LOOKING AT TEACHERS AMONG US
A WORKSHOP IN CONCEPTIONS OF TEACHING

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developed for future Supervisors of Observer-Interns

The following activities can be modified as necessary for time allotted and are designed for learners who have at least cursory teaching experience.

✍ INTRODUCTION (15-20 MIN)

Show video montage. As students watch, pay attention to verbal and non-verbal responses which may give insight into their opinion about each teacher.

"Ditto" from Teachers
"Mr. Tate" from The Faculty
"Jaime Escalante" from Stand and Deliver
"Mr. Keating" from Dead Poets Society

After viewing, engage the whole group in discussion. Draw on responses observed while viewing when discussing the following questions. *Be sure that in discussion, all students who posit an opinion explain why they feel that way.*

which of those teachers are good teachers?
which of those teachers are bad teachers?
what makes a teacher good or bad? (specific teaching practices, personal traits, personal beliefs, context, etc.)

Inform the group that all of the factors just mentioned (plus more) combine to create a conception of teaching. Each conception of teaching carries with it biases and judgments.

Let students know that today they will characterize various traditional conceptions of teaching and will apply these conceptions to authentic teaching situations. "Professional teachers only become professionals when they reflect on and choose a stance toward their calling that guides and sustains them in their important work of educating persons" (Fenstermacher 1986). They will need to look at the merits of each, remaining open-minded to teachers who demonstrate each kind of teaching conception. Additionally, these exercises will assist any teacher as he/she is faced with colleagues, administrators, parents, and even students who have conceptions of what good teaching is that are different from their own. By the end of this session the students will have information that will help them bridge the gaps between people who hold different conceptions of teaching.

✍ CONCEPTIONS OF TEACHING (90-110 MIN)

Read aloud the short intro called "The Teacher As . . ." (see Appendix A) that outlines four conceptions of teaching:

gardener
potter
midwife
provisioner

Part One:
Let students know that they will be working on this first exercise in groups of 3. Each group member is responsible for reading one section of the Fenstermacher article and sharing it with the rest of the group:

An Art Lesson (Appendix B)
A Math Lesson (Appendix C)
Grading Policies - contains two conceptions (Appendix D)

As they read, students should plan to share a brief description of the teacher(s) mentioned, the conception(s) of teaching illustrated, and 3-4 beliefs and practices in support of each conception. Groups should be prepared to report their beliefs and practices to the whole. If students need a reminder, practices include teaching techniques such as questioning, lecturing, and student discovery while beliefs include ideas about students and teaching such as moral or character education, constructivism, and the thought that all students can learn.

After 15-20 minutes, have students report out and write all the beliefs and practices under each conception on the board. If the subject of the context in which a teacher is teaching emerges from the discussion at any point, table it until a later time. After all groups have reported and all ideas are on the board, have the students discuss any discrepancies. The group that suggested the item under discussion can offer justification or can withdraw the item in light of the rest of the grouping. In this way the students will arrive at the definitions of each conception by working together with minor facilitation.

Part Two:
Students will continue discovering new conceptions of teaching. This time, groups of 5 will become experts on one conception:

didactic (Appendix E)
evocative (Appendix F)
tinkerer (Appendix G)
mimetic (Appendix H)
transformative (Appendix I)

Assign one conception to each group for all members to read and then discuss. Out of the discussion, all members should be able to identify 3-4 characteristics of their given conception. Thus each group will become an expert on one conception of teaching.

Once all students are familiar with their assigned conception (20-25 minutes), they will be responsible for sharing it with other students through a jigsawing process. Two members of each group will move to a different group where they will exchange their information for that of the group (10 minutes each). It is important that both the new members and the old members share their expertise with each other. Continue the process until all pairs of experts have visited all groups.

Bring the whole group back together and continue listing beliefs and practices that correspond with each conception of teaching on the board. Follow the same routine as earlier in making sure that each list is consistent for the corresponding conception of teaching. Remember, students will arrive at their knowledge with minor facilitation.

By the end of this study, all students should have information on the four Fenstermacher conceptions and the five additional conceptions from Axelrod.

✍ DISCUSSION OF CONTEXT (15-20 MIN)

Now that students are familiar with 9 standard conceptions of teaching, they need to examine their own beliefs about how these conceptions relate to the job that a teacher does. Lead a whole group discussion about the role of context in the formation of a teacher's conception of teaching using the following guiding questions:

> Do you think that a teacher's conception of teaching can change?
> What factors might change a teacher's conception of teaching?
> Might a teacher have one conception of teaching during 3rd period and another during 5th?
> What could lead to that difference?

In pairs have the students list as many contextual issues that may factor into a conception of teaching as they can. Keep in mind that not all students will agree that context plays a part here, but it is necessary to be open-minded and accepting of all opinions. There is no one right answer.

✍ A LOOK AT TEACHERS OF CLASSROOMS PAST (20-30 MIN)

Have students think back on their past experiences with teachers. Tell them to conjure up three or four teachers that they remember well. Encourage them to think about teachers they liked as well as those they didn't like. Students should label each teacher with the one conception of teaching that best suits that person:

gardener	didactic
potter	evocative
midwife	mimetic
provisioner	transformative
tinkerer	

After approximately 10 minutes, have the students discuss their responses with a partner. Their goal is to reach agreement between teacher descriptions and conceptions. If there were any teachers that seemed difficult to classify, introduce their descriptions to the whole group. Allow other students to ask questions to probe for more information about the teacher in order to make a decision. If there is a teacher who cannot be classified by the whole group, it is okay to leave that teacher without matching up one of the 9 given conceptions.

✍ A LOOK AT TEACHERS OF FICTIONAL CLASSROOMS (15-20 MIN EA)

Have the students watch a video clip of a teacher teaching. In small groups, have the students decide which conception(s) of teaching are being illustrated. Note that some opinions may be shaped by students who are familiar with the entire movie, but caution them to judge only on the clip given. For each conception they decide on, have them list as many supporting reasons as they can. (10 min) After the small group discussions, call on one group to present the conception of teaching that they think is best shown in the clip. After they present, take a vote from the whole group as to who agrees. Allow one or two dissenting opinions to state their case. If debate begins let it continue for a short time.

Repeat these steps with other video examples. Adjust the number of video clips to fit the time available or until the students have had enough.

