

Staff Development

◆◆ Chapter 27

Critical Thinking Staff Development: The Lesson Plan Remodelling Approach

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Abstract

No one can teach critical thinking who does not think critically. Unfortunately, most teachers did not have their own critical thinking developed when they were students. Furthermore, few have time to take courses in critical thinking to develop their own thinking. The result is that staff development in critical thinking must be designed to accomplish two ends: 1) to stimulate and develop the critical thinking of teachers and 2) to help them transform their teaching from a didactic to a critical, dialogical model of education. In this paper from the Critical Thinking Handbook series, Binker and Paul summarize "the basic idea behind lesson plan remodelling as a strategy for staff development in critical thinking."

The basic idea behind lesson plan remodelling as a strategy for staff development in critical thinking is simple. Every practicing teacher works daily with lesson plans of one kind or another. To remodel lesson plans is to critique one or more lesson plans and to formulate one or more new lesson plans based on that critical process. It is well done when the remodeller understands the strategies and principles used in producing the critique and remodel, when the strategies are well-thought-out, and when the remodel clearly follows from the critique. The idea behind our particular approach to staff development in lesson plan remodelling is also simple. A group of teachers or a staff development leader with a reasonable number of exemplary remodels and explanatory principles can design practice sessions that enable teachers to begin to develop new teaching skills as a result of experience in lesson remodelling.

When teachers have clearly contrasting "befores" and "afters", lucid and specific critiques, a set of principles clearly explained and illustrated, and a coherent unifying concept, they can increase their own skills in this process. One learns how to remodel lesson plans to incorporate critical thinking only through practice. The more one does it the better one gets, especially when one has examples of the process to serve as models.

Of course, a lesson remodelling strategy for critical thinking in-service is not tied to any particular handbook of examples, but it is easy to see the advantages of having such a handbook, assuming it is well-executed. Some

teachers lack a clear concept of critical thinking. Some stereotype it as negative, judgmental thinking. Some have only vague notions, such as "good thinking", or "logical thinking", with little sense of how such ideals are achieved. Others think of it simply in terms of a laundry list of atomistic skills and so cannot see how these skills need to be orchestrated or integrated, or how they can be misused. Teachers rarely have a clear sense of the relationship between the component micro-skills, the basic, general concept of critical thinking, and the obstacles to using it fully.

It is theoretically possible but, practically speaking, unlikely that most teachers will sort this out for themselves as a task in abstract theorizing. In the first place, few teachers have much patience with abstract theory or little experience in developing it. In the second place, few school districts could give them the time to do so, even if they were qualified and motivated enough themselves. But sorting out the basic concept is not the only problem. Someone must also translate that concept into "principles", link the "principles" to applications, and implement them in specific lessons.

On the other hand, if we simply give teachers prepackaged finished lesson plans designed by someone else, using a process unclear to them, then we have lost a major opportunity for the teachers to develop their own critical thinking skills, insights, and motivations. Furthermore, teachers who cannot use basic critical thinking principles to critique and remodel their own lesson plans probably won't be able to implement someone else's effectively. Providing teachers with the scaffolding for carrying out the process for themselves and examples of its use opens the door for continuing development of critical skills and insights. It begins a process which gives the teacher more and more expertise and success in critiquing and remodelling the day-to-day practice of teaching.

Lesson plan remodelling can become a powerful tool in critical thinking staff development for other reasons as well. It is action-oriented and puts an immediate emphasis on close examination and critical assessment of what is taught on a day-to-day basis. It makes the problem of critical thinking infusion more manageable by paring it down to the critique of particular lesson plans and the progressive infusion of particular principles. It is developmental in that, over time, more and more lesson plans are remodelled, and what has been remodelled can be remodelled again; more strategies can be systematically infused as they become clear to the teacher. It provides a means of cooperative learning for teachers. Its results can be collected and shared, at both the site and district levels, so teachers can learn from and be encouraged by what other teachers do. The dissemination of plausible remodels provides recognition for motivated teachers. Lesson plan remodelling forges a unity between staff development, curriculum development, and student development. It avoids recipe solutions to critical thinking instruction. And, finally, properly conceptualized and implemented, it unites cognitive and affective goals and integrates the curriculum.

