<div align="right">**Rexford G. Brown**</div>

SCHOOLING AND THOUGHTFULNESS

ABSTRACT: *In "Schooling and Thoughtfulness," Rexford Brown discusses his concept of a "literacy of thoughtfulness" for all students, characterized by the ability to think critically and creatively, to solve problems, exercise judgment, access, assimilate, and apply information, and communicate effectively with others. He contends that as an institution, the American school generally does not foster such capabilities, despite our society's increasing demands for graduates and workers who can think. Brown suggests that thoughtfulness is inescapably bound up with culture. Educational restructuring, in his view, can only succeed in the context of an environment in which public policy and the community support bold, collaborative inquiry, imagination, and trust in the democratic process.*

When Karen Greenberg asked me to again address a National Testing Network in Writing (NTNW) conference, she said, "Just take up where you left off last year." Let me, therefore, very quickly synopsize what I said last year and what has happened since. Then I will go on to talk about thoughtfulness and evaluation and the evaluation of thoughtfulness.

What I said last year was that there was considerable momentum around the country among business people (and this is true in

---

Rexford G. Brown is director of communications for the Education Commission of the States, a nonprofit interstate compact which conducts educational research, analyzes policy, and advises state governors, legislators, and school boards about issues related to school restructuring and reform. He also directs a five-year study called "Policy and the Higher Literacies," funded by the John D. and Catherine T. MacArthur Foundation. Brown's new book, Schools of Thought, How the Politics of Literacy Shape Thinking in the Classroom, *just published by Jossey-Bass, examines the degree to which policy and politics in America either encourage or undermine efforts to facilitate critical and creative thinking among teachers, administrators, and students. The above paper was the keynote address at the National Testing Network in Writing (NTNW) 1989 conference in Montreal.*

Canada as it is in the United States) and policymakers to require schools to produce students who are far better at critical and creative thinking and problem solving, and active learning. I use the word "thoughtfulness" to embrace a wide variety of things that people mention when they talk about the kinds of students they want to see graduating. They're really the kinds of things you'd like to see in a good mind. A good, well-trained, disciplined, engaging mind of a graduate should be good at detecting fallacies, it is argued, good at building arguments, and very good at critiquing arguments. A good, well-trained, educated mind is a mind that knows the various modes of discourse in the sciences, in the humanities, in the arts, and how in each of these modes of discourse people define and debate and solve problems. A good mind is creative when necessary and can discover and invent. And certainly a good mind has what they call the "Hots," the higher order thinking skills: the capacity to analyze information, to synthesize it, to interpret it, to evaluate and judge it. And increasingly you hear people saying that a good mind is capable of metacognition—thinking about thinking, thinking about the strategies and tactics of solving problems whether they're well-defined or ill-defined problems.

A good mind is capable of making distinctions and clarifying, capable of the various modes of discourse that we talk about so often in writing: description, illustration, persuasion, explanation. A good mind is capable of making decisions, inquiring, and learning how to learn.

We want people to be able to practice these various aspects of thoughtfulness alone, and with others, verbally and orally, in written form with various subjects and with a core kind of knowledge and in appropriate kinds of activities, given their ages. Moreover, today you hear from various quarters that the kinds of graduates we want, should have, in addition to these qualities, dispositions that are favorable to employing them. They should display the various virtues that go along with intellectual pursuit, for instance, the courage to pursue a matter to its end. Not only are these the kinds of things people talk about with respect to an elite class destined to go on to the university, they are saying we need these for a far broader range of our people than ever before.

I also said in my earlier talk that this kind of thoughtfulness requires certain conditions that are very difficult to achieve in schools. For instance, in order for people to be thoughtful you need a certain amount of mystery. Paradox is helpful. Uncertainty often stimulates us to think. Ambiguity can be a good condition for stimulating thoughtfulness, as is unpredictability, an atmosphere in which there are multiple demands, a dynamic social environment.

Also needed are a good deal of diversity in culture and language and background; theoretical disagreements; tension; incongruity; incompleteness; an urgent need to know; wonder; marvel; astonishment; surprise; enchantment.