Video clips:

"Mr. Keating" from Dead Poets Society

helping student compose poem in front of class

"Bill Rago" from Renaissance Man
testing students on Hamlet
"Economics Teacher" from Ferris Bueller's Day Off
calling on students during class
"Mr. Holland" from Mr. Holland's Opus
teaching football player about rhythm
"Herbert" from Teachers
simulating Washington crossing the Delaware
"Jaime Escalante" from Stand and Deliver
working with a student to "fill the hole"
"Louanne Johnson" from Dangerous Minds
explaining the Dylan / Dylan competition

✍ A LOOK AT THE TEACHERS AMONG US (30-45 MIN)

Now that students have knowledge about particular teaching conceptions and have had the opportunity to work with others in applying them, it is time for them to examine their personal preferences on individually.

Have students work individually to list 5-8 behaviors and practices that they have exhibited in their practice teaching. After 5-10 minutes, refocus the students and have them list 5-8 behaviors and practices that they feel are vital in the classroom. Let them know that these two lists may overlap, but that it is not necessary. Also acknowledge that many times what teachers are able to do in the classroom due to contextual factors (like those they listed earlier) does not match their ideal view of a classroom. For example an English teacher may feel that students should always learn through discovery, but in reality she needs to teach them grammar in a more mimetic or drill and skill fashion. Again, give the students about 5-10 minutes to complete their lists.

Challenge students to review their lists and decide which two conceptions of teaching that they have just learned about best describes the items on their lists. Have them categorize each item on their two lists beneath one or both of the conceptions of teaching.

- ✍ If the students find that most items do fall under one conception, have them think about whether they are comfortable with all elements of that conception or not.
- ✍ If the students find that most items do not fall under one conception, have them get creative and design a new conception which will encompass all the items on their two lists.

If students get stuck when faced with designing their own conception, give them an example.

> e.g. scientist – all students are generally the same, the teacher must look for the similarities and treat a class accordingly, experimenting with practices is okay in this conception

One way to wrap up this discussion is to have students raise their hand for their personal teaching conception and to record the types and numbers on the board.

✍ OPTIONAL EXTENSIONS (20 MIN EACH)

Have the students group together by their predominant teaching conception. In each group have the students discuss what drew them to that conception and which others would be the most difficult to work within. For example a teacher who sees herself as an executive might have trouble imagining being transformative.

Have the students arrange themselves in groups where no two people fit into the same conception of teaching. In each group have students discuss ways they could bridge their differences if they were faced with working together in an academic teaming situation.

✍ REFERENCES

Avellan, E. (producer), & Rodriguez, R. (director). (1998). The Faculty [Film]. (Available from Blockbuster Video).

Axelrod, J. (1976). "Chapter 1: Didactic and Evocative Teaching Modes." in The University Teacher as Artist. Jossey-Bass Publishers. San Francisco.

Bruckheimer, J. (producer), & Smith, J.N. (director). (1995). Dangerous Minds [Film]. (Available from Blockbuster Video).

Chinich, M. (executive producer), & Hughes, J. (director). (1986). Ferris Bueller's Day Off [Film]. (Available from Blockbuster Video).

Duncan, P.S. (executive producer), & Herek, S. (director). (1995). Mr. Holland's Opus [Film]. (Available from Blockbuster Video).

Fenstermacher, G.D. & Soltis, J. (1986). "Chapter 1: The Teacher As . . ." in Approaches to Teaching. Teachers College Press. New York.

Law, L. (executive producer), & Menendez, R. (director). (1987). Stand and Deliver [Film]. (Available from Blockbuster Video).

Little, J.W. & McLaughlin, M.W. (1993). "Chapter 1: The Model of the Independent Artisan in Teachers' Professional Relations." in Teachers' Work: Individuals, Colleagues, and Contexts. Teachers College Press. New York.

Marshall, P. (executive producer), & Marshall, P. (director). (1994). Renaissance Man [Film]. (Available from Blockbuster Video).

Russo, A. (producer), & Hiller, A. (director). (1984). Teachers [Film]. (Available from Blockbuster Video).

Witt, P.J. (executive producer), & Weir, P. (director). (1989). Dead Poets Society [Film]. (Available from Blockbuster Video).

APPENDIX A: THE TEACHER AS . . .

The Teacher As . . .

This is a book about different approaches to teaching. In it we want to stimulate you to think about some basic ways to conceive of the role of the teacher. We believe that how you approach your teaching will have a great effect on what you do as a teacher. To help you see what we mean, consider some of the analogies often used to characterize teaching and try to imagine what you might do as a teacher if you believed them literally. No one takes them literally, of course, but if you did, you might approach teaching in very different ways. Think about the teacher as

Gardener: Tending to the development and nurturance of young growing things. Imagine an art lesson using this approach.

Potter: Shaping formless clay into useful objects. Imagine the same art lesson. Would using this approach make it different?

Midwife: Assisting in the birth of ideas and knowledge. Imagine a math lesson using this approach.

Provisioner: Providing a store of knowledge and skills needed for the journey of life. Imagine the same math lesson based on this perspective.

You might want to stop here and sketch out your ideas of what these different approaches to teaching might be like in these lessons before going on to see how we imagined them.

Fenstermacher, G.D. & Soltis, J. (1986). "Chapter 1: The Teacher As . . ." in Approaches to Teaching. Teachers College Press. New York.

APPENDIX B: AN ART LESSON

An Art Lesson

It was spring. Mrs. Gardner never ceased to be touched by the children's spontaneous gifts of fists full of dandelions and, occasionally, a pilfered tulip or daffodil. Painting flowers just had to be the art lesson today! She pulled from her file folder a sample of flower paintings her students had done over the years and hung them around the room. After her aides distributed the painting materials, Mrs. Gardner told the children to look at the paintings but also to try to remember what the flowers they had seen on the way to school looked like and how they made them feel; then to try to paint a bouquet to please someone at home. As the children worked, Mrs. Gardner moved among them encouraging the reticent, praising the productive, helping those who had problems, and drawing the children's attention to the beautiful variety of colors and flowers that were growing on all their papers.

Mr. Potter, in the next room, had also decided it was a good time to give his very successful flower painting lesson. He knew the children had not yet mastered the mixing of colors and this lesson would help them form that skill. Because tulips were in bloom around town, it was an ideal time to distribute the tulip templates for the children to use to trace four flowers on their papers. This would also strengthen eye-hand coordination and give them all some immediate reinforcement of success. Each table had only three paint pots: red, yellow, and blue. Mr. Potter told the class that they were going to learn to do something they had not done before—create colors. The class was excited. He had them watch as he mixed a little red paint with yellow on his paper palette. The magic of orange was greeted with a chorus of "Ooooh!" The same squeal came with blue and red making purple. Then, after painting his four flowers red, yellow, orange, and purple, Mr. Potter painted a blue stem on each. As the children began to object, he covered the blue paint with yellow, thus making green and raising one last chorus of "Ooooh!" "Now try it yourselves," Mr. Potter said, "and remember, you can make your own colors if you ever need to."

