Teaching to Students' Learning Styles

Barbara Quirk
The scene is familiar to all of us. We stand in front of the classroom explaining something to our students—something we believe is important enough to warrant their close attention. Some students pay us that attention; others doodle or fidget or stare out the window. Our reaction to the drifters tends to be anger, often mixed with hurt. Or if we can keep our more personal emotions in check, we at least wonder how some students can ignore us even when we've made clear how important it is that they listen closely. The behavior seems self-defeating as well as rude. And in many cases that is true—but not, perhaps, in as many cases as we might think. Someone may "be home" after all, learning successfully despite the absence of conventional visual clues of attention and processing. What in many cases we may be seeing here are "learning styles" that we simply are not familiar with—or at least not comfortable with. And it often turns out that these alternative learning styles need to be encouraged more than is common in traditional curricula.

According to Bernice McCarthy, a pioneer in the field of students' learning styles, it's likely that most of our doodlers are processing the information we are presenting—but doing it in a way that, though it may make us uncomfortable, is most natural and most successful for them. In terms of the now-familiar "left brain"/"right brain" scheme, such students are likely using
the right side of their brains to engage in non-linear (and therefore less conventional) spatial, perceptual, and abstract thinking.

At all stages of learning, indeed, different students may process information differently, beginning with physical perception and advancing through understanding. Some feel their way along, mainly using their physical senses to deal with concrete reality. Others are more abstract in their operations, using analysis and conventional reasoning to understand material. Similarly, some students need actual hands-on practice and application in order to comprehend material, while others are willing to watch and to listen and finally to reflect on the material which has been presented. All modes are valid and valuable, although as teachers we tend to be most comfortable with—and value most—the behavior shown by the listener/thinker. As Max Rennels put it several years ago, “Schools have systematically eliminated those experiences that would assist young children’s development of visualization, imagination, and/or sensory/perceptual abilities” (Rennels 1976). Our challenge as teachers, then, is to first understand the nature of these alternative learning styles and then, whenever possible, to adapt our lesson plans to account for them. The work of McCarthy is especially helpful to us in meeting these challenges.

McCarthy’s basic paradigm is based on the work of David Kolb, who in 1971 developed a four-sectioned, or “quadrant,” graph to identify four major learning styles based upon how people perceive and process information: the Imaginative, the Theoretical, the Practical, and the Intuitive (McCarthy, 1981).
The results of many other studies dealing with learning styles fit into Kolb's diagram, including the work of Carl Jung, Alexis Lotas, Anthony Gregorc, and that of McCarthy herself. Each has added insight into the different learning styles and the practical concern of how best to accommodate to them. A synthesis of these studies is pictured in Figure 2. On the right-hand side of the quadrant we have the Imaginative and the Theoretical learners. Imaginative learners are largely directed by their emotions and are most intently involved with matters that directly concern people they know or identify with. They need "people problems" to engage their full attention, and their decisions
are generally made on the basis of their concern for others. Such learners tend to delay their reactions somewhat, so they need time to reflect upon material before being asked to react overtly to it. Also reflective, but in a different way, are the Theoretical learners, who are directed by their intellects and most intrigued by intellectual concerns. Most comfortable when decoding symbols, these learners' decisions tend to be based on the logical, abstract processing of facts--facts they prefer to receive in rational, sequential presentations.

On the "left-hand" side of the quadrant we find two learning styles that are characterized by active experimentation. These are the "doers" in our
classrooms. One variation of this action-oriented style is the Practical learners. Such learners are directed primarily by their physical senses and are concerned with the practical matters of life, including getting the job done on time. The decision-making of such students requires accurate information, preferably learned through direct sense-experiences that are guided and structured. Also active, but more adventurous, is the last of the four types of learners noted in Figure 2: the Intuitive learner. Directed by their intuition and more concerned with finding the meaning behind an activity than in the activity per se, these learners are more concerned with values than are the other types in their decision-making about information. Like the Practical learner, the Intuitive learners learn through application of information rather than through abstract thinking or emotion-driven reflection; but these learners' conclusions tend to be intuitive leaps resulting from an unstructured, private trial-and-error approach to information and tasks. Teachers just get in the way.

