three points may find it helpful to reserve their points and let the other team uncover some of the prizes. If that team fails to make a match, the team with three points can use the clues they gained to make a match during their turn.

Prize Match - Example

Surprise	Candy	$ Money Honey $
2	3	4
Red	Green	Orange

$ Money Honey $	Surprise	Draw
2	3	4
Blue	Red	Yellow

Candy	$ Money Honey $	Candy
2	3	4
Green	Blue	Red

Draw	Draw	Surprise
2	3	4
Yellow	Yellow	Blue

Scoring Sheets for the *Sentence Writing Strategy*

by

Janet Jones
Minneapolis, Minnesota

Janet Jones is an LD teacher at the junior high level and a SIM trainer. In addition, she collaborates with regular eight and ninth grade teachers as well as running study skills groups with 7th graders. Janet uses the two sheets (shown below and on the following page) when scoring and giving feedback during the *Sentence Writing Strategy*. These sheets are to be used on controlled practice series 4 for simple sentences and series 6 for compound and complex sentences. They are useful when working with large groups.

Janet found that the score sheets used for the pre/post tests didn't cover the criteria needed for student feedback or the types of sentences required for those lessons. These forms have been used during training and are viewed as very practical.

SIMPLE SENTENCES SERIES #4 EVALUATION FORM

STUDENT'S NAME _____ DATE _____

YES	NO	
		Product contained at least six sentences.
		Each sentence had a subject and a verb.
		Every sentence began with a capital.
		Each sentence ended with the proper end punctuation.
		Every sentence was about the topic.
		Every sentence made sense.

The product contained at least one of the following sentence types.

		S V
		SS V
		S VV
		SS VV

This form was developed by Janet Jones and may be reproduced

COMPOUND & COMPLEX SENTENCES SERIES #6 EVALUATION FORM
(Circle one)

Student's Name_____ Date_____

YES	NO	
		Product contained at least six sentences.
		Every sentence was about the topic.
		Every sentence begins with a capital.
		Each sentence was correctly punctuated.
		Met requirements for types.

<u>Compound</u> or <u>Complex</u>
2 simple   2 complex
2 compound 1 compound

The product contained at least one
of the following sentence types:

YES	NO		
		S	V
		SS	V
		S	VV
		SS	VV

YES	NO	
		I, cl
		I; I
		ID
		D, I

Met Requirements_____ yes

_____no

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researcher "learning community." Hopefully, the ensuing dialogue stimulated by this article will lead to clarification and feasibility discussions of learning apprenticeship as a concept with the potential to enhance learning strategy instruction. Knowing that perhaps many more questions than answers have been raised with regard to implementation of the cognitive and metacognitive attributes of SIM through learning apprenticeship, I encourage your response to this introductory set of articles.

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