Fenstermacher, G.D. & Soltis, J. (1986). "Chapter 1: The Teacher As . . ." in Approaches to Teaching. Teachers College Press. New York.

APPENDIX C: A MATH LESSON

A Math Lesson

When Mrs. Middleweiss asked if anyone had ever painted a room at home, many hands shot in the air. But when she asked how you could know how much paint to buy, only Karl braved a guess. Karl said, "The label on the paint can tells you how many square feet a gallon will cover and so you just figure it out." "But how?" she asked the class. "What is a square foot anyway, and how do you count square feet in a room?" The problem of defining square feet was quickly settled, and the class decided to follow Juanita's suggestion that they try a picture-solution approach on the blackboard by drawing a representative wall of a room. Mary volunteered, "We need to know the measurements first," and Mrs. Middleweiss made the wall 8 feet high and 10 feet wide. Then Paul suggested drawing square feet on the wall and counting them. Everybody thought that was a good idea, and it was done. They counted 80 squares. Karl noticed something: 8 times 10 is 80. He asked to try something. He added 2 more feet to the drawing, filled in the squares, counted 96, and then announced to the class that he had found an easier way—multiply height by base! Mrs. Middleweiss agreed that it was a good strategy and then complicated the picture by putting a 2-foot by 4-foot window in the wall. Hands shot up. "Subtract 8 square feet from 96 and you get 88!" a number of children shouted in unison. "Unless you're going to paint the windows," someone added *sub voce*. The problem of the amount of paint needed was soon settled, and the children had learned the general idea of how to find the area of a rectangle.

Mr. Provider, the math teacher next door to Mrs. Middleweiss, also prided himself on making abstract math principles sufficiently concrete and practical that his students could easily learn them and see their use in everyday life. Today he was going to cover ways to compute areas of plane surfaces bounded by straight lines. He wanted at least to get through rectangular area ($A = bh$), but if there was time, he would like to cover $A = \frac{1}{2} bh$ for triangles, too. He began by showing students how much of their everyday world was made up of rectangles—in rooms, windows, and doors; in the yard, tennis court, and football field; and so forth. He noted that such ordinary tasks as painting rooms, curtaining windows, and seeding yards required that we know how much area we were dealing with so we could get the right amount of paint, fabric, or seed. "Fortunately," Mr. Provider added, "there is a simple formula that will help us figure this area. It is base times height." He did a number of examples of yards, tennis courts, and windows on the board until he was sure his students had the basic idea. Mr. Provider first had Andrew figure the area of a 10-foot by 8-foot wall without a window; he then added the same window that had been used to find curtain area in the earlier example. This made it easy for the class to see that $A = bh$ should be modified by subtracting any subarea within the total area that was not to be treated in the same way as the rest of A. Mr. Provider wrote his version of this new formula on the board [$A = bh\ (-a)$], and then he added a pitched roofline triangle to the wall to move the class along to consider the next formula he wanted to present before the period ended.

These cases should make it clear that not only are there different ways to teach the same things (and probably very effectively), but also that a teacher's approach, his or her general conception of the teacher's role, plays an important part in *how* one teaches. In this book, we are going to help you explore and think about three very basic approaches to teaching. For convenience, we have named them the "executive," the "therapist," and the "liberationist" approaches, although they go by many names. Each has its historical roots as well as its contemporary

Fenstermacher, G.D. & Soltis, J. (1986). "Chapter 1: The Teacher As . . ." in Approaches to Teaching. Teachers College Press. New York.

APPENDIX D: GRADING POLICIES

Fenstermacher, G.D. & Soltis, J. (1986). "Chapter 1: The Teacher As . . ." in Approaches to Teaching. Teachers College Press. New York.

Grading Policies

David Levine is the chairperson of Henry Hudson High School's Social Studies Department. Because of the size of the student population, several sections of certain courses are offered each year, and each is taught by a different instructor. In the case of Modern American History, three teachers offer courses. Students are assigned to these courses according to a simple alphabetical rotation. But this simple system has created a complex problem for Mr. Levine, for each teacher uses a different approach and parents and students are complaining that this is unfair.

The first section is taught by Albert Foley. Mr. Foley is a young, somewhat idealistic teacher who believes that stimulating learning experiences form the core of an education. In his class, he relies upon the study of current events from newspapers and television, and he encourages his students to initiate independent study projects. Mr. Foley is not as concerned about command of exact facts as he is about the personal significance that modern American history may come to hold for his students. In that direction, he believes, lies the promise of good citizenship and authentic personhood. Students are graded on the basis of essays they write about topics they select and journals of personal response to classroom discussion and current events. He grades because he has to, but he does not believe grading is what education is really about. Among the students, he is known as "Easy *A* Foley." In a typical year, 40 percent of his students will receive *A*'s and another 30 percent will receive *B*'s. The rest are given *C*'s, with an occasional *D* for serious cases. Mr. Foley says that a student will pass his class if he is able to find his way to the classroom. In his opinion, it is hard enough being a teenager, and he is not going to make it any tougher. He believes that his students really learn and grow in their sense of self-worth because of his teaching and grading policies.

"Historical knowledge broadens and deepens the mind" might be the motto of Mr. William Sampson, the teacher of the second section, for he believes that subject matter is all-important in getting students to understand the world they have inherited. Mr. Sampson relies on the textbook exclusively, and he delivers detailed lectures. He demands that his students know the facts about American government and recent historical events, and he has little patience with uninformed opinion. He wants his students to use evidence from historical events and documents to back up their claims. In his view, good citizenship must rest on a sound foundation of knowledge and the ability to think critically. He tells his students that they must learn American history backwards and forwards or they will not pass his course. But his exams are not on the specific facts of history. Rather, he gives rigorous and demanding essay exams that force his students to think about history. In a recent class of forty students, Mr. Sampson's grades were distributed in the following manner: three *A*'s, five *B*'s, eighteen *C*'s, nine *D*'s, and five *F*'s. Mr. Sampson contends that his tests are fair measures of his students' ability to think. The students call him "Slasher Sampson."

Nancy Wright, the teacher of the third section, has taught history for twelve years, and each year she tries out new ideas and techniques she has read about in *Social Studies*, a national journal for teachers. This year she has developed a behavioral-objectives unit on the New Deal and has designed an evaluation instrument for it that gives her very accurate ways for grading a student's knowledge of FDR's policies. She has found that specifying her own objectives not only helps her but also helps her students see clearly what they need to study and learn in her classes. Each year she feels that her teaching is still improving. One thing she does not change, however, is her policy of grading according to a curve. In her most recent group of forty students there were five *A*'s, ten *B*'s, fifteen *C*'s, seven *D*'s and three *F*'s, a distribution of grades which she came to favor long ago after taking a course on statistics and evaluation. Ms. Wright uses both essays and objective tests in order to provide an unbiased basis for her judgments. She believes that her proportional approach to grading avoids the possibility of favoritism and accurately reflects the performance of each student as it compares to that of others in the class. Ms. Wright's students have no nickname for her.

