Directions for Teachers

Purpose and Rationale

The purpose of the Learning Toolbox website is to help students with learning difficulties to become more effective learners so that they can meet the increasingly rigorous academic demands of today's schools. The Learning Toolbox is designed for use by three groups: students, teachers, and parents.

Students

The Learning Toolbox is designed for independent use by secondary level students with learning difficulties. Some of these students have been identified as having learning disabilities or Attention Deficit Hyperactivity Disorder; but, many of these students have no identified disabilities and are still experiencing difficulties meeting the demands of their coursework. Students with learning difficulties have one or more of the following characteristics, which interfere with mastery of school learning.

1.) Passive learning. When students with learning difficulties approach a learning task, they do not lay out a plan for mastery of the task.

(2.) Learned helplessness. When such students are confronted with a difficult task, they either avoid the task or they rely on others (either parents or teachers) to structure the task so that they can master it or just "get through it." Both reactions are the result of a long history of failure and the students' beliefs that they cannot learn.

(3.) Weaknesses in cognitive processing. Some of the students have difficulties in cognitive processes necessary for mastery of academic learning (e.g., memory, language, thinking processes, metacognitive skills, and language).

(4.) Limited generalization. Some of the students have difficulties transferring learning of a particular skill in one context (e.g., science) to applying the skill in other contexts (e.g., English).

The design of the Learning Toolbox takes into consideration these learning difficulties. The learning strategies and instructional model underlying the Learning Toolbox approach are aimed at assisting students with learning difficulties to become active learners and take

the initiative in learning. Because of the nature of the students' difficulties, the website was designed to require limited reading, use of clear graphics as instructional aids, and avoidance of distracting visual and auditory stimuli.

The Student Section of the Learning Toolbox was designed to be used independently by secondary students with learning difficulties because the type of instruction embodied in the Learning Toolbox approach may not be available in the schools. In contrast to specific instruction designed to meet their learning needs, many secondary students with learning difficulties are provided with general tutoring for the purpose of passing them through.

Teachers
The Teacher Section of the Learning Toolbox is designed for both special education and general education teachers who work with middle school or secondary level students with learning difficulties.

While the Student Section of the Learning Toolbox is designed for independent use by secondary students with learning difficulties, middle school students may find the information too difficult to apply independently. Middle school students will benefit most when directly taught strategies by a teacher. While many secondary students may be able to apply the strategies on their own, others may also need teacher instruction. The Teacher Section of the Learning Toolbox provides both middle school and secondary level teachers a model for effectively teaching learning strategies to their students in specific content oriented courses.

Parents
The Parent Section of the Learning Toolbox is to be used by parents. This section is designed to help parents assist their children who are attempting to use the website independently. Or, they can also assist the teacher who is teaching the student to use the website by providing experiences at home to facilitate generalization of the strategies learned in school to

Instructional Approach

The instructional approach underlying the Learning Toolbox involves four components: assessment, strategy learning, course-specific instruction, and systematic instruction.

Assessment
Assessment is conducted in two areas. First, the specific problems that the student is having in his/her classes must be identified. This

involves analysis of the student's grades on tests and assignments in each class. Second, the Learning Toolbox Questionnaire is used to identify the specific problems that the student thinks s/he is having. This questionnaire includes checklists of items involving problems in each of the following eight areas: organization, test taking, study skills, note taking, reading, writing, math, and advanced thinking skills.

Strategy Learning
The Learning Toolbox provides instruction in strategy learning for students in each of the eight areas listed above. Research demonstrates that mastery of strategies results in students becoming more active learners, thereby helping them to perform better in their classes.

Course-Specific Instruction
The Learning Toolbox approach emphasizes strategy instruction that is specific to the courses students are currently taking. Strategies are selected and taught based on specific course demands (e.g., types of assignments) within context of the content emphasized in the course (e.g., history, earth science). There is no general training of strategies and skills (e.g., a time-limited workshop or class on study skills).