Of course, the remodelling approach is no panacea. It will not work for the deeply complacent or cynical, or for those who do not put a high value on stu-

dents' learning to think for themselves. It will not work for those who lack a strong command of critical thinking skills and self-esteem. It will not work for those who are "burned out" or have given up on change. Finally, it will not work for those who want a quick and easy solution based on recipes and formulas. It is a long-term solution that transforms teaching by degrees as teachers' critical insights and skills develop and mature. Teachers who can develop the art of critiquing their lesson plans and using their critiques to remodel their more and more effectively, will progressively 1) refine and develop their own critical thinking skills and insights; 2) re-shape the actual or "living" curriculum (what is in fact taught); and 3) develop their teaching skills.

The approach to lesson remodelling developed by the Center for Critical Thinking and Moral Critique depends on the publication of handbooks which illustrate the remodelling process, unifying well-thought-out critical thinking theory with practical application. They explain critical thinking by translating general theory into specific teaching strategies. The strategies are multiple, allowing teachers to infuse more strategies as they clarify more dimensions of critical thought. This is especially important since the skill at, and insight into, critical thought varies.

This approach, it should be noted, respects the autonomy and professionalism of teachers. They choose which strategies to use in a particular situation and control the rate and style of integration. It is a flexible approach, maximizing the teacher's creativity and insight. The teacher can apply the strategies to any kind of material: textbook lessons, the teacher's own lessons or units, discussion outside of formal lessons, discussion of movies, etc.

In teaching for critical thinking in the strong sense, we are committed to teaching in such a way that children, as soon and as completely as possible, learn to become responsible for their own thinking. This requires them to learn how to take command of their thinking, which requires them to learn how to notice and think about their own thinking, and the thinking of others. Consequently, we help children talk about their thinking in order to be mindful and directive in it. We want them to study their own minds and how they operate. We want them to gain tools by which they can probe deeply into and take command of their own mental processes. Finally, we want them to gain this mentally skilled self-control to become more honest with themselves and more fair to others, not only to "do better" in school. We want them to develop mental skills and processes in an ethically responsible way. This is not a "good-boy/bad-boy" approach to thinking, for people must think their own way to the ethical insights that underlie fairmindedness. We are careful not to judge the content of the student's thinking. Rather, we facilitate a process whereby the student's own insights can be developed.

The global objectives of critical thinking-based instruction are intimately linked to specific objectives. Precisely because we want students to learn how to think for themselves in an ethically responsible way we use the strategies we do – help them gain insight into their tendency to think in narrowly self-serving ways (egocentricity); encourage them to empathize with the perspec-

tives of others; to suspend or withhold judgment when they lack sufficient evidence to justify making a judgment; to clarify issues and concepts; to evaluate sources, solutions, and actions; to notice when they make assumptions, how they make inferences and where they use, or ought to use, evidence; to consider the implications of their ideas; to identify contradictions or inconsistencies in their thinking; to consider the qualifications or lack of qualifications in their generalizations; and do all of these things in encouraging, supportive, non-judgmental ways. The same principles of education hold for staff development.

◆ *Beginning to Infuse Critical Thinking*

Let us now consider how to incorporate these general understandings into in-service design. Learning the art of lesson plan remodelling can be separated into five tasks. Each can be the focus of some stage of in-service activity:

1) *Clarifying the global concept* — How is the fairminded critical thinker unlike the self-serving critical thinker and the uncritical thinker? What is it to think critically? Why think critically?

2) *Understanding component principles* underlying the component critical thinking values, processes, and skills — What are the basic values that (strong sense) critical thinking presupposes? What are the micro-skills of critical thinking? What are its macro-processes? What do critical thinkers do? Why? What do they avoid doing? Why?