APPENDIX E: DIDACTIC

Didactic Modes

The teaching styles we classify under the didactic modes are designed to achieve objectives that are generally clear and relatively easy to formulate. These objectives include the mastery of a definite body of information or the acquisition of specific motor-kinetic skills or specific mathematical or verbal skills (in English as well as in other languages). The didactic modes thus stress either cognitive knowledge acquired primarily by memorization, or mastery of skills acquired primarily by repetition and practice.

Among the teachers whose classes we visited and whose teaching styles clearly fell among the didactic modes were many whose classes—given the objectives of the teachers—were unusually effective. One of these, whom we shall call Professor Daniel Garcia, was recommended to us as one of the best foreign-language audio-lingual instructors in the United States. Professor Garcia's field is Spanish. He often gives professional demonstrations of his drill techniques at modern language meetings; and observers, whether they know Spanish or not, find his talent extraordinary. In the drill work of the audio-lingual method, tempo must be varied, but it must also be regulated to the split-second if the drill is to be completely successful. Professor Garcia's timing is as subtle and varied as that of a great actor. The audio-lingual approach is based on principles derived from Skinnerian psychology and structural linguistic theory, and the teaching methodology that has resulted from this combination has been developed by Professor Garcia to the finest point. Our admiration for Professor Garcia as a first-class craftsman was increased when he told us that his methodology was "in a somewhat confused stage" because within recent years, a new school of linguistics—the school of transformational or generative grammer—has called into question whether the principles of Skinnerian psychology are really appropriate for language learning.

Teachers of modern languages often work under paranoia-inducing conditions, and their colleagues around the campus—including those in neighboring departments in other humanistic studies—scarcely understand the problems that beset the language instructor who wants to achieve excellence as a teacher. A large part of the language teacher's frustration arises from the peculiar shape of his discipline, for in order to practice it, he is expected to be four or more different kinds of specialists. He is expected to be a teacher-craftsman helping students acquire language skills, but he is also expected to teach linguistics courses, courses in foreign civilization, and literature courses (where he must function at different times as literary historian, aesthetician, critic, poet-translator, and text explicator). All of the facets of his discipline—except the teaching of language skills—merit by anyone's standards the highest status in the world of traditional scholarship. But it is the lot of the foreign language teacher that he is often imagined by his colleagues to be a mere polyglot who is uninterested in ideas, inquiry, and intellectual exploration.

The teaching of language skills has its own distinctive excellence, and the craftsman who achieves this excellence must command our respect. But due to the very nature of these skills, any teaching style by which they are taught must be classified among the modes we have called didactic. All of the other kinds of knowledge traditionally transmitted by the foreign language teacher, however—literature in all its facets, linguistics, civilization—constitute fields in which excellence can be achieved only if a professor is a teacher-artist. While the didactic modes were much in evidence as we visited various classrooms in the foreign language field, we also saw many classes in literature and civilization, and a few in linguistics, in which foreign language teachers followed evocative teaching prototypes.

The didactic modes are followed by teachers in a number of disciplines, particularly in classes where the skill to be acquired does not depend on reasoning and where the teacher's objective is to develop in the student an automatic or semiautomatic response. When the teacher's aim is to induce in the student an ability to respond immediately, without reflection, he would be teaching *against* his aim to encourage the student to reason out his responses for each exercise. Thus in sessions led by a teacher whose prototypic model falls in one of the didactic modes, the ratiocinative processes are kept at a minimum. The acquisition of the skill (or the mastery of a body of information, if that is the objective of the course) is attained by repetition and practice, rather than by problem-solving. In a skills course, the emphasis is placed on "learning to do," rather than on "learning about." In a course where a body of information is to be learned, the emphasis is placed on the direct presentation and memorization of facts and generalizations, rather than on the process of learning through discovery or inquiry. But whether the objective in a class following a didactic prototype is the acquisition of a skill or the mastery of information, the teacher is regarded by all parties as the ultimate authority and the student is not at any time presented with genuine alternatives. Once he has decided to participate—and he faces penalties if he decides not to participate—he discovers that there is only one way to respond to each cue that is given in a class discussion or in a written test. For each cue, there is only one response that the teacher regards as best.

Axelrod, J. (1976). "Chapter 1: Didactic and Evocative Teaching Modes" in The University Teacher as Artist. Jossey-Bass Publishers. San Francisco.

APPENDIX F: EVOCATIVE

The basic difference between the didactic modes and the evocative modes is the method used in the learning process: the major means employed in the evocative modes are inquiry and discovery. Among the evocative modes, we discovered several major prototypes. If we analyze the teaching-learning process and divide it into its component elements, it is evident that three are basic: teacher, learner, and the subject matter or skill being taught. The major prototypes of evocative teachers can be differentiated according to different views that professors hold about their relationships to the other two elements involved in the process—the learners and the subject matter. The relationships between these three elements—what we might call their "fit"—are extensively varied. Typically, one of the elements moves to the center of the teaching-learning process, and the other two elements are expected to accommodate themselves to its demands and requirements. In the university classroom, it is the teaching style of the professor that determines which two of the elements are expected to make the greatest amount of accommodation and which one remains relatively stable.

One of the major teaching prototypes focuses on subject matter, and it is therefore the other two elements—teachers and learners—that must undergo adjustment. Neither teachers nor learners are permitted to reshape the subject matter, except in quite minor ways. The subject matter is simply not expected to accommodate itself to them, no matter what their requirements or special conditions might be. Teachers who are subject-matter-oriented usually view with alarm any suggestion that the subject matter of a course ought to be changed. They protest that any altering of subject matter would be tampering with academic standards. They believe that changing the subject matter in any basic way in order to accommodate the special needs of students would be detrimental to society, to the university, and in the long run to the students themselves.

But those professors who take as their teaching model one of the other major prototypes in the evocative mode insist that such a view is based largely on an academic myth. What, they ask, is "subject matter" anyway? They hold that the conventional boundaries and content of each field of knowledge are determined by historical accident and are preserved (although often revised and updated) by the learned societies—those guilds which the professionals in each subject field have created to protect and nurture themselves. The prototypes followed by these professors, then, focus on other elements of the teaching-learning process.

