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Why We Can Do Better than "Best Practice:" Taking a Closer Look at the Relationships among Classroom Management Practice, School Climate and Student Achievement

John Shindler jshindl@calstatela.edu

California State University, Los Angeles Los Angeles, CA 90032

Introduction

As teacher educators, we are committed to the improvement of teacher practices and methods that increase student academic achievement. To this end we are constantly investigating and evaluating practices that get results, often called "best practices." Since the 1960s when we made a national commitment to the education of all children regardless of race, ethnicity, socio-economic status, and gender, we have also been investigating the preconditions necessary for improved academic achievement. We have engaged is a great deal of research investigating non-school preconditions such as poverty, family structures, and English language acquisition. Additionally, we tended to add to these givens or school preconditions such things as school structure, school leadership, and student behavior. The contention that student behavior is a precondition for increased academic achievement has in many respects guided the development of the field of classroom management to this point. The assumption is that when the teacher obtains an acceptable level of control the result will be the order necessary for teaching and in turn learning. It follows then that any methodologies that obtain order will lead to more student achievement.

The findings of this study of thirty (30) urban schools suggest that the assumption that more control inevitably leads to more learning is to a great degree ill-conceived. When examined more carefully what can be seen is that different kinds of classroom management practices will produce very different levels of student achievement and school climate. The data point to a larger contention that classroom management practices do not simply have the effect of producing the conditions for learning but are essential teaching practices that in themselves will lead to greater or lesser student achievement. It may be true that order as an isolated variable does tend to relate positively with more learning, but as this paper will show, attempts to promote order can and do achieve vastly different outcomes. In fact, most classroom management practices can be inferred to be an attempt to create order in some form. The findings of this study show that some of these attempts contribute to the low achievement and poor climate in many schools. Moreover, the study found that those practices that do produce reliably high levels of achievement to be both predictable and explainable.

In this present age of accountability, educators are being encouraged to implement whatever is necessary to achieve higher student achievement. Yet, if our goal is student achievement, there is a great deal of support for the contention that effective classroom management and discipline practices are necessary. Research has consistently shown a relationship between effective classroom management and student achievement (Emmer, Evertson and Worsham, 2003). Wang, Haertel, and Walberg (1993) conducted a meta-analysis of studies on student achievement. Of the 228 variables that they identified in their examination, classroom management practices were found to be the most predictive of student achievement. Moreover, Shindler, Jones, and Williams (2010) found classroom management and discipline to be the most predictive of both school climate as well as student achievement from the eight climate dimensions measured.

Historically much of the educational research has suggested a linear analysis of "better management" – i.e., more engagement or fewer disruptive behaviors lead to more learning. For example, Brophy (1996) found that students achieved more when management practices resulted in more academic learning time. Yet, there is a growing body of research that points to more complex kinds of factors that create a climate for more learning. For example, in a meta-analysis of over 100 studies, Marzano (2003) found that teacher relationship was the key to high quality classroom management. Those teachers who were judged to have better relationships with their students experienced 31 percent fewer behavioral problems than those with were judged to have weaker relationships. The work of Wentzel (2000), Dweck (2000, 2006) and many others in the area of human development offer even greater insight into factors that influence student motivation and behavior. These authors focus on systems theory rather than stimulus and response theory to make sense of classroom phenomenon. The result is a more nuanced understanding of what kinds of results we can expect from any given practice.

Purpose

The purpose of this study was to examine which classroom management and discipline practices produced the most positive influences on student academic achievement and school climate. The study offers a three-part conceptual framework that provides a comprehensive lens by which to examine the classroom practices of teachers and the student motivation and behavior that results. Study explored correlations among three variables – management/discipline, climate and achievement. Implications for both policy and practice would be generated as a result.

Methods

The study examined classroom management practice ratings, school climate ratings and student achievement scores at thirty (30) urban public schools, ten (10) Elementary, ten (10) Middle Schools and ten (10) High Schools. The sample of schools was drawn a large urban area and reflected schools from diverse ethnic and socio-economic communities. Each school assessment team administered the Alliance for the Study of School Climate (ASSC) School Climate Assessment Instrument (SCAI). The climate assessment team at each school incorporated a standard protocol and surveyed a minimum portion of student, parent and faculty participants. Commensurate year California State Academic Performance Index (API) was used to measure student achievement at each school. Qualitative data was gathered at each school in the form of participant observation and researcher observation. Qualitative data were gathered from approximately twenty-five (25) additional schools where the SCAI was administered, but the participant N was too low to produce the reliability necessary to include their ratings in the primary survey data analysis.

