The potential for the coherent integration of the cognitive and affective aspects of student development through a constructivist approach is discussed in this paper. Educators should be concerned with students' learning with regard to developing values and characteristics, especially respect and responsibility. The obstacles that hinder the creation of constructivist schools are described, some of which include the politics of state-level policy formation, the hierarchical nature of local decision-making, control by compromising superintendents, adversarial teacher-board relationships, dissatisfied teachers, and apathetic parents. Strategies for bringing constructivism into school systems at several levels include hiring visionary principals and superintendents, providing teacher retraining programs, and enlisting community support. (LMI)
Let me begin by saying a bit about myself. My professional career in education began as a public school teacher. I taught in a self-contained 7th grade on Long Island (New York) for eight years. I completed my doctoral work at SUNY Albany in Educational Psychology & Statistics. Since 1969 I have taught at Mount Holyoke College in South Hadley, Massachusetts. I have been involved in teacher preparation. I was elected to the South Hadley School Committee in 1977 and served 9 years. South Hadley is a largely residential college town in Western Massachusetts with a population under 20,000. The school committee has 5 elected members. There is a representative town meeting. The town is almost entirely white and middle-class. My work at Mount Holyoke takes me into the South Hadley schools regularly.

Speaking first as a constructivist, I will ask whether there is anything missing from our construction of constructivism? Assuming that the audience is reasonable well-versed in current descriptions of constructivism, most of which have primarily a cognitive focus, I would like to suggest that in theory and practice, constructivists need to give more attention and effort to understanding the affective aspects of development. Piaget in his writings gave co-equal weight to the cognitive and affective components in development, intertwined as they are. (By affective I include emotions, feelings, interests, values, etc.) Piaget's research and writing focused primarily on what we recognize as the cognitive aspects of development. Terry Brown, among
others, suggests Piaget took the easier road of focusing his research on the
cognitive and not on affective development. The road Piaget took is the road
most of us followed in our own constructions of constructivism. It is my
belief we need to get back to affective development and more adequately
construct its role in development and learning. Constructivists and other
reformers are not just interested in cognitive development but also in moral
or "character" development. The missing "R's" are respect and responsibility
(Lickona, 1991). Affective development plays a major role here. I believe
Piaget would agree. Annually we are subjected to data which says the greatest
in school problem in education is school discipline. As a constructivist, I
read this as the greatest problem in education is motivation. Motivation is
primarily, but not exclusively, an affective issue.

American education has a mental health problem. Students, teachers,
administrators, parents, school board members, taxpayers are all too often
feeling hopeless with regard to public education. Despair is widespread.
Apathy is widespread. There is a lot of bad "feelings". Approaches to
educational reform which do not effectively address the affective as well as
cognitive issues will necessarily fall short. Schools which do work,
explicitly or implicitly address both.

One of the hopes for the constructivist philosophy is that there is the
potential for a coherent integration of the cognitive and affective aspects of
development. I think we do need to be concerned with students learning with
regard to values and character, the most important probably being respect and
"constantly underlies adult-child relationships." (p. 67)

The roadblocks to creation of constructivist schools are largely, but
not entirely, the same as those which effect efforts at educational reform in general.

1. State governments mandate aspects of education which constrain alternative visions. These constraints can be overcome but function, for many, as a disincentive for meaningful reform. To frequently, responses by states are political responses which can frustrate initiatives.

2. There exists the traditional model of what schooling is and should be which has evolved over many years. There has been some adaptational value to that model by definition. The question "Why change?" is not a trivial one. The answer is, of course, that the model which has been adaptive is no longer adaptive, we fear.

3. Within local school systems, local school boards hold the legal power for all decision-making. Legally it is a top down model in terms of power.

4. School boards are typically composed primarily of citizens who hold by the traditional model of education. Constructivism is an unknown, and if heard about is suspect.