The second major teaching prototype focuses on the second element—the professor himself. The instructor-centered teacher believes that the other two elements—students and subject matter—should accommodate themselves to him. He is, after all, the possessor of knowledge and a model for learners. He could hardly submit to alteration for the sake of the other two elements because that would be to surrender his ego to unknown and possibly hostile forces. When a nationally famous American professor of French was reprimanded by his department chairman for not teaching his sophomore French class at an appropriately elementary level, he replied: "When a restaurateur hires an Escoffier, he does not ask him to make hamburgers!" The instructor-centered teacher, when he is not reduced to such a defensive stance, however, builds his argument on a different basis: if the university teacher is to be pushed into a shape that is not his own, then the humanity and the individuality of the professor are lost and we might as well invest in more efficient types of programmed learning. Students and subject matter remain important for the instructor-centered teacher, but *they* must be adjusted to fit what *he* is.

The third teaching prototype places its emphasis on the student. Student-centered professors argue that the teaching-learning process will not be effective if conditions require the student element to be vastly reshaped before the process can get started. Their view is that if the student is expected to accommodate himself to the other two elements in the educational transaction, if he is pushed into a shape other than his own, the whole educational process is endangered. The student's requirements—the steps needed for his development—are what is important. In this view, the whole undergraduate enterprise—classes and courses and professors—exists to meet the student's needs as a growing human being.

These three prototypes are based, then, on the three elements of the teaching-learning process. Those teachers who focus on subject matter follow the Principles-and-facts Prototype. Their teaching is organized around their desire to help students master principles, concepts, analytic tools, theories, applications, and relevant facts. It is characterized by two main features: an emphasis on cognitive knowledge, and the systematic coverage of a given segment of that knowledge in each of their courses.

Those teachers who focus on themselves and their own ideas follow the Instructor-centered Prototype. These teachers organize class sessions around their desire to help the student learn to approach problems in the field as they themselves approach them. Like their colleagues who follow the Principles-and-facts Prototype, they concentrate on transmitting segments of cognitive knowledge, but unlike those colleagues they use the force of their own personalities and their own unique points of view to give shape to that knowledge.

It became apparent during our investigation and analysis of student-centered teachers that there are two student-centered prototypes. One type of professor emphasizes the personal development of the student but limits the scope of his endeavor to the development of the student's mind. These professors follow the Student-as-mind Prototype. The class sessions of such a teacher are typically organized around his desire to help his students acquire a set of skills and abilities that are intellectual in nature. Students are taught to adopt reason and language as their major tools and to use problem-solving as the major means of investigating subject matter. The second type of student-centered professor emphasizes the personal development of the whole student—his entire personality and not just his mind. These professors follow the Student-as-person Prototype. Such a teacher organizes his class sessions around his desire to help students develop as individuals, along all the dimensions—particularly the nonintellectual dimensions—where growth appears necessary or desirable. The student's peer group (his classmates in a given course, for example) is used as a means for accomplishing such development.

Axelrod, J. (1976). "Chapter 1: Didactic and Evocative Teaching Modes" in The University Teacher as Artist. Jossey-Bass Publishers. San Francisco.

APPENDIX G: TINKERER

Little, J.W. & McLaughlin, M.W. (1993). "Chapter 1: The Model of the Independent Artisan in Teachers' Professional Relations." in Teachers' Work: Individuals, Colleagues, and Contexts. Teachers College Press. New York.

Let us imagine, for a moment, the classroom teacher as a tinkerer or an instructional handyman, a do-it-yourself craftsperson who can put to use a host of materials lying around at various stages of a construction or repair job. Unlike, say, an engineer, a teacher works seldom with predesigned materials or tools. Nor does a teacher start with a blueprint, but rather reaches for some scrap or surplus material from previous jobs as a project takes shape. These materials meet the particular need that emerges at a specific point and are fashioned to fit this particular purpose. Gradually, of course, the teacher "craftsperson" accumulates a workshop full of materials most likely to be needed at some still-unknown moment for the kinds of things he or she builds or fixes. In *Working Knowledge,* Harper (1987) provides some wonderful, lovingly detailed examples of a virtuoso car mechanic who buys virtually no spare parts but instead turns an old boiler into a car radiator and scrap metal into engine fittings. Finally, as our tinkerer accomplishes a succession of different tasks with ever-varying combinations of the materials at hand or materials made to fit the purposes of each job, he or she develops an increasingly differentiated and integrated set of procedures, representations, and algorithms for reading the next task to be accomplished and for knowing which materials will be required at the outset.

The image of the tinkerer, or bricoleur, is derived from Lévi Strauss's (1962) work on primitive thinking and has more recently been used as a metaphor for the teaching process (Hatton, 1989; Huberman, 1988; Perrenoud, 1983; Yinger, 1987). It envisions the teacher as creating or repairing learning activities of different kinds with a distinctive style or signature. He or she adapts on the spot the instructional materials that have been bought, given, or scavenged, as a function of the time of day, the degree of pupil attentiveness, the peculiar skill deficiency emerging in the course of the activity, the little unexpected breakthrough on a grammatical rule, and the apparent illogic to the children of mathematical bases other than 10. In doing this, the teacher relies heavily on concrete bits of practice that have proved successful in the past but that must be reconfigured as a function of the specific situation in the classroom, in order to make them work.

What we have here is not a teacher who formulates in advance a codified lesson plan containing a series of sequenced, timed routines that are run through serially—for example, presentation of a scripted math lesson for 10 minutes, followed by the working of a few problems at the board by three or four children, then 20 minutes of individual work in the exercise book, and then a 5-minute oral quiz to test levels of understanding and mastery. Rather, the teacher has a general goal for the time period, usually expressed less in terms of what is to be achieved by pupils than in terms of activities that can be undertaken in the time allotted. The core materials for these activity formats are prepared and ready at hand, and the teacher begins the sequence as planned. As soon as he or she sees, however, that several children are squirming in their seats or wrinkling their brows in apparent confusion or that the two problems worked at the board entail faulty algorithms, the remainder of the sequence is cast aside, and our teacher begins improvising with a series of ad hoc responses to the new situation. The teacher puts up, say, two problems that test mastery of the operations prerequisite to those introduced earlier, works them through with the class, and then digs some remedial exercises out of the closet and has the whole class work on them as he or she circulates among the pupils. As the teacher monitors work on the exercises, he or she decides to divide the class into four groups and invents a slightly more difficult problem for each group. Each pupil in the group is to see the solution independently and then compare and justify his or her solution with the others. While this is going on, the teacher gets out the materials for the work on reading comprehension to follow or, if a secondary-school teacher, moves quickly from group to group to make certain that the task is accomplished before the period is over.