The SCAI was designed to achieve an in-depth examination of the climate, health, function and performance of each school as a whole. Scale D5 of the SCAI – discipline and management was used to measure the kinds of classroom management and discipline practices being used at each school. Items within the SCAI are structured to reflect 3 levels – high, medium, and low functioning. There is

descriptive language for each level of each item. Participants are asked to rate their experience of their school on each item. Chronbach's alpha reliability coefficient for the overall SCAI (N=894) is .97 and .92 for subscale D5. Example items from the SCAI can be seen in Figure A.

Figure A: A Sample of Three Items from Sub-Scale D5 (Discipline Environment) of the ASSC School Climate Assessment Instrument (SCAI) – Teacher version 7.2.1

5. Discipline Environment					
Level - 3		Level - 2		Level - 1	
High high	-middle	middle	middle-lo	w low	
5.cO	o	O	O	O	
Most teachers use effective discipline strategies that are defined by logical consequences and refrain from punishme or shaming.	assertive disc	rs use some form of positicipline but accept the notion and shaming are necessarts.	on that thin	ost teachers accept the a ng the students in the sounishment and/or personnel.	school understand
5.eO	o	O	o	O	
Maximum use of student-generated ideas and input.	Occasional ideas.	use of student-generat		achers make the rule ould follow them.	es and students
5.i0)	O	0	O	
Management strategies consistently promote increased student self-direction over time.	acceptable l	nt strategies promote levels of classroom con out are mostly teacher-	trol res	nnagement strategies sults: some classes se er time, while others	em to improve

Figure A depicts sample ASSC School Climate Assessment Instrument (SCAI) items from sub-scale D5 (Discipline and Management). Items are structured to reflect practices at the high, middle and low levels of practice and experience as characterized by the ASSC model and conceptual framework. Figure B depicts the general characteristics of these 3 levels. At the core of what defines each level of practice is 1) the level of "perception" that defines the rating option (Figure C), and 2) that practice's effect on what could be classified as the "psychology of success (POS) of each student as an individual and the class as a collective (Figure D). High or level 3 schools are defined by a high degree of function, intention, and collaborative structures. Middle or level 2 schools are defined by some function and intention, and more independent structures. Low or level 3 schools are defined by high levels of dysfunction, what could be termed an "accidental" modus operandi, and competitive structures.

Figure B: Theoretical Construct for Each of the Three Levels of the ASSC School Climate

Assessment Instrument (SCAI).

Accessinent mot			
	Level 3	Level 2	Level 1
System	Intentional	Semi-intentional	Accidental
Ethos	Sound vision translated into effective practice	Good intentions translated into practices that "work."	Practices defined by the relative self-interest of faculty and staff
Effect on	Liberating	Perpetuating	Domesticating
Students	Experience changes students for the better	Experience has a mixed effect on students	Experience has a net negative effect on students
Level of Perception	System/Principle	Program	Sensory
Goal	Community and Self Responsibility	Order and Engagement	Obedience (or lacks a clear goal)
Psychology	Promotes a Psychology of Success	Promotes a Mixed Psychology	Promotes a Psychology of Failure

Conceptual Framework – ASSC Model

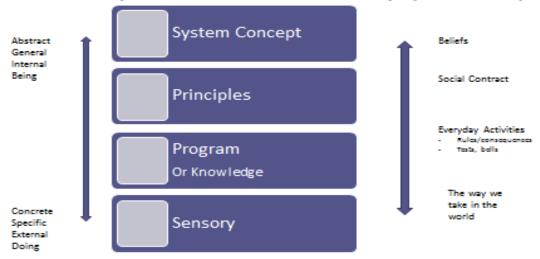
To better understand the difference among classroom management approaches, it is useful to examine them within three lenses (e.g., the ASSC Model) that will operate as the analytical framework for processing the data from this study. First, classroom management principles and practices are examined within the teaching-style matrix that offers a simple way to classify teacher action into four categories (Shindler 2009). Second, all practices are examined in relation to the "level of perception" (Powers, 2005) that they would ultimately encourage. Third, practices can be examined in relation to their effect on the psychology of each individual student and the class and school as a whole. All practices could be judged to be producing either more "psychology of success (POS)," or "psychology of failure" (POF) (Shindler, 2009).