Well, when you go through this list as I did last year, you begin to realize a very interesting fact: that all of these things are potential in any classroom, but all of them are often recognized by teachers as the enemy, not the friend, of instruction. Few are the teachers (who have a hundred and sixty students) who want to see ambiguity, who see unpredictability as a friend, who can deal with great diversity and uncertainty. There is something about the very conditions of schooling that makes us prefer that these kinds of conditions be minimized, not maximized.

So there's the dilemma that was sketched last year. A great many people would like to see thoughtfulness broadly defined and yet there are a number of conditions, all known to be favorable to thoughtfulness, which are perceived within the institution of schooling not to be useful, not to be desirable.

At that point, I left the NTNW conference and went off on a quest for thoughtfulness. I picked up my lantern and I did a series of studies. I went to the Deep South and studied some schools attended entirely by Black students and staffed entirely by Black teachers and, in fact, visited for a while in a community that was founded by ex-slaves and has always been an all-Black community in America. I also visited an Indian reservation and did some interviewing and case studies there. I also visited a major city in Canada and a number of major urban areas in America. In each case, I was looking for thoughtfulness. My colleagues and I spent about 650 hours viewing and talking with people and chatting with children. We were interested in a couple of things. One, what are the opportunities for thoughtfulness that young people from minority and language-minority backgrounds have in the schools? And two, what are the various kinds of policies at the local, state, or national level that can either foster a great deal more thoughtfulness in the schools or seem to squelch it? So we were constantly asking questions about the role of assessment, the role of curriculum mandates, the role of various kinds of teacher training opportunities, and so on, either in constraining people who would like to be more thoughtful in their classrooms or empowering them to go on and do so.

I just wanted to tell you a little bit about the results of our wanderings last year and focus in on the area that I think you are probably most interested in and that's the evaluation of thoughtfulness. I want to give you a broad overview that I hope will be helpful

of what I see going on around North America with respect to evaluating a wide range of behaviors associated with thoughtfulness.

First some overall findings. Most of what you see with respect to thinking and problem-solving at schools is expressed, both in terms of politics and in the classroom, as skills. People talk about the "skills" of thinking and break thinking into millions of tiny bits and pieces and then drill students on aspects of thinking. And so, as a result, much of what we saw was disappointing.

Overall, we found two main approaches to thoughtfulness. One is to define, very precisely, something like critical thinking or tactics or metacognitive skills and teach them and test them one at a time. The other is the "whole-language" approach to getting kids to immerse themselves in reading, writing, and discussion in ways that will naturally lead them to use their minds and go through many of the kinds of things I mentioned as characteristics of a good mind. Little of what we found was guided or supported by a coherent literacy policy at state or local levels. A great deal of what you see in schools results from a tension between the fact that schools are institutions and therefore must follow bureaucratic and logistical demands of institutions, while at the same time they are institutions that harbor practices—the practice of teaching and the practice of learning. One of the things that we were very interested in was the difference between the language of people primarily concerned with their institutional role, and people who were interested in learning. The language, the words, the type of rationality—the instrumental rationality that dominates administrative thinking—seems to clash powerfully with the language and the type of rationality that learners and teachers most use when learning is productive.

We talked to a lot of people about what the barriers might be to allowing students to be more active in their learning. And they told us things that I think you'll find quite familiar. Number one, people said there is not enough time to be thoughtful. There's not time to think, either because there's not enough time to plan for thoughtful activities or because time in our institutions is so fragmented that you can never get any extended writing, any extended discussion, or any extended reading going. And you know from the observational research of the last fifteen years that in American schools, certainly, very little reading goes on, very little writing goes on, and almost no discussion goes on. When you say that, people say, "Well what *is* going on?" and the answer to that is something that I'll talk about in a moment.

The second reason people gave as to why there's not a lot of active learning and why minds are not being challenged is that the

curriculum must be covered at all costs. Coverage is a very important thing. Teachers will tell you, "I can't do this thinking thing today because we have to do Asia today. And then tomorrow we're doing Australia." Because there are so many mandates requiring an incredibly broad and atomized curriculum, no one can cover it in depth or comprehend it in whole,. and enormous amounts of time are spent trying to pass it along as quickly as possible to as many children as possible. Also with respect to coverage, people say that too much of what passes for curriculum is devoted to enabling skills and not enough is devoted to doing something with those skills. Reading, instead of being an enabling skill, has become a subject in and of itself which has its own vocabulary and its own arcane kind of system. I saw many children all over the country studying, not reading but what adults have made reading into, trying to memorize the various terms and so on and so forth. We began to describe the language of the classroom as the language of "talkin' 'bout" because so many people were talkin' 'bout writing, but not really writing, and talkin' 'bout mathematics, but not really calculating.