3) *Seeing ways to use the various component strategies in the classroom* — When can each aspect of critical thought be fostered? When is each most needed? What contexts most require each dimension? What questions or activities foster it?

4) *Getting experience in lesson plan critique* — What are the strengths and weaknesses of this lesson? What critical principles, concepts, or strategies apply to it? What important concepts, insights, and issues underlie this lesson? Are they adequately emphasized and explained? What use would the well-educated person make of this material? Will that usefulness be clear to the students?

5) *Getting experience in lesson plan remodelling* — How can I take full advantage of the strengths of this lesson? How can this material best be used to foster critical insights? Which questions or activities should I drop, use, alter, or expand upon? What should I add to it? How can I best promote genuine and deep understanding of this material?

Let us emphasize at the outset that these goals or understandings are interrelated and that achieving any or all of them is a matter of degree. We therefore warn against trying to achieve "complete" understanding of any one of them before proceeding to the others. Furthermore, we emphasize that understanding should be viewed practically or pragmatically. One does not learn about critical thinking by memorizing a definition or a set of distinc-

tions. The teacher's mind must be actively engaged at each point in the process — concepts, principles, applications, critiques, and remodels. At each level, "hands-on" activities should immediately follow any introduction of explanatory or illustrative material. When, for example, teachers read a handbook formulation of one of the principles, they should then have a chance to brainstorm applications of it, or an opportunity to formulate another principle. When they read the critique of one lesson plan, they should have an opportunity to remodel it or to critique another. When they read a complete remodel set — original lesson plan, critique, and remodel — they should have a chance to critique their own, individually or in groups. This back-and-forth movement between example and practice should characterize the staff development process overall. These practice sessions should not be rushed, and the products of that practice should be collected and shared with the group as a whole. Teachers need to see that they are fruitfully engaged in this process; dissemination of its products demonstrates this fruitfulness. Staff development participants should understand that initial practice is not the same as final product, that what is remodelled today by critical thought can be re-remodelled tomorrow and improved progressively thereafter as experience, skills, and insights grow.

Teachers should be asked early on to formulate what critical thinking means to them. You can examine some teacher formulations in the chapter, "What Critical Thinking Means to Me". However, do not spend too much time on the general formulations of what critical thinking is before moving to particular principles and strategies. The reason for this is simple. People tend to have trouble assimilating general concepts unless they are clarified through concrete examples. Furthermore, we want teachers to develop an *operational* view of critical thinking, to understand it as particular intellectual behaviors derivative of basic insights, commitments, and principles. Critical thinking is not a set of high-sounding platitudes, but a very real and practical way to think things out and to act upon that thought. Therefore, we want teachers to make realistic translations from the general to the specific as soon as possible and to periodically revise their formulations of the global concept in light of their work on the details. Teachers should move back and forth between general formulations of critical thinking and specific strategies in specific lessons. We want teachers to see how acceptance of the general concept of critical thinking translates into clear and practical critical thinking teaching and learning strategies, and to use those strategies to help students develop as rational and fair thinkers.

For this reason, all the various strategies explained in the handbook are couched in terms of behaviors. The principles express and describe a variety of behaviors of the "ideal" critical thinker; they become applications to lessons when teachers canvass their lesson plans for places where each can be fostered. The practice we recommend helps guard against teachers using these strategies as recipes or formulas, since good judgment is always required to apply them.

◆ *Some Staff Development Design Possibilities*

1) Clarifying the global concept

After a brief exposition or explanation of the global concept of critical thinking, teachers might be asked to reflect individually (for, say, 10 minutes) on people they have known who are basically uncritical thinkers, those who are basically selfish critical thinkers, and those who are basically fairminded critical thinkers. After they have had time to think of meaningful personal examples, divide them into groups of two to share and discuss their reflections.

