

Designing and Implementing an Integrated Curriculum

**A Postscript
by Dr. Ed Clark (May 2005)**

Two years after writing this book, Kurt Anderson and I received a request from a Korean educator who had read my book and wanted to spend a week visiting Thompson Middle School. Around the middle of the week I spent an afternoon with him and discussed his observations. I still remember one question he asked. "How many of the teachers and teams are using your contextual strategies?" After giving the matter some thought, I responded: "None are teaching the material exactly as I would. However, all of them are implementing the philosophy. But each team is doing it in its own idiosyncratic way."

PHILOSOPHY

This led to the first of four insights that are fundamental to the success of integrated, student centered teaching. It can be summed up in a paraphrase of Bill Clinton, "*It's the philosophy, stupid!*" This is the first and perhaps most important lesson we've learned. *If you don't understand the philosophy and theory that forms the foundation of integrated, student centered learning, you will never be successful!* As psychologist Kurt Lewin wisely noted, "There is nothing more practical than a good theory." Conversely, there's nothing more impractical than an inadequate or outdated theory! And, the fact is that the philosophy and theories upon which many of to-

day's educational practices are based, were formulated a hundred years ago. Bill Gates, in a speech to the nation's governors stated the problem succinctly. "American high schools are obsolete," he told the governors. "By obsolete.... I mean that our high schools — even when they are working exactly as designed, cannot teach our kids what they need to know today. Training the work force of tomorrow with the high schools of today is like trying to teach kids about today's computers on a 50-year-old mainframe."

STAFF DEVELOPMENT

The second insight logically follows the first. Kurt Anderson summarizes what we both agree was the secret of the success of the integrated, student-centered program described in the book: *Staff development, staff development, staff development!* Not only was this true of Thompson's program, it has been true for all of the truly innovative educational programs introduced in the past fifty years such as the Open Classroom, New Math, and Whole Language. Where they failed, it was not because they were inherently wrong or impractical. Indeed, each was based on sound theory and could have been highly effective. Unfortunately, because of the implicit assumption that the key to the success of these programs was dependent primarily on methodology, minimal attention was given to the theoretical underpinnings. My personal experience with teachers and administrators in all three of the above examples reinforces this conclusion. School leaders tried to implement these programs without fully understanding the theory and its underlying philosophy of learning. Typical of this tacit mindset was the West Coast middle school principal who decided to implement the contextual strategies described in my book. After a year, she found no improvement in students' interest, involvement or, most important, in their learning. Inquiry soon revealed that the only training the teachers had received was a two day pre-service workshop after which they were left on their own. An apt analogy might be to expect a teenager to drive a NASCAR model in city traffic with only two days of driver training!

At Thompson, during each of the first two years of this program, we conducted a week-long workshop in the summer for the entire faculty. During both years, these workshops were followed by an on-going series of quarterly coaching sessions with each team that Kurt and I conducted jointly. One of my outstanding memories of these sessions is how often teachers would ask questions about both the theories and the prac-

tices that were under discussion — even though we had discussed both theory and practice repeatedly in earlier workshops. I slowly began to realize that true learning takes place only when a person, in this case, the teacher, asks questions that emerge from their own experiences. We call it “learning readiness” or “anticipatory set.” These coaching sessions were invaluable precisely because they provided teachers with the opportunity to ask and explore meaningful issues at a time when they were both real and relevant to their classroom needs. This insight, of course, reflects two truths about learning that we have known for a long time. The first is that in any learning situation, if one doesn’t understand why something is important, the chances of its being remembered, i.e., learned, is minimal. In this case, just as theory apart from the teaching context is impractical and irrelevant, so extensive practice without adequate theoretical understanding will never be effective. The second truth is that true learning comes only when what is to be learned is relevant to the learner’s life experience. This may be why so many students have difficulty remembering what is taught in school — precisely because it is irrelevant to their personal lives, issues and questions. This is equally true when introducing innovative programs to teachers. The concepts must be experienced in the teaching context before they are fully understood and their relevance fully appreciated. This reinforces the significance of the on-going coaching sessions designed to insure both the understanding and the relevance of the new curriculum strategies.

