

Using Perspective and Brief Writing Applications to Facilitate Dimensions Fundamen- tal to Teaching for Active Learning:

AN INTEGRATED APPROACH TO TEACHER TRAINING IN CRITICAL THINKING 7-12

This paper was presented at the North American Association for Community of Inquiry (NAACI) conference held in La Crosse, Wisconsin, USA, in July, 1998.

Phyllis Fahrie Edelson and Gerard Verone

A major goal of the Lakeland School District /Pace University's grant funded collaboration in staff development¹ to help Lakeland teachers promote active learning, especially in classes where students lack motivation and academic maturity. As University partners, from a liberal arts school, the central question for us was-What kind of training in critical thinking would directly address this problem?

We found that our teachers needed, first, and most of all, thorough training in the critical thinking skill of Perspective and its classroom extensions, including brief writing applications, so that they could recognize six enabling dimensions fundamental to developing active critical thinking and learning.

Further, they needed to learn and employ specific strategies to promote these dimensions. When teachers understand perspective, they become aware of the full exerted by each student's interior, world, and aware of the insistence of each mind on its own inner «mapping of the territory»^{2,3} out there in the classroom.

The spectre of a classroom of students, each one attached to his or her own spectacles, each one occupied with images, words, ideas, judgements, and feelings colored and shaped by his internal world, is sobering. Recognizing the difference between what a teacher says, or a textbook says, or one student says and what another student hears, is in fact, essential to promoting thinking and learning, particularly in a classroom of non-avid learners.

We believe that the necessary first step in teacher training is to have teachers themselves experience the range and power of individual differences in perception and interpretation of events, perspec-

tive. They need to understand how fondly we all tend to cling to our first perceptions and how much we omit from our individual awarenesses. Good staff development for an active learning classroom offers teachers an experiential⁴ understanding of the dangers in thinking that «What we are aware of is all that there is to be aware of...»^{5,6}

When they recognize fully the importance of this insight, teachers can connect many apparently disparate strategies in their teaching repertoires and use them to activate student learning. A fruitful classroom integration of traditional critical thinking, reader response theory and writing across the curriculum techniques can be achieved.

Critical thinking, tailored specifically for the secondary classroom, offers an overall framework that allows teachers to understand organize and integrate the often fragmented, sporadic, and unconnected efforts at staff development that plague many American school systems. Our approach to teacher training prepares the way for critical thinking-infused, active content learning. In training workshops we describe six important dimensions for becoming a critical thinker; present them as a block in relation to perspective; and explain how these dimensions may be developed through brief written classroom applications.

The dimensions we emphasize include capacities {a} to connect new knowledge to prior learning; {b} to engage with material to be learned; {c} to be aware of personal feelings, attitudes, and emotions toward what is being learned; {d} to usefully encounter other points of view and new information; {e} to recognize the need to evaluate sources of information and to know how to do so; and finally, {f} to be able to step back and monitor one's thinking, modes of learning, and progress or lack of it.

NEW KNOWLEDGE

To illustrate what we mean in the case of {a} above let us take, for example, a secondary student who enters a classroom where X is to be taught. This student, although he has never had a lesson on X before, does not enter fresh or blank on the subject. From other classes, other students, other people, the media and life itself, it is likely that the student has stored information and/or misinformation, feelings, attitudes toward X and toward the study of X.

Abundant research on the concept of prior knowledge tells us that this student will begin his classroom study of X by building upon whatever he has in storage on the subject, however inefficiently it may be stored. His prior knowledge storage influences his perspective on the topic and must be addressed if the teacher is to know where this student is vis a vis X.

It is not, however, the teacher alone who needs this information. Students themselves, especially reluctant students, need to get in touch with the thinking stored in their heads. Much of what anyone knows about anything is buried deep and needs to be forced to awareness. Much of what students

already know about a topic, they fail to connect to new learning. Yet their new learning will follow the lines rightly or wrongly of old often submerged ideas.

While uncorrected mix/learning can retard new learning, conscious awareness of prior connections to the new material can stir up memory paths and schema, pulling together a foundation on which to build. Both students and teachers profit from awareness of what has been stored. But how can this awareness be promoted?

One classroom application is an open ended brief writing exercise before instruction in X is initiated. Open ended questions are posed by the teacher and answered briefly in writing by students aware that these questions are not a test. The purpose of the questions is to require students to make contact with their past experience of the X to be taught. A question might be formulated this way:

«We have just begun our discussion of X. Before we go on, lets see what you already have heard or learned about X. Write two or three things that you remember or think you remember from your class in X last semester for last week or last year etc.» Take 3 or 4 minutes to jot them down.