Level of Perception – Defined

Powers (2005) demonstrates in studies of living organisms, including humans and human institutions, the quality of perception progresses from less to more advanced, in a regular series of stages (See Figure C). He states that each of us individually and collectively use all of our levels of perception all of the time, but the proportion varies, and will determine to a great degree the behaviors we choose. At the basic level are sensory and survival concerns. The next level is characterized by the need to understand our environment and create patterns and rules for living. The level above that involves the use of making abstract generalizations and the creation of principles for living. At the highest level we create the integration of our actions into systems that are guided by beliefs and values.

As one examines the function level of classrooms, these levels of perception operate effectively to predict the degree to which the collective behavior could be characterized as intentional and harmonious. These levels of perception are built into the ASSC SCAI to define the hierarchical classroom function/climate levels.

Figure C: Levels of Perception Perceptual Control Theory (Powers)



Success Psychology as Conceptual Framework for High Functioning Climate and a Predictor of Achievement

Psychology of Success (POS) is defined by three inter-related factors (Figure D). These factors are 1) internal vs. external locus of control (LOC), 2) a sense of acceptance and belonging vs. alienation and worthlessness, and a growth vs. fixed ability orientation. The continuum between POS vs. psychology or failure (POF) practices is reflected in SCAI item design.

Figure D: Sub-factors for the Theoretical Construct of Achievement Psychology

Psychology of Success (POS)	Psychology of Failure (POF)
Internal Locus of Control	External Locus of Control
Belonging & Acceptance	Alienation and Worthlessness
Growth- Orientation	Fixed-Ability Orientation

As we examine the idea of a "psychology of success" in more detail, what becomes evident is that several familiar concepts are rooted in this common phenomenon. The concepts of self-esteem, achievement psychology, intrinsic motivation, basic needs satisfaction, and success psychology are all rooted in the same fundamental components.

Paring the research in this area down to its fundamental components, these three essential factors emerge to explain the degree to which an individual student or a collective group has a psychological orientation toward success or failure. Moreover, there are a large number of studies to indicate that each of the three factors is independently correlated with academic success (Auer, 1992; Benham, 1993; Dweck, 2000, 2006; Klein & Keller, 1990; Joseph, 1992; Rennie, 1991). Each fundamental component is explored here in more depth.

Growth vs. Fixed-Ability Orientation. Carol Dweck (2000; 2006) and her colleagues in their research over the course of 30 years have developed a very useful paradigm with which to examine academic self-concept, achievement, and motivation. They have demonstrated in a series of studies with students (Dweck, 2000; 2006) that future success is not as much the result of talent (i.e., fixed ability factors) or current level of ability, as it is the result of the orientation/cognitive strategy one uses to approach learning tasks (i.e., a growth mindset). Research of others (Davis, 1992) and personal reflection support the notion that the level of one's sense of competence (or self-efficacy) will relate to the level of self-esteem. We of course want our students to experience healthy levels of self esteem. However, the different cognitive strategies that one might choose to use to attain that sense of competence will not accomplish the same result, especially in the long term. Dweck offers a useful lens for distinguishing two contrasting cognitive strategies for feeling competent and how over time they have dramatically different results. When a student uses a growth orientation they view a situation as an opportunity to learn and grow. They do not see their performance within a situation as a measure of their innate ability as much as a measure of their investment – better results requires more practice. Students who approached tasks with a fixed ability orientation viewed the context as a reflection of how much ability they innately possessed in that area. The result is a student who is looking for situations that will not challenge their fragile self image or make them feel "dumb." Dweck (2000, 2006) found that students with a growth pattern were more likely to persist in the face of failure and experience higher levels of academic achievement. The gap in achievement between the growth and fixed students was found to expand as students got older (Dweck, 2000, 2006).

Acceptance and Belonging vs. Alienation and Worthlessness. This second factor within the framework for a "success psychology" reflects the degree to which any member feels wanted and part of the group and the degree to which one likes and accepts one's self. The more one feels accepted and acceptable, the more one will be able to express one's self, act authentically and be fully present to others (Osterman, 2000). Self-acceptance is in contrast to self-aggrandizement or a compulsion to please. A sense of belonging and acceptance is essential to a young person's mental health and ability to trust and take risks (Shann, 1999; Shindler, 2009). It comes in part from accepting messages from VIPs, including self-talk, practicing a positive approach and attitude, experiencing emotional safety, and feeling a part of a community.