Or one could have them think of dimensions of their own lives in which they are most uncritical, selfishly critical, and fairminded.

2) Understanding component teaching strategies that parallel the component critical thinking values, processes, and skills

Each teacher could choose one strategy to read and think about for approximately 10 minutes and then explain it to another teacher, without reading from the handbook. The other teacher can ask questions about the strategy. Once one has finished explaining his or her strategy, roles are reversed. Following this, pairs could link up with other pairs and explain their strategies to each other. At the end, each teacher should have a basic understanding of four strategies.

3) Seeing how the various component strategies can be used in classroom settings

Teachers could reflect for about 10 minutes on how the strategies that they chose might be used in a number of classroom activities or assignments. They could then share their examples with other teachers.

4) Getting experience in lesson plan critique

Teachers can bring one lesson, activity, or assignment to the inservice session. This lesson, or one provided by the inservice leader, can be used to practice critique. Critiques can then be shared, evaluated, and improved.

5) Getting experience in lesson plan remodelling

Teachers can then remodel the lessons which they have critiqued and share, evaluate, and revise the results.

- Copy a remodel, eliminating strategy references. Groups of teachers could mark strategies on it; share, discuss, and defend their versions. Remember, ours is not "the right answer". In cases where participants disagree with, or do not understand why we cited the strategies we did, they could try to figure out why.
- Over the course of a year, the whole group can work on at least one remodel for each participant.
- Participants could each choose several strategies and explain their interrelationships, mention cases in which they are equivalent, or how they could be used together. (For example, refining generalizations could be seen as evaluating the assumption that all x's are y's.)

- To become more reflective about their teaching, teachers could keep a teaching log or journal, making entries as often as possible, using prompts such as these: What was the best question I asked today? Why? What was the most effective strategy I used today? Was it appropriate? Why or why not? What could I do to improve that strategy? What did I actively do today to help create the atmosphere that will help students to become critical thinkers? How and why was it effective? What is the best evidence of clear, precise, accurate reasoning I saw in a student today? What factors contributed to that reasoning? Did the other students realize the clarity of the idea? Why or why not? What was the most glaring evidence of irrationality or poor thinking I saw today in a student? What factors contributed to that reasoning? How could I (and did I) help the student to clarify his or her own thoughts? (From *The Greensboro Plan*)

The processes we have described thus far presuppose motivation on the part of the teacher to implement changes. Unfortunately, many teachers lack this motivation. We must address this directly. This can be done by focusing attention on the insights that underlie each strategy. We need to foster discussion of them so that it becomes clear to teachers not only *that* critical thinking requires this or that kind of activity but *why*, that is, what desirable consequences it brings about. If, for example, teachers do not see why thinking for themselves is important for the well-being and success of their students, they will not take the trouble to implement activities that foster it, even if they know what these activities are.

To meet this motivational need, we have formulated "principles" to suggest important insights. For example, consider the brief introduction which is provided in the Strategy chapter for the strategy "exercising fairmindedness:"

Principle: To think critically about issues, we must be able to consider the strengths and weaknesses of opposing points of view; to imaginatively put ourselves in the place of others in order to genuinely understand them; to overcome our egocentric tendency to identify truth with our immediate perceptions or long-standing thought or belief. This trait correlates with the ability to reconstruct accurately the viewpoints and reasoning of others and to reason from premises, assumptions, and ideas other than our own. This trait also correlates with the willingness to remember occasions when we were wrong in the past, despite an intense conviction that we were right, and the ability to imagine our being similarly deceived in a case at hand. Critical thinkers realize the unfairness of judging unfamiliar ideas until they fully understand them.

The world consists of many societies and peoples with many different points of view and ways of thinking. To develop as reasonable persons, we need to enter into and think within the frameworks and ideas of different peoples and societies. We cannot truly understand the world if we think about it only from *one* viewpoint, as North Americans, as Italians, or as Soviets.