Prompts are often needed if students are unaccustomed to the technique. The teacher might have to say, for example,

«It doesn't matter how small a detail you recall, just write it down. It doesn't matter if you are not sure about your recall. This is not a test; it is a way to activate ourselves for learning.»

To widen the net of possible response, the open-ended question can be varied:

«We are going to be discussing topic X. Can you recall any experience you or someone you know (or someone you have heard about, read about, or seen on the screen) has had with topic X? Or any part of it?»

To answer the question at all the student must try to recall something he studied or heard or knows or thinks he knows ... His «prior knowledge» is at that moment connected to the topic of study. A bridge is built, however rickety, between the student and the academic material. If appropriate, one or two written student answers to this question can be used to open discussion or encourage discussion. Students who otherwise would not participate in class will share their connections once they see that responses similar to or no more profound than their own have been shared without discomfort or penalty.

It takes the teacher just a few minutes to read through these student brief writes because they are very short, and neither evaluated, nor corrected. Their purpose is to connect the student with his own personal inventory of knowledge in the subject. They can be used by the teacher to empha-

size the importance of the student's connection. Every time the teacher reads aloud or refers to a connection made in a student brief write, the importance of the students' participation in the learning process is underscored. Our objective at this point is student response. We're trying to engage students and focus their attention.

ENGAGEMENT

During the teaching process, teachers of less than motivated student populations must be on the watch for student engagement. An appearance of listening does not mean much as teachers find out when grading examinations. What is needed is a vital contact point between the student and the material. A teacher aware of this goal will find it useful to intersperse, among explanations and other teaching activities, «engagement» brief writes such as the following:

«Write three sentences that make a connection between what we have been talking about in class and your life outside this classroom. «

If a student makes even the slightest attempt to answer this question, exploration of his or her personal relationship with the topic begins.

Some other possibilities for engagement provoking questions during ongoing teaching are:

«We have been discussing X in this class for the last ten minutes. In your opinion, what was the most important idea you heard?» «Why do you select that one?»

As with all engagement questions, there is no right or wrong answer. Credibility lies with the way the student defends his or her choice. The process of reviewing what was said, and selecting one item as most important involves the student in the topic. Because the question asks for student opinion on what is important rather than for what is important and allows the student to choose from what he has heard, the task is highly personalized and non threatening.

This writing application is not a test of the students' power to separate important facts and arguments from unimportant ones, although discussing the written brief writes indirectly promotes this ability. This is an exercise that connects the student to the topic through his or her own perspective, an exercise that deliberately, although temporarily, privileges the subjective for the purpose of engagement.

Emphasis is placed on the «you» in the question. Engagement questions for the students we are discussing must be «You» questions, not right or wrong queries at this point.

An important variation on teacher articulated open ended «engagement» question is the student generated question. For example,

«Write one question on topic X that you would like to have answered now or by the time we have finished studying this topic. «

In order to generate such a question, the student must review what has been taught, select, and compose, using some part of the lesson material. Having to choose what he or she would like to know, means engaging with the material at some level. And this is what we are after as we try to make the classroom a place of active learning.

A variation on this question that encourages students to address what they do not understand is the clarification query. This often yields particularly good feedback for the teacher before or between formal tests or papers:

«Write one question about something in Topic X that `you» think needs clarification or explanation. Be as specific as possible so that your precise question may be addressed. «

Our workshops encourage teachers to ask for brief written responses as above. Unduly terse student responses, we suggest, should be probed for more, whenever possible. Not meant as evidence of what has been learned, these bridge building brief written applications, are instead, both evidence of engagement and the means to promote engagement. They are an important step in putting the student at the center of instruction.

FEELINGS

But involving students, by which we mean initiating the student's own thinking on a topic, also means addressing feelings about the topic, and about the task of learning it. The possibility that emotions may be influencing a student's rational thought⁷ suggests that teachers would do well to promote student awareness of their feelings about learning, and awareness of how those feelings may affect the way they perceive what they learn, as well as their perspective on the process of learning itself.

Teachers might go further and stimulate student thought about harnessing their feelings in the service of their learning goals. Brief writing questions such as the following can be useful:

«We have looked at the topic of X, which we are starting today. You have already done some preliminary reading in your textbook. On the basis of these experiences and any other you might have had with this topic. «

«How do you feel right now about starting this area of study? What in your experience might account for the emotions that this topic arouses in you?»

