

The Empowering Learners Project

In Aurora, Colorado, the secret is out. Teachers are sharing their knowledge about learning and thinking with students to help them become autonomous learners.

In a quest to make schooling more effective, educators can choose from myriad solutions and programs designed to "fix it." Our district, to date, has offered classes in Madeline Hunter's Instructional Theory Into Practice, Teacher Expectations Student Achievement (TESA), Assertive Discipline, writing across the curriculum, thinking skills, 4-MAT, cooperative learning, learning styles, cognitive learning styles, peer coaching, reading in the content areas, and others.

To coordinate these disparate endeavors, we searched for a framework that would validate having different people attacking the same problems in different ways. We sought a banner that would unite our efforts. Finding a common link proved elusive *until* we turned our attention away from the programs and what teachers do and onto our students and the process of learning.

Now our rallying cry has become, "Let's empower our students with knowledge about how learning occurs." We call our program the Empowering Learners Project, and our goal is to share with our students what we as professionals know about learning and thinking. It doesn't matter, then, whether a teacher is using TESA, writing across the curriculum, thinking skills, or

learning styles. Our teachers tell their students what approach is being used, explain why, and help them assimilate and apply that knowledge in becoming independent learners.

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tially means four things: (1) teaching students what enhances and what impedes learning; (2) helping them recognize and further develop their own personal learning strengths; (3) teaching them specific thinking and learning strategies; and (4) passing on the responsibility for learning to them.

Learning Enhancement

First, we want our students to learn which behaviors and attitudes intensify learning and which inhibit it. They should know how novices differ from skilled learners and should be able to identify the characteristics of effective thinkers. A few representative examples will illustrate the variety.

The Hunter model. Teachers providing anticipatory set should also teach (1) the importance of focusing attention before attempting to learn and (2) the need to access prior knowledge in order to link new information to what is already known. Whether they use the term *anticipatory set* with students is unimportant. What is important is that teachers explain what they are doing and why. For another example, teachers using closure should explain how an immediate review of new learning increases retention. Their students should understand that by relating new information to personal inter-

ests, experiences, and needs in as many ways as possible, they are creating links to that information that will help them recall and apply it later.

Writing across the curriculum. Students who are asked to do mapping, webbing, or graphing activities should know that effective learners organize information in personally designed structures for storage in memory. They should also appreciate the power of "chunking" (organizing information in packages for efficient recall and use) and understand how the graphics they create help chunking to occur.

TESA. Teachers trained in TESA should explain to their classes why they persevere when a student doesn't respond immediately. Their students should know some critical differences between skilled and unskilled learners; for example, the skilled learner believes she can succeed; therefore, even when the answer isn't apparent or the first solution doesn't work, she keeps trying. On the other hand, if the problem isn't easy, the unskilled learner believes he can't do it and gives up too soon. What's more, students should be able to identify—and celebrate—examples of effort and perseverance in their own behavior and in that of their classmates.

Peer coaching. Peer coaching does not involve students directly, but it offers another opportunity to teach about learning. When the peer coach comes to observe, the teacher can explain the purpose of the visit: to provide feedback to help her be self-reflective and analytical about her work. She can become a living example of the importance of planning, monitoring, and reflecting on performance.

Personal Learning Strengths

The second area of concentration in our project involves (1) making students aware that different people have different learning styles and strengths and (2) helping them recognize their own strengths and develop additional ones. As with all the other goals of Empowering Learners, each teacher will include whatever information is relevant to the instructional theory or

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strategies he uses. The following examples illustrate what we have done.

Learning styles. Teachers knowledgeable about learning styles can share useful insights about learning strengths with their students. They can help students understand elements of their styles, such as:

- environmental preferences (At what time of day or in what type of lighting do I learn best?);
- structure preferences (Do I learn best from an authority figure, with friends, or by myself? Do I work best in a free environment or in a highly structured setting?);
- modality strengths (Am I a visual, auditory, tactile/kinesthetic, or emotive learner?);
- cognitive strengths (Am I a holistic or an analytical thinker? Do I categorize broadly or narrowly?).

Once a student has identified her own preferences, she can learn how to adapt learning tasks to her strengths and how to reinforce her areas of weakness.

Cooperative learning. One of the purposes of working in small cooperative groups is to learn from and help one another, not only in learning content but also in developing learning strengths. Teachers can stress the power of perceiving, representing, and communicating information in different ways. They can encourage students to teach each other from their special and particular perspectives. For example, a visual learner might represent information with a picture or chart, the auditory learner can ex-

plain the information in her own words, and a kinesthetic learner can add rhythm or movement to his presentation. Each can then explain to the others how he conceptualized his demonstration and help his classmates develop the ability to do likewise.

Writing across the curriculum. Teachers can point out the different ways writing tasks can be used to support modality preferences or cognitive strengths. For example, as a memory device, visual learners might be encouraged to draw illustrations, while auditory learners can rewrite information for a younger person. Holistic thinkers can turn sequential information into pictures, symbols, or Venn diagrams, while analytic thinkers might compose hierarchies, flowcharts, or webs. Further, teachers can stress that matching the writing activity to the style of the student can enhance the learning of difficult material and that practicing easy material through a learning style weakness can help develop new strengths.