A third reason people gave us for there not being many active learning opportunities in school was that they felt most kids cannot think at a sophisticated level. Intelligence is what is required for using one's mind, they believed, and in America intelligence is distributed across a bell-shaped curve. This means that only 5 to 15 percent of the people in any school are capable of any heavy thinking. The rest are not. Ultimately what it means is that thinking is against nature. This is not the case in other countries where people don't believe in the bell curve the way we believe in it.

A fourth thing that we heard is that young people do not want to do more thinking and problem-solving or are developmentally unable to think because they're too young. We heard that thinking is fine for college students but until students have gone through these various Piagetian stages of development there's really no point in trying to get them to think. They're either too young or they're developmentally behind from a learning theory point of view; they're disadvantaged. We heard dozens of reasons why disadvantaged students cannot use their minds fully. Ironically, many were from people who love these disadvantaged students dearly and wanted to help them, but believed that poverty and lack of opportunity were reasons why they couldn't think.

A fifth reason given is that a great many teachers who would like to get their students involved in activities that use the mind more fully don't know how to do it. And this is a serious problem because, if you look at staff development opportunities and training

opportunities, they are few and far between, particularly in large urban centres. And very often they themselves are conducted in the same lecture and recitation mode that classrooms are conducted in, in which teachers outtalk whole classes by ratios of three to one.

Another reason why people said they were not engaging in thinking activities is that the kinds of things I listed under thoughtfulness cannot be evaluated. They're too subjective; they can't be evaluated because we don't know how. Or they said, "Well yes they can be evaluated, but not in ways that are compatible with the accountability system we have in this district or this state. We have a basic skills test and this is what occupies our time. We must do well on it, and there's no way to make what you're talking about compatible with this test."

A major reason we saw for there not being much thoughtful activity going on in large school districts was a lack of coherence. There's no vision. Most major urban school districts have long since given up on trying to focus on curricular goals or outcomes except in the most superficial sense. They are absolutely overwhelmed by discussions about asbestos removal, gasoline for the buses, and leaky roofs and tar, and how can a large urban district afford insurance anymore and things like this. But they have no real vision about where they want to go. At the same time, large urban districts have been under attack for so long that they have found a porcupine-like way of defending themselves. So if you come into a district and ask, "Well are you trying this?" they will say, "Oh, yeah, we're trying that. We've got a pilot on that." "What about this?" "Oh yes, we've been doing that for five years." No matter what you say, they will tell you that they are doing it, or that they did it and it didn't work.

Another very important reason there's not a lot of thoughtfulness among students is that there's not a lot demonstrated by the adults in the system. As a matter of fact, one of our hypotheses as we went out to look for this literacy of thoughtfulness was that we did not expect students to be much more literate than their teachers. By and large, we found this to be true. Where teachers were critical and creative thinkers and problem solvers and were using their minds fully, there we happened to find students who were much more liable to be working in the same ways. Where we found teachers who were not using their minds very well, we found that was true of the students as well.

In poor schools, there's no vibrant conversation, there's no sense of a tradition of inquiry or argument. You find in them a preponderance of the kind of bureaucratic instrumental rationality which focuses on skills and processes and control. And you do not

see the kinds of conversations that lead to thoughtfulness, except rarely. Where we did see thoughtful schools and thoughtful districts, there was a huge and vibrant and exciting conversation with a capital "C" going on in the community and in the school, among the adults. They were engaged in community-making and community-building by focusing on the most important matters of the community and tackling them as a group.

Well, those were some of the things we found. We did indeed find some wonderful schools and some wonderful things going on and we saw some progress within some large urban school districts. We were very impressed with some schools and some school districts that we observed in Canada, where the whole-language philosophy had permeated and had been very thoroughly imbued in the educational system for a number of years.

