Self-Instruction

Why Is This Strategy Useful?

Self-instruction refers to a variety of self-regulation strategies that students can use to manage themselves as learners and direct their own behavior, including their attention. Students classified as eligible for special education services may benefit from self-instruction strategies which provide verbal cues to help students regulate their learning. Self-instruction is contrasted with external instruction because it aims to gradually withdraw teacher’s support and increase the student’s active participation in the learning process. This strategy is appropriate for students of all grade levels and abilities and has been shown to be effective for those with learning disabilities.

Description of Strategy

With this approach, students are taught to pose specific questions about what they need to do, what they already know, and what they need to self-monitor. Another important aspect of self-instruction is exposing students to a large variety of tasks requiring different strategies. Students need to analyze the task structure, compare and contrast the structure of various tasks, and choose a proper strategic approach. The teacher introduces students to self-instruction for use in solving arithmetic problems. First, the teacher models the use of self-instruction to solve a problem. To do this, the teacher verbalizes each step of solving the problem by making statements like, “first I need to…”, “now I do…”, and “so the answer is…”. Then, the teacher gives the student similar problems to try. The teacher prompts the student to verbalize the self-instruction. The teacher uses praise to reinforce correct verbalizations of self-instruction and solutions. The teacher gradually fades the prompts and praise until the student can use self-instruction on his or her own.

Research Evidence

At least one randomized controlled trial provides evidence to support self instruction. In the study, 12 first and second grade students of average ability were randomly assigned to three experimental conditions and a control. The two measures were the number of correctly answered arithmetic problems and the number of arithmetic problems where the student stated the self-instructions they had been taught. The experimental groups that received self instructional training and rewards improved more from baseline to treatment than the comparison group who received rewards only.

Sample Studies Supporting this Strategy


This study investigated the impact of training nine first- and second-grade children to use a full self-instructional regimen, and then differentially reinforced the use of self-instruction only, accuracy only, or both self-instruction and accuracy. Three comparison children received no training in self-instruction and were reinforced for accuracy only. Children improved dramatically in academic accuracy subsequent to self-instructional training, independent of the use of self-instruction and of the specific behavior consequated. Children who were reinforced for using self-instruction did use self-instruction, and those who were not, did not. Comparison group children showed little improvement until training in problem-solving strategies was given after
nine days of reinforcement for accuracy. Self-instructional training is discussed as one type of event that increases the likelihood of accurate performance. Its effectiveness may be explained in terms of a teaching strategy rather than in terms of modifying cognitive processes.

**Sample Activity**

**Source:** adapted from Roberts et al. (1987)

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<th>Sample Activity</th>
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<tr>
<td>The teacher writes the problem: 4 + _ = 10.</td>
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<td>Model out loud, &quot;First, I need to read the problem. Four plus some number equals 10. I put four dots over the 4 and put dots over the blank until I get 10. 1, 2, 3, 4, and 5, 6, 7, 8, 9, 10. Now I count the dots over the blank. 1, 2, 3, 4, 5, 6. There are six dots over the blank. Six is the answer so I write it in the blank. Four plus six equals 10.&quot;</td>
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**Additional Resources**