«List two things you could do that might help you learn more comfortably?»

OTHER POINTS OF VIEW

Teachers who have a comprehensive grasp of the teaching/learning implications of perspective, are more likely to buy the idea that with reluctant or under prepared learners, it is the teacher's job to keep connected to the thinking going on inside the student's head by requiring and validating student response.

Indeed this effort on the teacher's part is often, itself, the trigger of student cogitation. But we must ask ourselves what happens when a student's every response is legitimized by mere acceptance. Without the complementary dimension of other points of view that teach the student to recognize the limitations of his or her awareness, we have a distortion of the student response oriented classroom.

Teachers with incomplete understanding of this point foster dangerous untruths about active learning. Unless they are well grounded in critical thinking, response centered classrooms may encourage less than rigorous learning and risk a tarnished reputation with the public and with those teachers who remain unconvinced or unwilling.

Balancing a teacher's respect for the engagement of the individual student must be a concern for awareness of the hazards of one point of view, one source of information, one interpretation, one research study, etc. A tilt toward engaging individual opinion, feelings, or meaning making, without a complementary emphasis on encountering the point of view of others is counterproductive. This happens, however, when teachers take away from their training only half of the story.

Critical thinking, properly conceived, should not lead to solipsism in the classroom, to the individual conviction that things are the way I feel/see they are. It is the teacher's responsibility to include classroom strategies that build and exercise student's capacities to listen actively and competently to others and to consider various sources of information in coming to a grounded substantial position.

A good teacher gives each student the notion that a thinking person builds his or her own knowledge through attention to the knowledge and opinions of others. What safeguards do we have against idiosyncrasy or individual error as we try to acquire knowledge? Only the corrective or perhaps reaffirming influence of other opinions.

As we can learn from John Chaffee [1994]⁸ and Richard Paul [1992]⁹, the critical thinker aims to understand the other person's point of view, and to be able to follow it, perhaps to repeat it competently before he or she feels free to either attack or dismiss it. Classroom activities that stress serious attention to the implications of other viewpoints, and the reasoning behind them underscore these aims. In every subject, although to differing degrees, it is possible to use teaching strategies that help students in Paul's words, «to enter sympathetically into another's point of view, and to recognize one's own egocentricity or ethnocentricity.» (p.85)

Adequate encounter with other viewpoints and consideration of their consequences for the student's own thought or conclusions, allows students to realize the limitations of their knowledge and gives them a means to widen its boundaries. Teachers trained in critical thinking can promote this process of growth through exchange. Students need to have the process regularly identified and clearly labeled as it is going on in the classroom. (Edelson and Vallone, 1998)¹⁰

Less able students are often confused when they hear more than one way of looking at a problem or issue; strong students frequently encounter opposing views as a chance for one upmanship. Repeated classroom and homework opportunities to encounter and assimilate or refute opposing views will help students develop the confidence and openness to widen their own horizons.

For example a specific brief writing assignment to address this goal asks for 3 main points of argument A-in outline form, perhaps, and 3 main opposing points derived from text, research or class discussion. This task develops the skill of argumentation and widens understanding.

EVALUATION

Of course, exposing the student to new ideas and opinions to widen his perspective will be of little value unless the student develops the accompanying capacity to evaluate contrary or different ideas, evidence, or facts.

From magazines that trade in tall stories such as «Ghost saves 200 year old man from Martian kidnap on 42nd Street,» to the wildly uneven melange of the internet, this crucial aspect of perspective, sometimes called acknowledging the observer, is a pressing classroom objective, often ignored.

Teachers frequently deplore what they call the gullibility of their students. Yet how many actually teach students to consider issues of position, location, physical capacity, time, culture, psychological need, special interest, and expertise, as these issues impinge on evaluating an information source? How many teach students to look for the limitations as well as the strengths of a source of information. Evaluating an information source may change our perspective on it dramatically or may serve to confirm it.

Brief writing applications in the form of questions such as: «Who is the observer?» or «What are his interests in this issue?» develop this dimension, fundamental to critical thinking and essential to widening the student's perspective as an evaluator of what he reads and hears. Inadequately prepared students are often most in need of the coaching which such brief writes provide. The «critical thinking» trained teacher is more likely to take advantage of teachable moments when a «source» is being quoted in the course of class discussion, to offer a timely reminder about acknowledging and interrogating the observer behind the information.