Research has shown a positive relationship between a sense of belonging with acceptance and self-esteem (Katz, 1993; Osterman, 2000; Shann, 1999). Moreover, building a sense of classroom belonging and the sense of self- and peer-acceptance has been shown to promote higher achievement (Dembrowsky, 1990; Rhoades & McCabe, 1992; Sanders & Rivers, 1996).

Internal vs. External Locus of Control. The third factor in the construct of "success psychology" is defined by one's sense of internal causality and orientation toward personal responsibility. The more internal locus of control (LOC) we possess, the more we feel that our destiny is in our own hands. It could be contrasted to an external LOC or an orientation that views *cause* as an external factor and one in which life "happens to us." An internal locus of control can be defined as the belief that one is the author of his or her own fate. An internal locus of control comes from having a causal understanding of behavior and effect. It is learned from freely making choices and taking responsibility for the consequences of those choices. Through responsible action and accountability for those actions, the young person learns to attribute the cause of success or failure internally. Consequently, he or she feels a sense of power and responsibility and is able learn from his or her life experience. Another term we could use for internal locus of control is "personal empowerment."

Research has drawn a strong relationship between levels of student self-esteem and sense of an internal locus of control (Hagborg, 1996; Klein & Keller, 1990; Sheridan, 1991). Moreover, studies have shown repeatedly that students with higher degrees of internal locus of control demonstrate higher

levels of achievement (Auer, 1992; Park & Kim, 1998; Tanksley, 1993). In fact, having high levels of internal LOC have been shown to be an even more significant predictor of achievement than intelligence or socioeconomic status (Haborg, 1996). In addition, higher internal LOC has also been shown to mediate the stress response and lead to healthier behavior (Ayling, 2011; Meaney, 2001).

Taken together these three interdependent variables make up a comprehensive explanation for why some students achieve more of their potential, and why some contexts contribute to more students meeting more of their potential. These factors influence students' growth in all aspects of their lives, yet the affect of what takes place in schools make up a significant amount of their influence.

Teaching Style Matrix

To adequately classify teaching practices within a school or classroom, at least two variables are required. First, one variable must reflect the degree to which any practice leads to more or less function. Second, practices must be classified as being either more teacher-centered or student-centered. Shindler (2009) offers a two dimension matrix for classifying classroom management practices that uses these two variables. The result of this dissection produced four quadrants that represent very different kinds of practices and outcomes. These four "teaching-styles or orientations" are depicted in Figure E below.

The ASSC School Climate Assessment Instrument (SCAI) levels approximate onto the matrix as shown in Figure E. The low or 1-level practice/condition descriptions are defined by high levels of dysfunction/external LOC, and either a 3-Style/passive approach or a 4-Style/dominator approach. The middle or 2-level practice/condition descriptions are defined by a traditional teacher-centered modest level of function approach. The high or 3-level practice/condition descriptors are defined by high levels of function, an internal LOC on the part of teachers and students and a student-centered approach.

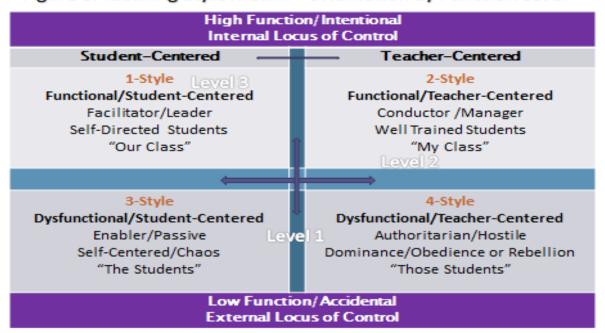


Figure E: Teaching Style Matrix – Orientation by Function Level

Findings

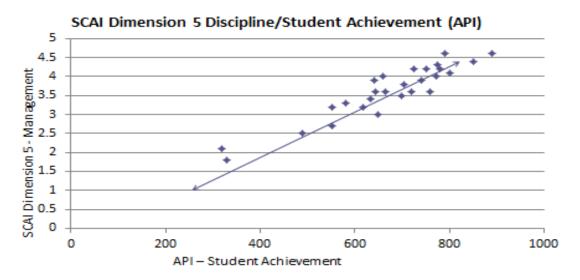
The results of the study find strong correlations among all three factors – classroom management practices, school climate and student achievement. A Pearson Product Moment Correlation show at 0.7 correlation coefficient between student achievement as measured by California API and SCAI dimension five (D5) – Discipline and Classroom management participant ratings. In addition, both API/achievement and D5/classroom management practice level ratings were strongly correlated to overall school climate as measured by the overall SCAI rating (see Figure F).