But I want to turn back to the question of evaluation, because that is the subject of this conference, and tell you a little about how I see things shaping up with respect to a question that came up again and again, at school after school, and in district after district: Can thoughtfulness, variously defined, be assessed? And if so, how? I see some real changes at work in the environment around testing and assessment and I want to tell you a little bit about them.

First of all, two things are happening simultaneously. One is that we have an increasing use of standardized tests in the States, and the other is that we have an increasing interest in reform. The two go hand in hand because the reform movement has moved ahead over the last six, seven, eight years only because there have been promises made that the reform will be watched carefully. So, legislators have been freeing up money for school reform only on the grounds that schools be accountable. Accountability seems to be tied into standardized test scores with the result that there is more standardized testing than we used to have. This is unfortunate because we've already got a great deal too much, and have had for a number of years.

But at the same time there's increasing criticism of standardized tests because they don't measure this new kind of literacy or any of these things that, increasingly, people are asking for. It makes a difference that the people asking for these things are in the business community—because it's the people in the business community who asked for basic skills fifty years ago, who very much fixed the curriculum the way it is today, and who very much put a premium on standardized tests. So if you find that you can get to a point at which important people around the schools are asking questions, the answers to which they cannot get from standardized tests, you

have some likelihood that you're going to move away into alternatives.

You also hear a lot of criticism about teaching to the test. Indeed, I saw an enormous amount of teaching to the test in two kinds of situations. In the first, school districts are under court ordered mandates and are being scrutinized carefully by the community because people are so concerned about them. There, a rise or fall of two or three points on a standardized reading test can mean the difference in a superintendent's job. Secondly, you also see teaching to the test among the insecure and young teachers who are looking for ways to fit into the culture and do what they think must be done. I found plenty of teachers who don't teach to tests at all and who don't care about them at all and whose students do just fine. I also found plenty of school districts that are not in these high stakes situations, where no one pays any attention to the tests and things seem to go fine too. But there is this pernicious and ironic, even paradoxical, fact that the more people teach to the test, the worse their students do. You get this increase in students' scores at the price of a diminution of comprehension and breadth and a few other things that show up in other indicators that people then complain about. Because what is stressed in these places is a certain type of learning. It's "learning-in-order-to-be-tested" rather than natural learning. And this kind of learning incites the wrong strategies of problem-solving, the wrong kinds of thinking. As a consequence of these criticisms, we're having a very broad scale, interesting search for alternative outcome measures, alternative ways of looking at the context of learning, alternative ways of looking at students' and schools' backgrounds, alternative indicators of various processes and practices.

I see four basic areas of innovation right now in testing and assessment around North America, and I think these areas are going to continue to dominate the landscape increasingly over the next few years. A number of people are working to improve existing, widely used testing and assessment instruments including instruments that look at discreet competencies or holistic competencies or organizational characteristics of schooling. What they're doing is taking examinations like the Iowa Test of Basic Skills and they're trying to make sure that they include more higher-order thinking skills questions. There's a whole debate about whether, in fact, a question to which there is already a known answer is really going to challenge thinking, but in any case you do see this. You see experiments like the Pittsburgh, Pennsylvania district's Higher-Order Thinking Skills Assessment, which was developed in order to lead teachers toward developing their teaching in more thoughtful

ways. You see more interest in the National Assessment of Educational Progress among the States—particularly those aspects of the National Assessment of Education Progress that cover writing and reading comprehension and higher-order kinds of activities. You see people more and more using several tests instead of one test in order to gauge the quality of education. You certainly see more and more people using writing samples, whether they score them holistically or analytically or through primary trait or error analysis.

I would say that in California they've gone about as far as they can go in writing assessment in terms of defining primary traits that one isn't sure exist. They've defined so many different, small aspects of writing to look at, that they've started fragmenting it in a new way. In any case, it's a good sign, because it involves real writing and making students write and there is some evidence that when you change your assessment to a writing-based assessment, more writing is taught in the schools, rather than just grammar and drill.

In the second area of innovation, I see more effort to aggregate information that already exists and is widely gathered but to analyze it and package it in new ways. In Peter Ewell's book *The Self-Regarding Institution* (Boulder, CO: National Center for Higher Education Management Systems, 1984), Peter mentions a number of the kinds of information that higher education institutions gather, most of which is never looked at or analyzed at all, let alone in some thoughtful or new way. I've seen a movement toward gathering people together to take a look at this data base and try to look at new kinds of perspectives on it: school profiles, organizational indices, changes of various kinds.