Furthermore, critical thinkers recognize that their behavior affects others, and so consider their behavior from the perspective of those others.

Teachers reflecting on this principle in the light of their own experience should be able to give their own reasons why fairmindedness is important. They might reflect upon the personal problems and frustrations they faced when others — spouses or friends, for example — did not or would not empathically enter their point of view. Or they might reflect on their frustration as children when their parents, siblings, or schoolmates did not take their point of view seriously. Through examples of this sort, constructed by the teachers themselves, insight into the need for an intellectual sense of justice can be developed.

Once teachers have the insight, they are ready to discuss the variety of ways that students can practice thinking fairmindedly. As always, we want to be quite specific here, so that teachers understand the kinds of behaviors they are fostering. The handbooks provide a start in the *application* section following the *principle*. For more of our examples, one can look up one or more remodelled lesson plans in which the strategy was used, referenced under each. Remember, it is more important for teachers to think up their own examples and applications than to rely on the handbook examples, which are intended as illustrative only.

Lesson plan remodelling as a strategy for staff and curriculum development is not a simple, one-shot approach. It requires patience and commitment. But it genuinely develops the critical thinking of teachers and puts them in a position to understand and help structure the inner workings of the curriculum. While doing so, it builds confidence, self-respect, and professionalism. With such an approach, enthusiasm for critical thinking strategies will grow over time. It deserves serious consideration as the main thrust of a staff development program. If a staff becomes proficient at critiquing and remodelling lesson plans, it can, by redirecting the focus of its energy, critique and “remodel” any other aspect of school life and activity. In this way, the staff can become increasingly less dependent on direction or supervision from above and increasingly more activated by self-direction from within. Responsible, constructive critical thinking, developed through lesson plan remodelling, promotes this transformation.

Besides devising in-service days that help teachers develop skills in remodelling their lessons, it is important to orchestrate a process that facilitates critical thinking infusion on a long-term, evolutionary basis. As you consider the “big picture”, remember the following principles:

- ✓ *Involve the widest possible spectrum of people* in discussing, articulating, and implementing the effort to infuse critical thinking. This includes teachers, administrators, board members, and parents.
- ✓ *Provide incentives to those who move forward in the implementation process.* Focus attention on those who make special efforts. Do not embarrass or draw attention to those who do not.
- ✓ *Recognize that many small changes are often necessary before larger changes can take place.*

- ✓ *Do not rush implementation.* A slow but steady progress with continual monitoring and adjusting of efforts is best. Provide for refocusing on the long-term goal and ways of making the progress visible and explicit.
- ✓ *Work continually to institutionalize the changes made* as the understanding of critical thinking grows, making sure that the goals and strategies being used are deeply embedded in school-wide and district-wide statements and articulations. Foster discussion on how progress in critical thinking instruction can be made permanent and continuous.
- ✓ *Honor individual differences among teachers.* Maximize the opportunities for teachers to pursue critical thinking strategies in keeping with their own educational philosophy. Enforcing conformity is incompatible with the spirit of critical thinking.

It's especially important to have a sound long-term plan for staff development in critical thinking. The plan of the Greensboro City Schools is especially noteworthy for many reasons. 1) It does not compromise depth and quality for short-term attractiveness. 2) It allows for individual variations between teachers at different stages of their development as critical thinkers. 3) It provides a range of incentives to teachers. 4) It can be used with a variety of staff development strategies. 5) It is based on a broad philosophical grasp of the nature of education, integrated into realistic pedagogy. 6) It is long-term, providing for evolution over an extended period of time. Infusing critical thinking into the curriculum cannot be done overnight. It takes a commitment that evolves over years. The Greensboro plan is in tune with this inescapable truth.

Consider these features of the Greensboro plan:

A good staff development program should be realistic in its assessment of time. Teachers need time to reflect upon and discuss ideas, they need opportunities to try out and practice new strategies, to begin to change their own attitudes and behaviors in order to change those of their students, to observe themselves and their colleagues — and then they need more time to reflect upon and internalize concepts.