Figure F: Correlation Table Achievement by Climate Factors

	SCAI - Overall School Climate	API	Scale 5 Discipline and Management
SCAI – Overall School Climate		+0.7	+0.9
API Achievement Performance Index	+0.7		+0.7
SCAI Scale 5 Discipline and Management	+0.9	+0.7	

A scatter plot distribution of each of the 30 school's SCAI scale D5 rating (1-low to 5-high) by API scores (200-low to 1000-high) shows a distinct pattern, as depicted in Figure G. Higher levels of practice corresponded to higher levels of student academic achievement. Qualitative data gathered at these schools (in addition to several other schools not included in the sample where the SCAI was administrated, yet the N was too low to provide an adequately reliable sample) further support this relationship. What can be seen to be conspicuously missing on the scatter plot below are incidents where a school demonstrates a high level climate/SCAI and a low API, or a low level climate/SCAI and a high API. These schools neither existed in this sample of schools nor within an informal survey of schools at large. Moreover, the formula SCAI (20) =API D5 or conversely API/20=SCAI D5 provided a robust prediction of either API or SCAI/D5 at any particular school.

Figure G: SCAI Dimension 5 score by Student Achievement (CA API)



Discussion

The data from this study confirm findings from earlier studies in which both climate and classroom management practices at the classroom and school level correlate with student achievement scores (Osher, 2011). However, the data from this study seem to provide both more precision as well as insight into the causal relationships among the three.

The ASSC model and SCAI instrument provide the ability to predict certain variables from others. That is, given any one of the following variables 1) API, 2) SCAI D5, or 3) the overall SCAI or 4) a reliable observation of the common practices at a school, one can predict with some confidence the other three variables. For example, if one knows that a school has an API of 600, it is likely that the SCAI D5 rating will be about 3.0, and certain practices could be expected to be common at the school.

To understand what kinds of practices relate to what levels of student achievement, it is helpful to combine the three elements of the SCAI conceptual framework into a single graphic (ASSC Model and Figure H). In Figure H, both API and corresponding SCAI are plotted onto the teaching style matrix. The path represented in the figure represents the most common locations for schools to exist. Not represented on the graph are @600API/3.0SCAI schools that fall to the student-centered or teacher-centered sides of the curve, but these schools are uncommon. Most schools that were studied reflected a typical pattern. Most often low achieving schools exhibited a great deal of dysfunctional practice as the norm, high achieving schools that were very intentional and had a collective commitment to student-centered practice, and schools in the middle that usually defaulted to a somewhat traditional teacher-centered form of practice.

Figure H: SCAI Classroom Management Ratings, and Corresponding Predicted
API Score Correlations by Specific Teaching Practice

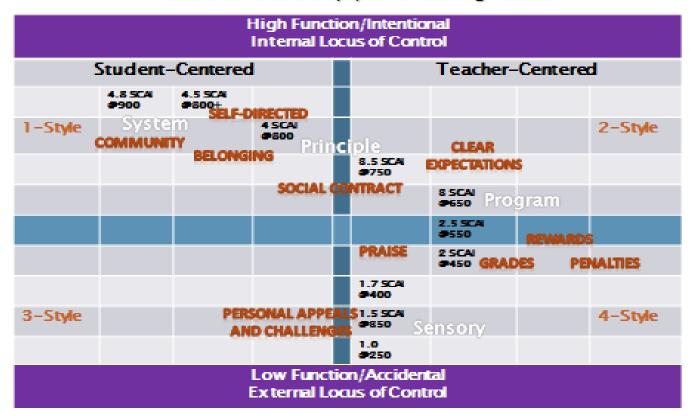


Figure H (ASSC Model) also includes an approximation of the location of each of the levels of perception. Levels of perception increase on the model as the practice moves up and to the left. Also included on the model are some key words that define the practice at each level. The result is a model that can predict levels of achievement and/or function given the knowledge of the common forms of practice used in a classroom or school.