In this example, the unraveling of the math lesson is a continuously reinvented process, with dozens of decision points at which the teacher moves on to the next activity format, which has only just emerged as a likely follow-on exercise, or switches to another exercise as a result of the

drift of pupils' oral responses, the level of pupils' task engagement, the time remaining until recess or the end of the period, or, more likely, all these factors. The continuous readjustment results from what Lévi Strauss (1962) has called, felicitously, "engaging in a dialogue with the situation" as that situation unfolds. To tinker well here seems to depend on how quickly and accurately the teacher can read the situation—can call up from a store of similar situations a range of likely responses, can choose a procedure quickly, can find or cobble together the materials needed to engage the pupils, and can move the class smoothly into the new task environment—all without breaking the flow of the lesson.

Before moving on, a few remarks are warranted. The first is that the teacher in our illustration could have gone ahead with the original plan: the lesson, blackboard work, individual exercises, and an oral quiz. Many—possibly most—teachers do just that, especially at the secondary level, with its tight 45- to 50-minute lesson cycle. The material would then have been "covered," and the math program would have "advanced." In terms of pupils' levels of representation and mastery of the material, however, it's a fair bet that the initial format would have been inappropriate for 45 percent to 60 percent of the class and that these pupils' difficulties would have increased when slightly more demanding material was presented the following day or week. In other words, the kind of interactive, responsive, and dynamic mode of instructional management implicit in the tinkerer model is likely to be more motivating and meaningful to a greater number of pupils and, in terms of their representation of or proficiency with the task, more efficient than a highly scripted instructional sequence. Apart from the obviousness of this point, some modest empirical work lends support to it (Yinger, 1986).

The second remark is that unlike the procedures used in more stable or predictable fields of application, such as engineering, medicine, or architecture, the tinkerer model assumes that there is no set of nomothetic knowledge—theories, concepts, and principles—that is valid across all instructional situations from which a specific sequence of actions can be derived to resolve the instructional problem at hand. In other words, to return to our illustration, there is no prescriptive theory of mathematics learning that could have dictated in advance the appropriate activity or response formats for this set of pupils at this point in their progression. In fact, it is precisely the craftsmanship or artistry of the tinkerer in this situation that compensates for the inadequacies in the knowledge base (Gage, 1985). Teaching, like other highly complex, unstable, and furiously interactive tasks, poses what Churchman (1971) calls "wicked problems," problems whose solutions are not inherent in the problem space itself and thus which need to be progressively transformed into simpler problems for which the solutions at hand are likely to be appropriate.

APPENDIX H: MIMETIC

THE MIMETIC TRADITION

We turn to the "mimetic" tradition first not because it is any older or any more important than the one called "transformative," but principally because it is the easier of the two to describe. In addition, it is closer to what most people today seem to think education is all about. Thus, presenting it first has the advantage of beginning with the more familiar and moving to the less familiar. Third, it is more harmonious with all that is thought of as "scientific" and "rigorous" within education than is its competitor. To all who rank that pair of adjectives highly, as I reservedly do myself, therein lies an additional reason for putting it first.

This tradition is named "mimetic" (the root term is the Greek word *mimesis*, from which we get "mime" and "mimic") because it gives a central place to the transmission of factual and procedural knowledge from one person to another, through an essentially *imitative* process. If I had to substitute another equally unfamiliar word in its place, with which to engage in educational debate, I would choose "epistemic"—yet another derived from the Greek, this from *episteme*, meaning knowledge. The first term stresses the *process* by which knowledge is commonly transmitted, the second puts its emphasis on the *content* of the transaction. Thus we have the "mimetic" or the "epistemic" tradition; I prefer the former if for no other reason than that it places the emphasis where I believe it belongs, on the importance of *method* within this tradition.

The conception of knowledge at the heart of the mimetic tradition is familiar to most of us, though its properties may not always be fully understood even by teachers committed to this outlook on teaching. For this reason it seems essential to say something about its properties.

First of all, knowledge of a "mimetic" variety, whose transmission entails mimetic procedures, is by definition identifiable in advance of its transmission. This makes it secondhand knowledge, so to speak, not in the pejorative sense of that term, but simply in that it has to have belonged to someone first before it can belong to anyone else. In short, it is knowledge "presented" to a learner, rather than "discovered" by him or her.[2]

[2] Aristotle once remarked that "All instruction given or received by way of argument proceeds from pre-existent knowledge." (*Posterior Analytic*, Book I, 71a) By this he meant that we must begin with major and minor premises whose truth is beyond dispute before we can move to a novel conclusion. This is not quite the same as claiming that all knowledge is secondhand, but it does call attention to how much of the "known" is properly described as having been "transmitted" or "passed along" to students from teachers or teacher surrogates, such as textbooks or computers.

Such knowledge can be "passed" from one person to another or from a text to a person; we can thus see it as "detachable" from persons *per se*, in two ways. It is detachable in the first place in that it can be preserved in books and films and the like, so that it can "outlive" all who originally possessed it. It is detachable, secondly, in the sense that it can be forgotten by those who once knew it. Though it can be "possessed," it can also be "dispossessed" through memory loss. Moreover, it can be "unpossessed" in the sense of never having been "possessed" in the first place. A correlate of its detachability is that it can be "shown" or displayed by its possessor, a condition that partially accounts for our occasional reference to it as "objective" knowledge.

A crucial property of mimetic knowledge is its reproducibility. It is this property that allows us to say it is "transmitted" from teacher to student or from text to student. Yet when we speak of it that way we usually have in mind a very special kind of process. It does not entail handing over a bundle of some sort as in an actual "exchange" or "giving." Rather, it is more like the transmission of a spoken message from one person to another or the spread of bacteria from a cold-sufferer to a new victim. In all such instances both parties wind up possessing what was formerly possessed by only one of them. What has been transmitted has actually been "mirrored" or "reproduced" without its ever having been relinquished in the process.

The knowledge involved in all transmissions within the mimetic tradition has an additional property worth noting: It can be judged right or wrong, accurate or inaccurate, correct or incorrect on the basis of a comparison with the teacher's own knowledge or with some other model as found in a textbook or other instructional materials. Not only do judgments of this sort yield a measure of the success of teaching within this tradition, they also are the chief criterion by which learning is measured.

My final remark about knowledge as conceived within the mimetic tradition may already be obvious from what has been said. It is that mimetic knowledge is by no means limited to "bookish" learning, knowledge expressible in words alone. Though much of it takes that form, it also includes the acquisition of physical and motor skills, knowledge to be *performed* in one way or another, usually without any verbal accompaniment whatsoever. "Knowing that" and "knowing how" is the way the distinction is sometimes expressed.[3]

[3] For a well-known discussion of that distinction, see Gilbert Ryle, *The Concept of Mind* (New York: Barnes and Noble, 1949).