Whenever the discussion turns to staff development, Kurt always add one additional comment: *“All Staff development is first human development! Teacher growth is a pre-condition of student growth.”* Although on the surface this seems to be an obvious observation, what Kurt is suggesting is not so obvious. He is emphasizing that to be effective, what one has learned must be internalized, that is, it must become an integral part of the way the individual thinks and acts. For this to happen in a teacher-training environment, staff development must be a holistic, integrative experience that involves both the teacher and the student in a series of interactive, dialogical teaching/learning encounters. This “participative dialogue” involves the heart as well as the head of both teacher and student and should be the bedrock of any effective staff development program. In short, this philosophy of staff development reflects the philosophy, theory and teaching strategies presented in my book because they represent the essence of integrated, student-centered teaching and learning. Thus, the first step in all effective staff develop-

ment programs, i.e., for all effective teaching, is for the instructor to model the processes that are being introduced.

I must confess that this was not so obvious to me when I first began conducting the workshops at Thompson. At that time I was so interested in disseminating “head stuff” — ideas, concepts and strategies — than I wasn’t even aware that I was not modeling the processes I was trying to impart. But, thanks primarily to Kurt whose quiet example demonstrated another way of teaching, I began to realize that I wasn’t practicing what I was preaching. A few weeks after this insight dawned on me, I found myself acknowledging this failure to a graduate class I was teaching at the time. I let them know that from then on I was sharing the responsibility of the class with them as we both struggled to learn the “participatory dialogue” so necessary for effective teaching and learning. That was the beginning of a sea change in my own life, not only in my teaching style, but in more personal venues as well. It was only then that I began to understand how the experience of “participative dialogue” lies at the heart not only of effective teaching and learning, but is the essence of all satisfactory human relationships. Once this experience does become internalized, in the words of Donna Stockman, “I will never teach the same way again.”

SUPPORTIVE LEARNING COMMUNITIES

The third insight we gained from our experience at Thompson was that *to be successful, innovative programs require an enthusiastic, supportive learning community*. One or two teachers cannot do this alone. Organizational culture simply won’t allow it. For substantive innovation to be effective and longlasting, the sea change discussed above must not only be evident in the classroom, it must begin to be reflected in the school culture. Over time, any innovative philosophy must become thoroughly grounded in the school functioning as an integrated learning community. This can take place only in the context of a school-wide, preferably district-wide, systemic culture shift. Although Thompson had already begun to have a more relaxed, informal atmosphere, it took about two years before this shift became evident throughout the entire school. By then it was obvious that the lunch room conversations and parking lot chatter were different. Rather than being problem centered, staff members began to focus on success stories and on what worked and didn’t work and why. It soon became accepted practice for teachers to share their excitement over the insight or achievement of an emotionally or

behaviorally challenged student or the enthusiasm generated by a team of creative students whose presentation “knocked their socks off!” Because they had a shared vision, team members were learning to communicate more effectively among themselves and with their colleagues.

Skills in cooperative teaching and learning began to have influence far beyond the classroom walls as teachers, students, parents and administrators began to envision themselves as a community of learners in which each had different, but equally important functions. As I note in *Designing and Implementing an Integrated Curriculum*, the resource center had to increase its breadth of resources because students and teachers alike were asking different kinds of questions and exploring different types of issues. Students were often seen sitting on the floor in the hallways reading, studying, or quietly discussing some facet of what they were exploring with another student. Those students with learning and behavior disorders found themselves integrated not only into the classrooms and study groups, but into the social activities as well. Parents reported different dinner table conversations taking place as children often asked their parents about topics discussed in school that day. As a result, parental involvement in the life of the school increased significantly. And finally, students were increasingly involved in the broader community: a team studying the river ecosystem that runs through the city, individuals interviewing elected officials, the whole school making gifts for and visiting nursing homes and retirement communities. It soon became obvious that in this kind of atmosphere, everyone benefits: teachers, students, parents, the school and the community. In retrospect, it is also obvious that apart from the context of such an expanded learning community, any innovative program, no matter how good it is on paper, is doomed to failure! In short, “It *does* take a village to raise a child.”