The results of the study suggest that high functioning schools exhibited a high level of internal locus of control, and a guiding vision and a series of principles consistent with that vision. They tended to have the goal of self-directed and empowered students. The result of their practice was typically what could be termed a "liberating" climate and a collective sense of community. These schools were most often found in more affluent neighborhoods and/or were private schools. However, in some cases they were public schools located in lower or middle income neighborhoods. The argument is often made that these kinds of climates are simply a reflection of the homes from which the students come. The effect of the home can be seen to be significant, but the data suggest that it is possible to have a 4.3 SCAI/climate and a 860 API or better in any neighborhood and with any collection of students, given the time, commitment, and continuity of effort and staff. What should also be noted is that the data did not reflect any schools where there was a low SCAI and a high API, no matter the neighborhood. The data includes two schools from relatively affluent neighborhoods that had APIs in the 700s and SCAI D5 of around 3.5, which represents a level of achievement and a climate below that of many schools with less affluent student populations.

Results showed that low functioning schools tended to exhibit more of an external LOC and an "accidental" and fatalistic modus operandi both among the students and faculty. The goal of staff tended to be what could be termed "domestication"- or just keeping the lid on things throughout the day. Classroom management practices tended to be defined by either a 4-style dominator approach or a 3-style passive approach. There was typically little vision or continuity among classrooms. These contexts operated to a great extent on the sensory level of perception. Data suggest that teachers in these contexts used a lot of personal challenges, rewards, threats, personal comparative praise, and an emphasis on the use of grades to motivate students. In all cases, these schools were public and located in working class neighborhoods.

The most common location on the model for schools was at the 2-level or the intersection of a 550 to 700 API and between a 2.8 and 3.5 SCAI. These schools were defined by a program focus and 2-Style teaching. In many cases these schools have raised their API over the past few years with a heavy emphasis on standardized test preparation. But typically they have seen their API gains plateau and often begin to decline. As far as practice, what is typical in these schools is commonly a faithful adherence to what is commonly accepted as "best practice," including discipline programs such as Positive Behavioral Intervention and Support (PBIS), Assertive Discipline, Fred Jones, or Harry Wong. In K-8 schools of this kind a very common sight is to find colored card chart on the walls of the classrooms (recommended by both Canter and Wong). Interesting, these charts are slightly less common at 1-level schools and almost entirely absent in 3-level schools. They represent the faithful application of a program that is aimed at gaining control through a standardized form of public shaming. The goal of classroom management at the 2-level school tends to be control. The logic is that if students are on-task and under control, more learning happens than if they are not. The socioeconomic status of the students at these 2-levels schools varied greatly, further supporting the finding that API and climate are less a function of where the students come from or funding (i.e., preconditions) than what takes place in the school.

Study Implications

The findings of the study have substantive implications for the both educational policy and practice. They strongly support the recent initiatives by the US Department of Education Office of Safe and Drug Free Schools to place a major emphasis on supporting state and district level efforts to improve school climate. School improvement, including increased state and national test scores, will certainly require improved classroom teaching practice. While the results of the study are only correlational, they do suggest that high student achievement is not possible without high quality climates to support it. Likewise, neither good climate nor high levels of student achievement are possible without the collective use of high quality classroom management practices that make them possible.

The study findings support five implications:

1. Seeing classroom management practices as a component of teaching and learning, not as a precondition, is essential in process of their selection and use. When teachers understand that the use of certain classroom management practices either leads to greater or lesser student achievement, the unreflective adherence to doing "what works" is diminished. Moreover, there is a greater incentive to examine what have been accepted as "best practices" more critically. Seeing this relationship more clearly should encourage a willingness in teachers to be more cautious about adopting practices that may well lead to short-term teacher control and student order, yet in the long term lead to decreased student motivation and achievement. In addition, teachers will better understand the interrelatedness of seemingly discrete aspects of teaching (e.g., planning, instruction, assessment, and management) within an integrated conceptual framework.