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Here then are the central epistemological assumptions associated with the mimetic tradition. The key idea is that some kind of knowledge or skill can be doubly possessed, first by the teacher alone (or the writer of the textbook or the computer program), then by his or her student. In more epigrammatic terms, the slogan for this tradition might well be: "What the teacher (or textbook or computer) knows, that shall the student come to know."

How might the goal of this tradition be achieved? In essence, the procedure for transmitting mimetic knowledge consists of five steps, the fourth of which divides in two alternate routes, "a" or "b," dependent on the presence or absence of student error. The series is as follows:

Step One: *Test*. Some form of inquiry, either formal or informal, is initiated to discover whether the student(s) in question already knows the material or can perform the skill in question. This step is properly omitted if the student's lack of knowledge or skill can be safely assumed.

Step Two: *Present*. Finding the student ignorant of what is to be learned, or assuming him or her to be so, the teacher "presents" the material, either discursively—with or without the support of visual aids—or by modeling or demonstrating a skillful performance or some aspect thereof.

Step Three: *Perform/Evaluate*. The student, who presumably has been attentive during the presentation, is invited or required to repeat what he or she has just witnessed, read, or heard. The teacher (or some surrogate device, such as a test scoring machine) monitors the student's performance, making a judgment and sometimes generating a numerical tally of its accuracy or correctness.

Step Four (A): (Correct performance) *Reward/Fix*. Discovering the performance to be reasonably accurate (within limits usually set in advance), the teacher (or surrogate device) comments favorably on what the student has done and, when deemed necessary, prescribes one or more repetitions in order to habituate or "fix" the material in the student's repertoire of things known or skills mastered.

Step Four (B): (Incorrect performance) *Enter Remedial Loop*. Discovering the student's performance to be wrong (again within limits usually established in advance), the teacher (or surrogate) initiates a remedial procedure designed to correct the error in question. Commonly this procedure begins with a diagnosis of the student's difficulty followed by the selection of an appropriate corrective strategy.

Step Five: *Advance*. After the unit of knowledge or skill has been "fixed" (all appropriate corrections having been made and drills undertaken), the teacher and student advance to the next unit of "fresh" instruction, returning to Step One, if deemed necessary by the teacher, and repeating the moves in sequential order. The sequence of steps is repeated until the student has mastered all the prescribed knowledge or until all efforts to attain a prescribed level of mastery have been exhausted.

In skeletal form, this is the way instruction proceeds within the mimetic tradition. Readers familiar with cybernetic models will readily recognize the five steps outlined as an instance of what is commonly referred to as a "feedback loop" mechanism, an algorithmic device equipped with "internal guidance circuitry."[4]

Which teachers teach this way? Almost all do so on occasion, yet not all spend an equal amount of time at it. Some teachers work within the mimetic tradition only on weekends, figuratively speaking, about as often as a "do-it-yourself-er" might wield a hammer or turn a wrench. Others employ the same techniques routinely on a day-to-day basis, as might a professional carpenter or mechanic.

Which do which? That question will be treated at some length later in this chapter, where I will take up the relationship between the two traditions. For now it will suffice to observe in passing what is perhaps obvious, that teachers intent upon the transmission of factual information, plus those seeking to teach specific psychomotor skills, would more likely use mimetic procedures than would those whose conception of teaching involved educational goals less clearly epistemic in nature.

What might the latter category of goals include? To answer that question we must turn to the second of the two dominant outlooks within educational thought and practice, which I have chosen to call:

APPENDIX I: TRANSFORMATIVE

Little, J.W. & McLaughlin, M.W. (1993). "Chapter 1: The Model of the Independent Artisan in Teachers' Professional Relations." in Teachers' Work: Individuals, Colleagues, and Contexts. Teachers College Press. New York.

THE TRANSFORMATIVE TRADITION

The adjective "transformative" describes what this tradition deems successful teaching to be capable of accomplishing: a transformation of one kind or another in the person being taught—a qualitative change often of dramatic proportion, a metamorphosis, so to speak. Such changes would include all those traits of character and of personality most highly prized by the society at large (aside from those having to do solely with the possession of knowledge *per se*). They also would include the eradication or remediation of a corresponding set of undesirable traits. In either case, the transformations aimed for within this tradition are typically conceived of as being more deeply integrated and ingrained within the psychological makeup of the student—and therefore as perhaps more enduring—than are those sought within the mimetic or epistemic outlook, whose dominant metaphor is one of "adding on" to what already exists (new knowledge, new skills, etc.) rather than modifying the would-be learner in some more fundamental way.

What traits and qualities have teachers working within the transformative tradition sought to modify? Our answer depends on when and where we look. Several centuries ago, for example, when the mission of schools was primarily religious, what was being sought was nothing other than students' salvation through preparing them for Bible reading and other religiously oriented activities. Such remains the goal of much religious instruction today, though the form of its expression may have changed somewhat.

Over the years, as schooling became more widespread and more secular in orientation, educators began to abandon the goal of piety *per se*, and focused instead upon effecting "transformation" of character, morals, and virtue. Many continue to speak that way today, though it is more common to name "attitudes," "values," and "interests" as the psychological traits many of today's teachers seek to modify.

However one describes the changes sought within the transformative tradition, it is interesting that this undertaking is usually treated as more exalted or noble than the more mimetic type of teaching. Why this should be so is not readily apparent, but the different degrees of seriousness attached to the two traditions are apparent in the metaphors associated with each of them.

As I have already said, within the mimetic tradition knowledge is conceived of as something akin to material goods. Like a person materially wealthy, the possessor of knowledge may be considered "richer" than his ignorant neighbor. Yet, like the materially rich and poor, the two remain fundamentally equal as human beings. This metaphor of knowledge as coins in one's purse is consonant with the concomitant belief that it is "detachable" from its owner, capable of being "shown," "lost," and so forth. A related metaphor, one often used to lampoon the mimetic tradition, depicts the learner as a kind

[4] See, for example, G.A. Miller, E. Galanter, and K.H. Pribham, *Plans and the Structure of Behavior* (New York: Holt, 1960).

of vessel into which knowledge is "poured" or "stored." What is important about all such metaphors is that the vessel in question remains essentially unchanged, with or without its "contents."