In the third area of innovation, I see a number of people trying to adapt and legitimize evaluation schemes and instruments that already exist in various fields but are not widely used at present. This is where I think there's a lot of excitement. There are tests of creativity and divergent thinking and problem-solving that have been around for twenty, twenty-five years. They have not been widely validated and they have not been widely used. There is an effort now to get them into play and there are networks of people using them and doing some validation among themselves. The same is true of critical thinking tests like the Ennis-Weir Critical Thinking Test or the Cornell Critical Thinking Test, instruments that have been around for a number of years but have not been widely used and have not been validated but are increasingly being networked as ways of increasing the documentation necessary for validation.

Under this category, writing is being analyzed for what it reveals

about thinking and problem-solving, and comprehension, and so on. I remember years ago, when we were working on the second writing assessment for the National Assessment of Educational Progress, Lee Odell concocted a very interesting protocol for analyzing essays for cognitive development of children and laying it out on some kind of scale. People are now playing with ways of evaluating argument within writing samples so that one could perhaps conclude that a child was more or less thoughtful as a consequence of reading his writing.

I've seen in Canada that it's often the case that a research study by a major university of a sample of schools is sometimes sufficient to give people a good idea of what is going on in those schools, rather than imposing upon them a restrictive kind of assessment.

I see a bit more of "the teacher as researcher." This has been a slow developing phenomenon. Unless there are some major changes in the condition of work, you're not going to see a lot more of it, but it's growing slightly.

I see lots of interest in exhibitions as a form of assessment. We are in a collaborative program with Ted Sizer at Brown University developing fifty schools in five states, called "Re:Learning Schools." One of the principles these schools must ascribe to in order to join is that they must move away from standardized tests to exhibitions as a way of displaying knowledge.

I've seen "walkabouts" based on the Australian aborigine initiation ceremony in a number of the alternative schools I visited.

I've seen "Passages." There is an examination called the Rite of Passage examination at Walden Three High School in Racine, Wisconsin, which is a broad scale effort to have young people present all kinds of information and projects in order to graduate.

I've seen more performances. I worked for a while in an art institute for young people. The whole idea of assessment was that you performed as an actor, as a musician, and that was our whole way of evaluating students.

I'm seeing more interest in clinical evaluation in ways that are being pioneered by Lee Shulman, for instance, at Stanford University. Modes of evaluation derived from jurisprudence are coming into social studies in some places as well as from ethnographic studies. Portfolio evaluations have gotten to the point where the state of Vermont is going to have a state-sponsored portfolio assessment in order to find out how things are going.

All of the approaches that I've listed are efforts to adapt and legitimize and broaden and deepen evaluation schemes and instruments that have already existed in a number of different fields but have not been widely used to date.

One place in particular where I see some of this is my own home state of Colorado, where the governor has declared that he wants what he calls Educational Creativity Zones, which are places that are free of state rules and regulations. The State Board of Education has just passed a waiver law that says if any school can show that it is having difficulty restructuring and moving ahead toward a much more thoughtful kind of school environment because of some rule, regulation, or even state law, the Board will provide a waiver of that law so that it can move ahead.

Now the fourth area is what I would call breaking new ground in assessment. There are half a dozen approaches that I think merit our attention in the coming years. The first is adaptive computer testing and intelligent tutors—some work that Alan Collins at Bolt, Beranek and Newman (educational consultants, Cambridge, MA) is doing. Computer programs have been developed that assess what you know and follow you as you answer questions. They provide the next question that illuminates what you didn't know and leads you ahead, and so on. They're very interesting kinds of programs.

A second new direction is video. The Key School in Indianapolis is experimenting with video evaluation of children. The children are filmed both in candid and setup situations, and then the teachers and parents sit around and talk about them and say, "It looks to me that this child knows this, or has this problem or that problem."