Such a teacher, aware of the general value of independent learning in the development of critical thinking, and the importance of the development of the evaluating dimension of a critical thinker, will also be more easily persuaded to assign brief research/writing applications giving students the opportunity to evaluate the credibility of one or two sources. A mini research/writing assignment, for example, might involve reporting on the influences on a scientist whose discoveries, ideas or problem solving has been studied in class. Students might look into the scientist's educational, social, or religious background and speculate on how what they learn might have affected what he did or said. Then they would consider whether this information might qualify their own evaluation of the scientist as an information source.

METACOGNITION

The final dimension of our prescription for classroom stimulation toward active student learning, is the preparation of students to think critically through metacognitive practice. {See Costa, chap. 8, 1989} The capacity to step outside of oneself and reflect on one's thinking or learning gives the student an awareness that he is in fact, operating according to a certain perspective as a learner. This insight is often seriously deficient in academically immature students. Metacognitive awareness enables the student to step back and address such questions as the following, all of which are useful as metacognitive classroom writing applications:

*«What did I just do when I answered that question or performed the operation assigned?
How did I do it or not do it?»*

«What did I just learn? What didn't I learn? What part of the operation do I have to do over again because I was not successful the first time?»

«What strategies am I using in trying to write this paper? What strategies am I using in studying for this biology test? Are they working for me?»

«Do I know any other approaches I could try? If I don't, do I know where I could go to find out?»

Posing and answering metacognitive questions is essential for independent monitoring of learning and practice. It can be taught by the classroom teacher who habitually requires students to stop, stand back, {mentally} and write brief answers to questions such as the above, providing needed training for metacognition, which contributes richly to the development of a critical thinker and active learner.

CONCLUSION

Teaching less than adequately motivated and prepared students effectively, requires teachers to develop these students' capacities for active learning and critical thinking. Success in this effort depends upon teacher recognition of the significance of perspective to classroom learning and teacher awareness that thinking critically depends upon the activation of capacities connected to perspective. Classroom applications for such activation are essential. The brief writing assignments used as tools to promote

active learning, described above, can be useful at appropriate times in any classroom, but they are central for educating academically immature students. They provide initial and necessary first steps for content infused teaching of the whole roster of critical thinking skills.

NOTES

1. The Pace University/Lakeland School District, Mohegan Lake, New York, Worknet 2000 Collaboration in staff development is on-going through 1998. Education evaluation 1996-1997 by JoAnn Diono-Ingersoll, Strategic Research, Verona, New Jersey.

2. Korzybski, Alfred. (1962) *Science and Sanity: An Introduction to Non-Aristotelian Systems and General Semantics* (4th Edition). Lakeville, CT: The International Non-Aristotelian Library Publishing Company.

3. Hayakawa, S. I. *Language in Thought and Action* (4th Edition). New York: Harcourt, Brace, Jovanovich, Incorporated. 27ff.

4. Rachel Lauer, Director of the Straus Thinking Learning Center, Dyson College, Pace University, has developed and shared with the authors an experiential presentation of key critical thinking skills, along with materials for implementation. Dr. Lauer's experiential materials were used in the training of Lakeland teachers.

5. Costa, Arthur & Lower, Lawrence. (1989). *Techniques for Teaching Thinking*. Pacific Grove, CA: Midwest Publications.

6. Damasio, Antonio R. (1994). *Descartes' Error: Emotion, Reason, and the Human Brain*. New York: GP Putnam's Sons.

7. Damasio, on the basis of of neurological research, supports the idea that human emotions and feelings may be interwoven within the labrynth of our reason and rational thought. Damasio studies the «neurobiology of rationality» {511, and concludes that «Certain aspects of the process of emotional feeling are indispensable for rationality, ... Emotion, feeling and biological regulation all play a role in human reason.» {pp. xxi, xiiil

8. Chaffe, John. (1994). *Thinking Critically* (4th Edition). Boston: Houghton Mifflin.

9. Paul, Richard W. (1992). *Critical Thinking. What Every Person Needs to Know to Survive in a Rapidly Changing World* (2nd Edition). Rohnert Park, CA: Foundation for Critical Thinking.

10. Edelson, Phyllis Fahrie & Vallone, Gerard. (1998). «From Effective Teacher Training in Critical Thinking to Effective Classroom Teaching in Critical Thinking: End-labeling as Generic Instruction for Students, 7-12» *Analytic Teaching*, 18, 2.

Address correspondence to:

Phyllis Fahrie Edelson and Gerard Vallone

Pace University, Pleasantville

Campus 861 Bedford Road

Pleasantville, NY 10570 USA

[Back to current electronic table of contents](#)