Despite obvious overlapping (for which we can be grateful if we mistakenly tend to take graphs and paradigms as solid rather than fluid), each of the learning styles described above does suggest a somewhat different pedagogical approach (see Figure 3). The Imaginative learners seem to thrive in a classroom where discussions and group interaction are frequent. Material is most effectively presented to such students when given in terms of human problems, and students of this sort should be given time to reflect upon the material before being asked to respond to it formally. The Theoretical learners need time to reflect as well, but are better off if they are allowed to do so privately rather than as part of a large or small group. These students do well in a teacher-centered and text-centered environment where information is provided in a structured, presentational mode. The "Practical" learners are
also best served by teachers who provide structure, but in their case the information needs to be provided in a way that allows the students to experience it in a physical way. In such a classroom, the familiar “coach” metaphor for the teacher becomes nearly literal, since the teacher provides to Practical learners plenty of step-by-step guidance in the physical experience and application of information. Finally, the teacher of students with an Intuitive learning style must try to create a student-centered classroom where individuals can work on their own rather than as part of groups. Such students respond to a rich envi-
McCarthy has shown that students need to develop the ability to perceive and process information in all four styles. She developed the 4MAT System to provide teachers with a tool for accomplishing this goal. In this system, instruction follows a clockwise circle from Quadrant 1 to Quadrant 4, allowing all students the opportunity to strengthen the use of both sides of the brain by having them experience learning in different styles. Even if that admirable goal doesn't seem feasible, however, the 4MAT model provides guidance to us as we try to provide enough variety in our lesson plans so that our students' different learning styles are at least partly accounted for.

What follows is a demonstration of how easily a common writing assignment--the book report--can be adapted to McCarthy's 4MAT System. Typically such reports turn out to be little more than a written summary of the plot and of little interest or value to student and teacher alike. Research into learning styles suggests other--and better--ways to go about this project. The following lesson plans are based on that research; they are presented not only in hopes of providing teachers with some practical teaching ideas, but also with the belief that the research can be adapted and applied to other English class activities as well.

Learners who fall in Quadrant 1, the Imaginative learners tend to prefer people-related topics and like to use their imaginations. However, they need fairly clear and concise directions to follow. The following is a sample lesson plan for a "book report" for Quadrant 1 learners.
Instructions to the student:

You are to create an advertising campaign which contains two types of ads for the novel you read. You must complete two of the four choices which follow. Your project will be graded on persuasiveness, organization, color, and neatness. You may either trace or draw the pictures. You may want to use stencils or run-on letters for your text. You will need to identify the audience to whom you are trying to sell the book before you begin working on your campaign.

Option 1:
Plan a television commercial for the novel. You must include all the necessary dialogue as well as a description of the action and pictures to accompany it. Write it in script format.

Option 2:
Design an ad for a magazine or newspaper assuming that the book was recently published and is being introduced through the use of your ads. Use a sheet of unlined paper with the lettering, copy, illustrations, or decorations either drawn or pasted on. Remember that spacing is important. Both magazines and newspapers use color.

Option 3:
Design a 2'x4' poster to be used in a bookstore window to advertise a new best seller. The poster should include all of the elements mentioned in Option 2. If you choose Options 2 and 3, they must be different. Consider appealing to different audiences.

Option 4:
Design a display exhibit which will showcase the novel you read. We can use the display case in the library. You are trying
to convince others to read this book, but you will want to consider including other books by the same author, or books with a similar theme. You might want to consider including posters, reviews, or even a written interview with the author.

Be sure that your complete ad campaign is persuasive.

Quadrant 2 learners, the Intellectual learners, approach material from a more intellectual viewpoint, but they still need clear, concise instructions.

Instructions to the student:
You are to construct a bulletin board in our room using one of the following sets of directions. Your bulletin board will be graded on content, style, neatness, color, and how well you fulfill the directions.

Option 1:
If your novel dealt with a controversial subject, such as euthanasia, AIDS, abortion, etc., divide the board into two sections — Pro and Con. Collect material for both sides of the argument. You may use direct quotes from your sources or paraphrase them. If it is a direct quote, be sure to use correct punctuation. Each of your statements should cite the source (e.g., Time). You may want to include some pictures or drawings.

Option 2:
Use the bulletin board to persuade your classmates to read the novel. Don't just tell them you like the book. You could include a character sketch of each of the main characters. Try using some interesting
quotes from the book which would make others curious enough to read the book. If you want to include a plot summary, don’t tell the entire story. Tell just enough to hook the reader. You might include a biographical sketch of the author, or reviews of other novels written by the same author if you particularly like his writing style.

Quadrant 3 learners, the Practical learners, need the opportunity to experience hands-on learning. These students want their activities to be practical and useful in some manner. They need more freedom than others to be independent learners.