Systematic Instruction
The systematic instructional approach underlying the use of the Learning Toolbox involves five stages: advance organizers, modeling, guided practice, independent practice, and generalization. At the advance organizers stage, the strategy and its purpose are presented along with review of any related skills. This stage is followed by teacher modeling of how to use the strategy.

Guided practice is provided where the teacher supervises the student's attempts to apply the strategy to his/her coursework. At the independent practice stage the student applies the strategy to tasks specific to the courses s/he is taking. The teacher monitors the student's performance in applying the strategy, providing feedback as appropriate. Finally, the teacher provides opportunities for the student to generalize the strategy to other courses and course demands.

How to Teach Strategies

Teaching these strategies effectively involves using a step process.

As you read each step, depending on how your browser is configured, a quicktime video clip will automatically play illustrating the current step.

If you know you do not have the quicktime plugin click here and follow the instructions otherwise proceed by clicking on the link in the lower right of this page.

Step 1
The first and most important step in using the Learning Toolbox is to secure the student's commitment to learning the strategies. It is critical to explain the benefits of mastering the strategies. Make sure that the students understand that they will have to work hard, but the payoff is getting better grades.

Print out the
Student-Teacher Commitment Agreement.

Step 2
Next, it is necessary to identify the specific problems that the student is having with his/her classes. Meet with the student and have the student write down all the grades that s/he is receiving in each class. Discuss which tasks are most difficult, and why.

Step 3
Use the Learning Toolbox Questionnaire in which there are questions related to each of the strategies on the website. Print the questionnaire and have the student complete it independently. Print a copy for yourself and complete it also. Then meet and compare your responses.

Step 4
Based on the analysis of the student's classroom performance and the results of the Learning Toolbox Questionnaire, identify those areas that are most in need of attention. Prioritize problems in the following order. First use strategies for organization, study skills, test taking, and note taking. Organization, which includes both time management and materials management, must be attended to first. Obviously, if a student does not have a study plan or does not use a planner, it is unlikely s/he will be able to perform adequately. Once problems in organization, study skills, test taking, and note taking are overcome, then problems in reading, writing, math, and advanced thinking can be attended to.

Step 5
Before meeting with the student, go to the website and study the strategy that "matches" the area of difficulty identified on the questionnaire. Also print it. Practice applying it to several tasks so you understand how it is used.

Step 6
At the first meeting with the student, go to the website. Use advance organizers to explain the purpose of the strategy and review any relevant skills.

Step 7
Model the strategy by first going over each of the steps. Use the examples on the website to model the use of the strategy. Then model its use in the context of a specific course assignment.

Step 8
Provide guided practice where you assist the student in applying the strategy to his/her assignments.

Print a copy of the strategy and have the student put this in a special Learning Toolbox strategy notebook. Memorization of strategy steps is not emphasized for most strategies. The students are to use the print copies whenever they are working with them. However, there are strategies in test taking that do need to be memorized so that they student can use these while taking a test.

Step 9
Continue with guided practice until you feel that the student is ready for independent practice. At school, work with the student's classroom teachers in all subjects to provide opportunities for independent practice. Get feedback from all the teachers as to the student's status in their classes.

Step 10
Have the parents assist in providing independent practice at home. Have the parent access the parent site of the Learning Toolbox so that they can learn how they can help their child at home.

Step 11
Work toward having the student generalize use of the strategy to other classes. One way to do this is to collaborate with another teacher. Together, you can plan specific opportunities for the student to apply the strategy they successfully used in one class to using in another class.

Step 12
Monitoring should occur at each step; i.e., the teacher should evaluate whether the student is mastering the strategy. If a strategy is not successful, go to the Resource Section of the website and select

another strategy that is appropriate for the same type of learning difficulty. Use the same approach described above to try this second strategy.

Step 13
After a student mastered one strategy, go on to teach other strategies to overcome the student's learning difficulties.