- 2. Examining classroom management within a linear or single-factor lens (i.e., how much or how little of x) may limit our ability to understand any practice's effectiveness or to locate it within the vast configuration of which teacher actions lead to which student effects. Often what is accepted as "best practice" can be viewed as effective given a narrow linear perspective. In many cases, the research base that supports many "best practices" reflect the testing of the practice as a treatment effect in a largely broken context (i.e., "accidental' 3-style or 4-style) where it achieved a narrowly defined result (i.e., more control, less misbehavior, more on-task time, etc.). For example, a lens often used to judge the effectiveness of a particular strategy is its ability to increase the level of classroom order and teacher control. The results of the study suggest that order of some kind is desirable however the means the teacher uses to attempt to produce that order can result in vastly different outcomes. Order that is produced as a result of systems defined by the internalized values of the students and "communal bonds," will tend to lead to high levels of achievement and climate. Conversely, order that is obtained by domination, or rewards and public shame will tend to lead to lower levels of achievement and climate.
- 3. The results of the study support previous definitions of ineffective practice. Canter, Wong, Jones and PBIS all exist to some extent as a response to management practices that are defined by dysfunction exhibited as either hostility or passivity (i.e., 3 or 4-style classrooms). These practices provide a good counterpoint to more effective practices and are a prescription for "what not to do." No amount of these unsystematic/accidental practices that could be judged to operate on a largely sensory level of perception will lead to improved climate or achievement. Yet, in many schools, it is common to hear teachers suggest that "this is what these students need." It is useful to ask ourselves and the teachers who would make such a statement, who is being referred to as "these students?" And what are these practices that these students "need?" The unconscious assumption is often that because during much of their schooling, and in many of their homes, adults have used a 4-style approach with students who populate level 1 schools, it is "what works" with them. Certainly, it is true that many students become accustomed to being treated in a domesticating manner. However, the results of this study suggest that, even if students are used to them and even prefer them to less familiar practices at first, not only is the choice to use 4-style and POF producing classroom management practices unjust, it is guaranteed to lead to low students achievement and poor school climate.
- 4. In an effort to improve their student achievement scores and/or school climate, many schools attempt to implement school-wide classroom management programs. The results of this study suggest that this may help 1-level schools move to a 2-level, especially those which lack continuity, but it will imply certain inherent limits. In many cases these schools are in the group of those which are stuck at an API in the 600s or low 700s. The program helped get them up from 500, but it will keep them from ever getting beyond where they are currently. The belief in these schools is often that they can improve their API or climate by being more faithful to the program. The ASSC model is useful in understanding why enacting programmatic improvements tend to result in a plateauing off at about the 700API/3.5SCAI level, unless those programs are incorporated at a level that is more meaningful to students. Unless students understand both the question "why is this policy in place?" and "what value does it have for me and what I care about?" the use any program will not operate on a principle or system level, and will therefore not lead to high levels of achievement or climate.

5. Lastly, the study provides data that reinforce the findings of other research that describes the intersection of socio-economic status, achievement, and teaching practices (Anyon, 1980; Haberman, 1991). The findings of this study suggest that academic achievement of students is not merely a reflection of their "life-condition," but is highly influenced by the teaching and management practices of their teachers. The study in addition shows that the inequalities of schools go far beyond the financial aspects and have it most insidious effect on the practices adopted by the school and its personnel.

Conclusion

While there is a growing awareness that if we want to increase the quality of school climate and student achievement, the road inevitably leads through improved pedagogy including more effective classroom management practices. This study outlines which of these practices will lead to high achievement and which will lead to something less. The SCAI and ASSC model are shown here to be very effective in predicting student achievement and school climate quality from the ratings of teacher classroom management practices. Among the implications is that before any practice is defined a "best practice" it may be worthwhile to examine it within the ASSC model and determine the kinds of long-term effects it is predicted to produce.

References

Anyon, J. (1980, Fall) Socio-economic Status and the Hidden Curriculum of Work, Journal of Education, 162 (1).

Ayling, G. (2011, in submission) Report of an adolescent transition, a possible intervention for the stress response and diseases in adult life. *International Journal of Epidemiology*.

Becker, B.E., & Luthar, S.S. (2002) Social-Emotional Factors Affecting Achievement Outcomes Among Disadvantaged Students: Closing the Achievement Gap. *Educational Psychologist*, 37(4), 197-214

Benham, M.J. (1993). Fostering Self- Motivated Behavior, Personal Responsibility, and Internal Locus of Control, Eugene, Oregon. Office of Educational Research and Improvement (ERIC Document Reproduction No. ED 386 621).