**Instructions to the student:**

You are to construct a model of a stage setting which depicts a major scene from the novel you read. The scene you choose should be one which was significant in the development of the plot.

Each model must include a description of the scene and why it is important in the novel. Be sure to identify the novel and the author. Below are features of the scene which should be included if at all possible.

FOR A SCENE WHICH TAKES PLACE INSIDE:

1. wall coverings
2. furniture
3. props
4. lighting
5. characters

FOR A SCENE WHICH TAKES PLACE OUTSIDE:

1. appropriate trees, bushes, plants, grass
2. appropriate streets, sidewalks
3. any surrounding props
   (e.g., park bench)
4. lighting
5. characters

Below are some hints to help you get started. You do not have to use any of these ideas. You are only limited by your own imagination.

**Materials for the stage:**
1. shoebox
2. jumbo cereal box
3. hat box
4. stiff piece of cardboard

**Materials to use on the set:**
1. cloth
2. construction paper
3. typing paper
4. colored tissue paper
5. water colors
6. magic markers
7. crayons
8. colored pencils

Try using popsicle sticks or toothpicks as supports for cutouts.

When designing your set, you will probably want to draw from personal experience as well as information from the novel. Think about what you would expect to find in the particular scene you are using. What would it look like in a stage play or in a movie?

The model will be graded on authenticity, imagination, construction, organization, color, and neatness.
Of all learners, Quadrant 4 students, the Intuitive learners, most need the opportunity to use their intuition and independence. They prefer to discover on their own with little or no teacher intervention.

Instructions to the student:

You will be impersonating one of the characters in the novel you read. The only character you may not choose is the narrator. As the character (e.g., the main character or the main character's best friend) you are to present either live or on tape a first-person review of one or two important incidents that happened to the character in the book. The character does not have to agree with the narrator's description or analysis of the scene. You, the character, now have a chance to tell the story from your point of view.

Remember, the character is talking. Use the same language he or she used in the book. Also be sure to keep the character's personality the same; that is, if the character is basically shy, don't have him or her suddenly stand up to the class bully.

A variation on this idea, one particularly suited to the more creative of the Quadrant 4 students, allows them to use music as their central mode of responding to the novel.

Instructions to the student:

You may either compose an original theme song or assemble a group of popular songs, at least three, which are representative of the novel. You will want to consider the themes presented in the book, as well as the different moods.

Option 1:
If you choose to compose your own piece, you must hand in the score with both music and lyrics. You may choose either to perform your piece for the class—either live or on tape—or to have it performed for you by a classmate, again either live or on tape. You will need to give some background about your novel so that the audience can understand how the piece you have written represents the novel.

Option 2:
If you prefer to select several popular songs, there must be at least three. These songs could represent the theme of the novel, or each could represent a different section, event, mood, or character. You will need to give some background about your novel so that the audience can understand how the pieces you have selected represent the novel as a whole or the individual sections.

Be prepared to explain why you chose to write the musical pieces the way you did, or why you chose the particular pieces you use.

Research and practice in the field of learning styles (Dunn and Dunn, 1975; Guild and Garber, 1986; Butler, 1988) have indicated that when the school curriculum is adapted to the four learning styles in the ways modelled above, significant increases in content learning can occur. Such studies have also shown an increase in attendance after such curricular adaptation is made, particularly among those creative “right-brained” learners who often have a difficult time with conventional approaches to processing material. It is extremely important that these creative students have an oppor-
tunity to experience success outside the "arts" (Sintra, 1983). A cur-
riculum based on current research on learning styles will provide all
our students with chances to learn in ways that are most natural to
them. Such a curriculum will also provide students with the oppor-
tunity to use alternative learning styles—modes of learning with
which they may be less than comfortable, but which will enrich them
and, perhaps, make them more tolerant of other styles as well.

References

Butler, Kathleen. Learning and Teaching Style: In Theory and
Practice. Columbia, Connecticut: The Learner's Dimension,

Dunn, Rita and Kenneth Dunn. Educator's Self-Teaching Guide to
Individualizing Instructional Programs. Parker Publishing

Guild, Patricia and Stephen Garger. Marching to Different Drum-

McCarthy, Bernice. The 4MAT System, 2nd edition. Oak Brook,

Rennels, Max R. "Cerebral Symmetry: An Urgent concern for Edu-

Sintra, Richard. "Brain Research Sheds Light on Language Learn-
ing." Educational Leadership, May, 1983.

Barbara Quirk is the President of the Michigan Council of Teachers of
English and a doctoral student at Michigan State University.