DEDICATED LEADERSHIP

This leads to the fourth important insight that has emerged since writing the book: the necessity for strong, enlightened, dedicated leadership. As Carl Glickman in *Renewing America's Schools* points out, teachers as a group have been conditioned to conform rather than to be involved as initiators of change so that change will not automatically occur *if left solely to teacher initiative* (emphasis mine). Because of this, it is unfortunate that historically the principal's primary role has evolved from that of educational leader to that of building manager, disciplinarian, and public relations expert. Although any major disciplinary problems al-

ways involved Kurt and the Assistant Principal of the building, the culture and climate of Thompson created a school where disciplinary issues were minimal. Increasingly, discipline was handled at the classroom level because teachers understood the value of dealing with the problem where it occurred, rather than sending the student to the office. Consequently, the Principal was able to spend most of his time acting as educational leader. During the four years that Kurt and I worked together training and coaching the faculty, their insights, skills, and enthusiasm increased exponentially. Although one or two of the twelve teaching teams resisted any substantive change, the success of the program was evident. Teachers and students alike were excited and involved; discipline problems were almost non-existent; innovative teaching and creative learning strategies were evident everywhere; parent interest, satisfaction, and involvement was at a new time high; and student achievement — even when measured on standardized tests — was at least as good as, and in many cases, far superior to previous performance. After the first year, high school teachers began to report that they could always identify Thompson students because of their initiative, industry, provocative questions, and the quality of leadership and participation.

THOMPSON TODAY

I am often asked what's happening at Thompson today? Kurt Anderson left Thompson in 1999 to become superintendent of another district. In order to answer this question, four years after he left Kurt and I invited those teachers who had been active during the years described in the book to an after-school reception to reflect on their experiences both during and following Kurt's tenure as principal. Although we recognized from the beginning that a new principal would bring with her a different agenda and philosophy, we were anxious to find out how much of the program we had initiated was still in evidence. We also understood that there had been a substantial turnover in faculty. Several teachers had transferred to other schools in the district, some moved away and several had retired. These changes meant that the composition of all the teaching teams had changed significantly and most of the teaching was beginning to be done independently rather than as a team. Given these changes, we were pleased to find that in some ways, the school culture continued to be less formal, more student centered, and perhaps less hectic than in the other middle schools in the district. But to no one's sur-

prise, we also found that the program we had initiated and spent so much time on was evident only in a few isolated classrooms. Although a small number of teachers — those who had “internalized” the new philosophy — continued teaching in much the same way, the curriculum was less student centered and had become more content and discipline oriented. Some of the teachers continued their efforts to integrate both the former and the new philosophies with, perhaps limited success. But without the ongoing encouragement that strong leadership provides, even the most dedicated teachers tended to gradually return to what was most comfortable for them — the “tried and true.” In addition, state and federal programs such as *No Child Left Behind*, renewed the push for high scores on standardized tests. In spite of such counter pressures, a few teachers still continued to use the contextual strategies they had learned during Kurt’s tenure as principal.

The very fact that a program that had been so successful for four years was, for the most part, discontinued in subsequent years highlights the significance of the principal’s role as educational leader. At the same time, it underscores the importance of a district-wide culture shift in which curriculum innovation doesn’t take place in a few classrooms, or in a single school, but reflects a district-wide commitment. Without such a commitment, when Kurt left the district, there was no effort to replace him with another principal whose philosophy of curriculum was similar.

The experience at Thompson reinforced what we already knew, namely that substantive change such as that discussed in the book, does not take more money. Indeed, in the long run it requires far less. For example, the teachers at Thompson found that most textbooks were essentially useless for an integrated, student centered program. At best they could be used as resource materials and as such, they did not have to be replaced every few years and only a few copies were needed for the learning center or in a classroom. What we demonstrated was that the primary change necessary for success is a shift in what I call “mindset” in the book. This new mindset involves a shift in focus from teacher to student, from teaching to learning, from content-centered to student-centered teaching/learning, from discipline oriented to integrated, from outcome to process, from individuals to partnerships, from competition to cooperation.