Furthermore, we think that teachers need to see *modeled* the teacher attitudes and behaviors that we want them to take back to the classroom. We ask teachers to participate in Socratic discussion, we ask teachers to write, and we employ the discovery method in our workshops. We do *not* imply that we have "the answer" to the problem of how to get students to think and we seldom lecture.

In planning and giving workshops, we follow these basic guidelines.
Workshop leaders:

1. model for teachers the behaviors they wish them to learn and internalize. These teaching behaviors include getting the participants actively involved, calling upon and using prior experiences and knowledge of the participants, and letting the participants process and deal with ideas rather than just lecturing to them.
2. use the discovery method, allowing teachers to explore and to internalize ideas and giving time for discussion, dissension, and elaboration.

3. include writing in their plans — we internalize what we can process in our own words.

Here is what Greensboro said about the remodelling approach:

After studying and analyzing a number of approaches and materials, this nucleus recommends Richard Paul's approach to infusing critical thinking into the school curriculum (which has a number of advantages).

1. It avoids the pitfalls of pre-packaged materials, which often give directions which the teacher follows without understanding why or even what the process is that she/he is following. Pre-packaged materials thus do not provide an opportunity for the teacher to gain knowledge in how to teach for and about thinking, nor do they provide opportunity for the teacher to gain insight and reflection into his/her own teaching.

2. It does not ask teachers to develop a new curriculum or a continuum of skills, both of which are time-consuming and of questionable productivity. The major factor in the productivity of a curriculum guide is how it is used, and too many guides traditionally remain on the shelf, unused by the teacher.

3. It is practical and manageable. Teachers do not need to feel overwhelmed in their attempts to change an entire curriculum, nor does it need impractical expenditures on materials or adoption of new textbooks. Rather, the teacher is able to exercise his/her professional judgment in deciding where, when, at what rate, and how his or her lesson plans can be infused with more critical thinking.

4. It infuses critical thinking into the curriculum rather than treating it as a separate subject, an "add on" to an already crowded curriculum.

5. It recognizes the complexity of the thinking process, and rather than merely listing discreet skills, it focuses on both affective strategies and cognitive strategies.

This focus on affective and cognitive strategies may seem confusing at first, but the distinction is quite valid. Paul's approach recognizes that a major part of good thinking is a person's affective (or emotional) approach, in other words, attitudes or dispositions. Although a student may become very skilled in specific skills, such as making an inference or examining assumptions, he or she will not be a good thinker without displaying affective strategies such as exercising independent judgment and fairmindedness or suspending judgment until sufficient evidence has been collected. Likewise, Paul also emphasizes such behavior and attitudes as intellectual humility, perseverance, and faith in reason, all of which are necessary for good thinking.

Paul's approach also gives specific ways to remodel lesson plans so that the teacher can stress these affective and cognitive skills. Thirty-one specific strategies are examined and numerous examples of how to remodel lesson plans using these strategies are presented. These concrete suggestions range from ways to engage students in Socratic dialogue to how to restructure questions asked to students.

A critical factor in this approach is the way that a teacher presents material, asks questions, and provides opportunities for students to take more and more responsibility on themselves for thinking and learning. The teacher's aim is to create an environment that fosters and nurtures student thinking.

This nucleus recommends that this approach be disseminated through the faculty in two ways. First, a series of workshops will familiarize teachers

with the handbooks. Secondly, nucleus teachers will work with small numbers of teachers (two or three) using peer collaboration, coaching, and cooperation to remodel and infuse critical thinking into lesson plans.

Since no two districts are alike, just as no two teachers are alike, any plan must be adjusted to the particular needs of a particular district. Nevertheless, all teachers assess their lessons in some fashion or other, and getting into the habit of using critical thought to assess their instruction cannot but improve it. The key is to find an on-going process to encourage and reward such instructional critique.