The root image within the transformative tradition is entirely different. It is much closer to that of a potter working with clay than it is to someone using the potter's handiwork as a container for whatever contents such a vessel might hold. The potter, as we know, not only leaves her imprint on the vessel itself in the form of a signature of some kind, she actually molds and shapes the object as she creates it. All who later work with the finished product have a different relationship to it entirely. They may fill it or empty it to their hearts' content. They may even break it if they wish. But all such actions accept the object in question as a "given," something whose essence is fundamentally sacrosanct.

The metaphor of teacher-as-artist or teacher-as-creator gives the transformative tradition an air of profundity and drama, perhaps even spirituality, that is largely lacking within the mimetic tradition, whose root metaphor of mere addition of knowledge or skill is much more prosaic. But metaphors, as we know, are mere figures of speech. No matter how flattering they might be, they don't tell us whether such flattery is deserved. They leave us to ask whether teachers working within the transformative tradition actually succeed in doing what they and others sometimes boast they can do. And that's not all they leave unanswered. Beyond the question of whether transformative changes due to pedagogical interventions really occur at all there awaits the more practical question of *how* they happen. What do teachers do to bring them about? As we might guess, it is easier to answer the former question than the latter.

Fictional accounts of teachers who have had enduring effects on their students of the kind celebrated within the transformative tradition are familiar enough to be the stock in trade of the pedagogical novel. *Goodbye, Mr. Chips* and *The Prime of Miss Jean Brodie*[5] are but two of such works that come to mind most readily. Each exemplifies a teacher who has a profoundly transformative influence on his or her students. But what of real life? Do teachers *there* make a difference of the same magnitude as do the fictional Chipses and Brodies?

An answer to that question which I find quite convincing is contained in a study undertaken by Anne Kuehnle, a student of mine a few years back. In preparation for her term paper in a course on the analysis of teaching, work which later became the basis of her master's thesis, Kuehnle distributed questionnaires to 150 friends and neighbors in her hometown of Elmhurst, Illinois; she asked them to write a paragraph or two about the teachers they remembered most vividly. The results were striking. Not only did most respondents comply enthusiastically with the request, their descriptions yielded literally scores of vignettes showing the transformative tradition in action. Here are but three of them, chosen almost at random.

> He moved the learning process from himself to us and equipped us to study independently. We were able to see such mundane concepts as money supply, price mechanism, supply and demand, all around us. We became interested. We actually talked economics after class! In Eckstein's class I became aware that I was there to evaluate, not ingest, concepts. I began to discriminate . . .
>
> She was, to me, a glimpse of the world beyond school and my little town of 800 people. She was beautiful, vivacious, witty, and had a truly brilliant mind. Her energy knew no limits—she took on all the high school English classes, class plays, yearbook, began interpretive reading and declamatory contests, started a library in the town, and on and on. *She* was our town's cultural center.
>
> His dedication rubbed off on nearly all of us. I was once required to write him a 12-page report, and I handed in an 84-page research project. I always felt he deserved more than the minimum.[6]

These three examples are quite representative of the protocols quoted throughout Kuehnle's report. So if we can trust what so many of her respondents told us—and I am inclined to do so, for had I been asked I would have responded much as they did—there seems no shortage of testimonial evidence to support the conclusion that at least some teachers do indeed modify character, instill values, shape attitudes, generate new interests, and succeed in "transforming," profoundly and enduringly, at least some of the students in their charge. The question now becomes: How do they do it? How are such beneficial outcomes accomplished?

As most teachers will readily testify, the answer to that question will disappoint all who seek overnight to become like the teachers described in Kuehnle's report. It seems there *are* no formulas for

[5] James Hilton, *Goodbye Mr. Chips* (Boston: Little, Brown and Co., 1934) and Muriel Spark, *The Prime of Miss Jean Brodie* (Philadelphia: Lippincott, 1961).

[6] Anne Kuehnle, "Teachers remembered," unpublished master's thesis, University of Chicago, June 1984.

accomplishing these most impressive if not miraculous feats of pedagogical skill. There are neither simple instructions for the neophyte nor complicated ones for the seasoned teacher. There is not even an epigram or two to keep in mind as guides for how to proceed, nothing analogous to the ancient "advice" that tells us to feed a cold and starve a fever.

And yet that last point is not quite as accurate as were the two that came before it. For if we look carefully at what such teachers do and listen to what others say about their influence, we begin to see that they *do* have some characteristic ways of working after all, "modes of operation" that, even if they can't be reduced to recipes and formulas, are worth noting all the same. The three of these modes most readily identifiable seem to me to be:

1. *Personal modeling*. Of the many attributes associated with transformative teaching, the most crucial ones seem to concern the teacher as a person. For it is essential to success within that tradition that teachers who are trying to bring about transformative changes personify the very qualities they seek to engender in their students. To the best of their ability they must be living exemplars of certain virtues or values or attitudes. The fulfillment of that requirement achieves its apex in great historical figures, like Socrates and Christ, who epitomize such a personal model; but most teachers already know that no attitude, interest, or value can be taught except by the teacher who himself or herself believes in, cares for, or cherishes whatever it is that he or she holds out for emulation.

2. *"Soft" suasion*. Among teachers working toward transformative ends, the "showing" and "telling" so central to the mimetic tradition (actions contained in Step Two: *Present* of the methodological paradigm outlined above) are replaced by less emphatic assertions and by an altogether milder form of pedagogical authority. The teaching style is rather more forensic and rhetorical than it is one of proof and demonstration. Often the authority of the teacher is so diminished by the introduction of a questioning mode within this tradition that there occurs a kind of role reversal, almost as though the student were teaching the teacher. This shift makes the transformative teacher look humbler than his or her mimetic counterpart, but it is by no means clear that such an appearance is a trustworthy indicator of the teacher's true temperament.

3. *Use of narrative*. Within the transformative tradition "stories" of one kind or another, which would include parables, myths, and other forms of narrative, play a large role. Why this should be so is not immediately clear, but it becomes so as we consider what is common to the transformations that the schools seek to effect. The common element, it turns out, is their moral nature. Virtues, character traits, interests, attitudes, values—as educational goals all of them fall within the moral realm of the "right" or "proper" or "just." Now when we ask about the function or purpose of narrative, one answer (some might say the only one) is: to moralize.[7] Narratives present us with stories about how to live (or how not to live) our lives. Again, Socrates and Christ come readily to mind as exemplars of the teacher-as-storyteller as well as the teacher about whom stories are told.

[7]See Hayden White, "The value of narrativity in the representation of reality," in W.J.T. Mitchell (ed.), *On Narrative* (Chicago: University of Chicago Press, 1981), 1–24. Also, John Gardner, *On Moral Fiction* (New York: Basic Books, 1978). Gardner points out that "the effect of great fiction is to temper real experience, modify prejudice, humanize." (p. 114)