The reality is that learning is as natural to humans as breathing! Whenever you find a kid who doesn’t enjoy learning, you find a dys-

functional system — either family or school, and often both! Kids want to learn. It comes natural to them, and they can be responsible and active co-learners when given the opportunity. The more they're encouraged to participate, the more effective the learning. Remember those high school dropouts mentioned by Bob Samples in *The Metaphoric Mind* who had what he calls "a PhD in street smarts?" Kids intuitively know what's important. Unless brain damaged or emotionally abused, they have all the skills they need to be successful in the kind of educational milieu described in the book.

My experience based on working with teachers for more than thirty years has convinced me that many of them know that much of what passes for good education today does not address the learning needs of our youth. And so, they are legitimately skeptical of most efforts to impose new ideas on them because they know that innovative change takes time and sustained commitment not only on their part, but on the part of the administration. When they see such a commitment, in spite of the difficulties inherent in any major change, they are willing to embrace new ideas and strategies that they believe will benefit their students! Our experience at Thompson Middle School provides a perfect illustration of what research tells us about organizational change without such a comprehensive commitment. Because systems tend toward a steady-state homeostatis, when pressure for change begins to build, the system will fight back. Without the sustained leadership provided by a principal who understands and appreciates the difficulties teachers face in implementing a genuinely innovative program, it's simply a matter of time before even the best program will fail. But the principal alone cannot effect substantive change without the continuing positive support and encouragement of an enlightened administration that is fully committed to systemic change.

THE NATURE OF SYSTEMIC CHANGE

I used to believe that systemic change was "bottom up" and could be initiated by a small group of dedicated teachers. However, research and our experience make it clear that this is not the case. Although the organization can accommodate small pockets of innovation from time to time, without sustained support, the innovation will never become systemic, and will, in time, wither on the vine. Research has also demonstrated conclusively that innovative systemic change cannot be simply mandated from the "top down." Resistance is formidable! Substantive

systemic change must be accompanied by a major shift in organizational culture or what I refer to in the book as “mindset.” This means that systemic change must involve a “participative dialogue” in which all the players, teachers, staff, and administrators are involved and recognized as equal partners. As Michael Fullan in *The New Meaning of Educational Change* notes, successful reforms are partly a function of good ideas, and largely a function of the conditions under which the ideas flourished. Apart from this cooperative effort, structural innovation is doomed to failure.

1 TO ENGINEERING EDUCATION: 2. Designing An Integrated Curriculum THE CDIO APPROACH TO ENGINEERING EDUCATION: 2. Designing An Integrated Curriculum November 2007 Refer to "Rethinking Engineering Education", Chapter 4. Be sure to introduce yourself, and give participants your address. 3 SESSION TWO OBJECTIVES Explain the rationale for an integrated curriculum Plan ways to benchmark an existing curriculum Describe the process for designing and implementing an integrated curriculum. 4 THE CURRICULUM DESIGN PROCESS The highlighted (yellow) shapes are the focus of this session. Briefly explain the parts of the diagram as an advance organizer of what follows in this session. Implementing the Curriculum with Cambridge works for schools, I hope, on two levels. On the one hand, it is a map and guide to the wide range of resources "subject syllabuses, learner and teacher support" from which schools can draw in building and delivering a curriculum appropriate to their learners' needs. On another level, it sets out and explains the principles which we believe should underpin an effective school curriculum "principles based not on ideology but on our own research and that of others" and discusses how these principles can be applied in practice. Schools require well-designed and well-supported curricula to achieve their educational vision and aims. Curriculum integration is a good way to nurture children's multiple intelligences through integrated and daily life learning activities. In addition, children can also figure out their own ways to develop different intelligences. (please see Appendix 2 for details). 3.1.3 Tailoring with Consideration of Curriculum Continuity and Internal Coherence. setting up an interdisciplinary teacher team to design, and, later, implement the integrated curriculum for a certain level. (2). matching the topics to be taught in each subjects every month so as to create inter-topic links which usually appears in the form of themes.