Thinking skills. Teachers trained in thinking skills instruction can also address learning strengths. For example, the deep processing lesson from *TAC-TICS for Thinking* (Arredondo and Marzano 1986) teaches how to store new knowledge in memory for increased retention. The student learns to represent the information in four ways: visually, through self-talk, with sensory details (sounds, smells, and so on), and emotionally. As students learn the technique, they can also learn about modalities and how the four components relate to different learning styles. They should then understand that deep processing is a method of using their modality strength and at the same time strengthening areas of weakness.

Specific Learning Strategies

The third goal of the Empowering Learners Project is to teach specific learning and thinking strategies. In this instance, a guideline for teachers is to be sure, whenever giving an assignment, that students know the specific thinking strategies required to complete it. In addition to naming and providing

direct instruction in them, teachers should help students anticipate how those strategies might transfer to other classes and to situations outside school. Here are some examples.

Reading in the content areas. Teachers who have learned reading comprehension methods should not keep that knowledge a secret from their students. When conducting a pre-reading activity, such as having students pose questions for an upcoming reading assignment, for example, they explain the purpose of the activity. Their students learn that predicting and posing questions serve to focus the reader's attention, promote access to prior knowledge, help define main points, and raise the reader's level of engagement. After students understand the strategy, their teachers can help them anticipate other uses for it, for example, when viewing a documentary or listening to a lecture.

Thinking skills. The teacher who instructs his students in critical thinking should do more than teach strategies such as detecting errors in logic, evaluating evidence, or checking for support. Knowing how to check for evidence or justify a claim is not enough if a student is wildly impulsive or closed-minded. The teacher should also convey that critical thinking is dispositional in nature. That is, certain dispositions, such as the tendencies to seek clarity and accuracy, resist impulsivity, and remain open-minded, promote the use of critical thinking. The teacher should also help his students anticipate situations in and out of school in which critical thinking is important, for example, making consumer choices or political decisions.

Responsibility for Learning

The last goal of our project is to pass on the responsibility for learning to our students. We attempt to do this through pep talks, choices, and rewards. Pep talks can range from the cliché ("You can lead a horse to water . . .") to the highly personal ("I never realized my own responsibility for learning until . . ."). One teacher hung a banner of a quotation from her pep talk above the chalkboard: "The pri-

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mary cause of learning is the activity of the learner's own mind." Students discussed and then wrote their reactions to this sentence. They agreed almost unanimously that even the best teaching could not *make* them learn. They realized that their own effort or lack of it would ultimately determine their level of success.

In addition to pep talks, teachers should give students choices—not necessarily in learning outcomes but in methods of reaching them. Once students understand something about learning theory, they can easily explore how to approach a learning task. With the freedom to choose strategies and activities effective for their particular learning styles, they are more apt to assume responsibility for their own learning.

Last, teachers can recognize success with rewards. These might range from verbal reinforcements ("I noticed you really stuck with that difficult problem—good perseverance!") to points on a test ("Describe the learning strategies you used to prepare for this exam."). Students can also be encouraged to reinforce each other. For example, members of cooperative learning groups can evaluate each other for use of effective learning strategies or point out a learning strength they noticed in a classmate.

Pep talks, choices, and rewards should occur often throughout the year. Frequent reminders will create a climate in which students think of themselves as powerful, autonomous learners and, as a result, begin to assume responsibility for their own progress.

Breaking Old Habits

One year into the program, interest in the Empowering Learners Project has spread widely among our teachers.

However, they are finding the philosophy easier to agree with than to put into practice. Thinking of students as dependents is a perspective difficult to replace. Even though they agree students should understand the process of learning, the old habit of keeping secrets persists.

For example, one teacher reported negative effects from using extended wait-time in class. Asked what explanation she had given her students for making this change, she replied, "I didn't tell *them* what I was doing."

Her staff development instructor probed, "But that's the whole point of Empowering Learners—letting the students in on the strategies of learning."

"We can't do that," she replied. "We would teach ourselves right out of a job!"

Nevertheless, some teachers are finding that when they explain the learning principles on which class activities are based, students begin to sense their own potential and become more active in their own learning. In one case, an entire class suggested to their teacher how he should revise the course for the following year. In another, a group of freshmen became so involved in their science class that they began calling their teacher in the evenings to ask technical questions.

Thus far in the program, we have seen improvement of *instruction*. Explaining the theory base to students has helped teachers become more strategic, more aware of the link between their instruction and the resulting learning of their students.

The ideal is still to come—improvement of *learning*. As one teacher said, "The Empowering Learners Project isn't about my doing my job better. It's about teaching my students to do *their* jobs better." That's exactly it. □

Reference

Arredondo, D.E., and R.J. Marzano. (1986). *TACTICS for Thinking* Training Program. Alexandria, Va.: ASCD.

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