A third innovation that I think is very interesting is structuring an entire school around fundamental questions. Debbie Meier's school in Harlem seems to me to be a model of this. The entire school runs around five fundamental questions. First, "How do I know what I know?" Every student, every teacher has to be asking this question all the time, and they do. The second is "What's the viewpoint behind that statement?" Somebody asked Debbie at a conference I was at, "Well, how do you know that this is working?" and she said, "The other day I was walking down the hall and I heard one student say to the other, 'Mary likes you,' and the kid turned around and said, 'What's the evidence for that?'" The third question is "How does this connect with anything else?" The fourth is, "What if?" and, "Suppose that . . ." and the fifth is, "Who cares?" The teachers who meet for a full day every Friday to talk about the students and to talk about what they're doing, and the students, whether in the lunch room or on the playground or wherever, are constantly held responsible for dealing with these five questions. Once you get into a school organized around questions and not answers, the question of assessment almost becomes moot.

Who needs it? The thing is, you know everyone is being thoughtful as a matter of course.

A fourth thing that I'm quite interested in is student-created tests and assessments. I've been working with some teachers who are able to have the students themselves do their own evaluation at the end of any unit of study. When you finish the unit of study, you ask what the most important thing in the chapter is, and one kid says it's Abe Lincoln and another kid says it's the slaves, and so on, and you have an argument over what was the most important thing. After a while you get it down to maybe six things and the class has to agree that these are the most important things in the unit. Then they discuss how would anybody know if a person knew these six important things? Well, you just ask him. Well, how would you ask him? Sometimes this discussion takes a few days. In the end they invent a test. It's almost irrelevant by that time. Nobody really needs to take the test, because the most important thing was they had to invent it.

Number five under cutting-edge innovation would be school and system climate assessments. Some of us have been working with the Centre for Early Adolescence in North Carolina on a literacy assessment of entire schools that really tries to get a sense of the atmosphere and the environment.

You can see how in many of these, writing and writing assessment has been a pioneer, not only in terms of the substance of an assessment, but as a way of developing teachers and in developing coalitions. It's through programs like the National Writing Project, or NTNW that you develop networks over a good many years that become the source of training and information about some of the things many school districts themselves can't provide.

What are the remaining challenges for evaluation? Let me just suggest a couple of them. As people are going about restructuring classrooms and schools, one of the difficulties they face is a lack of evaluation materials. Yet, if we invented an absolutely stupendous thoughtfulness assessment tonight we wouldn't have enough of a market to offset our production costs; the commercial incentives simply aren't there. In many ways we're at the point where David Sarnoff was with television in the late 1940s. He had a product. It was a great product. He wanted to mass produce it, but the market wasn't big enough. The only way he got it off the ground was with huge subsidies by the government. The government bought millions of television sets and therefore made it possible for the unit cost to come down, and for the thing to spread and for more people to afford it. It could be that one of the things we have to do is to

interest people in creating a market and subsidizing the development of tests like this. Certainly, we're going to have to prove, in a way that's organized and persuasive and coherent, that exciting education is easily assessed and can provide the constituents of education with the information they need in order to be able to do their job. Along those lines we've got to look at the aggregation of soft, messy, data. Suppose for instance, everyone were doing the things that I mentioned in my last two categories: the cutting-edge innovation and the adaptation of very interesting kinds of assessment from other areas. Well, pretty soon it would look like chaos to a policymaker with public obligation to get answers to their questions. One of their criticisms of these apparently soft ways of going about assessing is that they don't answer a question such as "Are some children getting a better shake than others?"

I think that in the long range we need to look at ways of developing a market for interesting assessments of thoughtfulness. I think that we have to prove that it can be assessed and provide lists of all the various things that I've just given you in much more detail so that no one could then say that there's no known way of assessing it, and deal head on with this question of, "Its subjectivity and its softness." I think that in the end much of what is holding standardized testing in place is the need of policymakers to make various important decisions. We sometimes thought they do this because they are empiricists or behaviorists or positivists or bourgeois anti-intellectuals or something, but what it comes down to is they've held on to test scores because they're very practical people and the low-level basic skills test scores tell them things that they think they need to know. The best argument in the long run for us is to show them that they are not getting answers from this data to the very questions that mean the most to them, and to help them see that there are alternatives. I think that as we do this, as they see that the traditional modes of testing are not really meeting their needs and that there are alternatives, we'll find ourselves in the position of developing the kind of market we need and to spreading the kinds of gospel that the NTNW conference spreads each year, further and further around North America.