5. This is true for all other constituencies within school systems.

6. School boards rarely get beyond their "bread and butter" issues: money, buildings, and contract negotiations. Discussions about "education" are infrequent, limited, and typically driven by constituent complaints. As such they are typically responses to crises.

7. Educational leadership is left, by default, in the hands of superintendents. Thus, superintendents become key functionaries in the success or lack of success of any reform efforts. Unfortunately, too many superintendents are middle of the road politicians who choose compromise over
leadership as their personal management style. There are good reasons for this but it does inhibit reform which has an integrity.

8. Collective bargaining in many communities and states has led to seemingly permanent adversarial relationships between teacher's associations and school boards. Effective cooperation is all too often problematic.

9. Individual teachers tend to feel overworked, undervalued, not respected, isolated, apathetic, underpaid, and angry. Incentives for positive change are few.

10. Parents too frequently are full of apathy and despair. They too frequently feel schools are places they are not welcome and they feel little responsibility for schools.

11. Constructivism is a construction. It needs to be constructed. This takes time, as we all know.

Most of us who are committed constructivists have come to our conviction only after considerable experience in education. We are enamored of the theoretical coherence and explanatory value of the theory. We have witnessed sufficient success to believe in it. We "feel" it is the way.

WHAT TO DO?

There are several levels at which, and strategies with which, attempts to bring constructivism into school systems can occur.

1. Hire superintendents and principals who have visions which are sufficiently consistent with constructivist principles and who have a disposition to not abandon that vision in the face of local politics. Key administrators who understand the necessity of mutual respect relationships in education and who model that understanding in relations to others are necessary. With communication, persistence and endurance, constructivist
principles can trickle down, if all goes well.

2. Work with the converted and those susceptible to conversion. At Mount Holyoke College we have a program called SummerMath for Teachers which has been operating for ten years. It is an explicitly constructivist based teacher retraining program designed to foster change in mathematics instruction at all levels. SummerMath for Teachers began offering courses for teachers on constructivist pedagogy 10 years ago. Over the years it has added academic year content courses in mathematics for teachers, and most recently, weekly support for participating local teachers. Support has taken the form of program staff weekly visiting participating teachers classrooms, modeling teaching procedures, observing teaching procedures, followed by half hour (or more) followup discussions with teachers. This type of support has been found to be necessary for teachers spiritually converted to constructivism to begin to make the transition to successfully becoming a semi-independent constructivist teacher. A description of one teachers making the transition is found in Cathy Fosnot’s book, Enquiring Teachers. Enquiring Learner, (1989). It was also found that there exists a need for content courses in mathematics, particularly for elementary teachers. Some teachers, initially hostile of constructivism and "required" to attend SummerMath for Teachers by their school administration, have become fully converted to constructivism and have become staunch advocates.

3. Ultimately, any educational program will rise or fall on the consensus or lack of consensus in the community it exists in. The visionary superintendent and the isolated constructivist teacher must constantly swim upstream. Thus, at some point, the community at large must be invited in. In South Hadley, every time space issues raised questions about new buildings,
etc., successful resolution has only come about when the school committee activated its "School Plants Committee". This committee, with broad community and citizen membership, was invariably charged with studying the school space available in the town, what the immediate and projected needs were, and making a recommendation to the school department and town as to how to meet the needs. Over the past 20 years, recommendations have included pricey new schoolhouses and additions to existing schoolhouses. Every time this procedure has been followed, the recommendations of the School Plants Committee have been funded by the town. Every time the school department has not gone through the School Plants Committee, and made building recommendations on its own, the effort has failed. The lesson here is clear. Broad community support is essential to substantive change.

Recognizing that reform of educational programs is more complex than getting approval for new schoolhouses, I believe that the reform we seek can only proceed if the constituencies are invited in and do indeed participate. Tom Lickona in his recent book, Educating for Character (1991) outlines a process which is worth looking at. School committees can initiate and encourage this process.

Piaget, Jean (1981). Intelligence and Affectivity: Their Relationship During Child Development, Palo Alto Annual Reviews Inc.