Brophy, J. E. (1996). Teaching problem students. New York: Guilford.

Brophy, J. E., & McCaslin, N. (1992). Teachers' reports of how they perceive and cope with problem students. *Elementary School Journal*, 93, 3–68

Brophy (2000) Teacher influences on Student Achievement. In Smith and Pellegrini (Eds) Psychology of Education.

Chiu, L. H., & Tulley, M. (1997). Student preferences of teacher discipline styles. *Journal of Instructional Psychology*, 24(3), 168–175.

Dweck, C. (2000) Self-Theories; Their Role in Motivation, Personality and Development. Lillington, NC: Psychologists Press.

Dweck, C. (2006) Mindset: The new psychology of success. Lillington, NC: Psychologists Press.

Emmer, E. T., Evertson, C. M., & Worsham, M. E. (2003). *Classroom management for secondary teachers* (6th ed.). Boston: Allyn and Bacon.

Glasser, W. (1990). The quality school: Managing students without coercion. New York: Harper and Row.

Haberman, M (1991, Dec) The Pedagogy of Poverty vs. Good Teaching. Phi Delta Kappan, 290-293.

Hoy, W., & Hannum, J. (1997) Middle School Climate: An Empirical Assessment of Organizational Health and Student Achievement. Educational Administration Quarterly, 33(3) 290-311

Klein, J. D., and Keller, J. M. (1990). Influence of Student Ability, Locus of Control, and Type of Instructional Control on Performance and Confidence. *Journal of Educational Research*, 83(3) 140-46.

Jones, A., Shindler, J., Cadenas, H., Taylor, C. (2003, January) *Transcending Traditional School Assessment: Examining the efficacy of a participant driven school climate assessment and improvement system.* Presentation at the American Association of the College Teachers of Education. New Orleans, LA. January 25-27.

Kerman, S., Kimball, T., & Martin, M. (1980). *Teacher expectations and student achievement*. Bloomington, IN: Phi Delta Kappan.

Marzano, R. J. (with Marzano, J. S., & Pickering, D. J.). (2003). Classroom management that works. Alexandria, VA: ASCD.

McGarity, J. & Butts, D.P. (1984) The relationship among teacher classroom management behavior, student engagement, and student achievement of middle and high school science students of varying aptitude. *Journal of Research in Science Teaching*. 21 (1) 55-61

Osher, D. (2011, March) Linkage of school climate data to academic outcomes. Presentation at the US. Department of Education, Office of Safe and Drug Free Schools, School Climate Technical Assistance Symposium, New Orleans, LA.

Osterman, K.F. (2000) Students' need for belonging in the school community. Review of Educational Research, 70(3), 323-367.

Park, Y., & Kim, U. (1998) Locus of Control, Attributional Style, and Academic Achievement: Comparative Analysis of Korean-Chinese, and Chinese Students. *Asian Journal of Social Psychology, 1*(2) 191-208

Powers, W. (2005) Behavior: The control of Perception. Benchmark Publications. New Canaan, CT.

Rennie, L.J. (1991). The Relationship between Affect and Achievement in Science. *Journal of Research in Science Teaching*, 28 (2) 193-09.

Sanders, W., & Rivers, J. (1996). Cumulative and residual effects of teachers on future student academic achievement. Knoxville, TN: University of Tennessee Value-Added Research and Assessment Center.

Shann, M. H. (1999) Academics and a Culture of Caring: The Relationship Between School Achievement and Prosocial and Antisocial Behaviors in Four Urban Middle Schools. *School Effectiveness and School Improvement*, *10(4)* 390-413.

Shindler, J. (2003) Creating a Psychology of Success in the Classroom: Enhancing Academic Achievement by Systematically Promoting Student Self-Esteem. Classroom Management Resource Site, CSULA. Retrieved on 01/17/2011 from www.calstatela.edu/faculty/jshindl/cm.

Shindler, J., Jones, A., Taylor, C., & Cadenas, H. (2004) Does Seeking to Create a Better Classroom Climate lead to Student Success and/or Improved Teaching? Examining the Relationship Between Pedagogical Choices and Classroom Climate in Urban Secondary Schools. Paper presented at the AERA, San Diego.

Shindler, J. (2009) Transformative Classroom Management. John Wiley & Sons. Chappaqua, NY

Shindler, J., Jones, A., & Williams, A. (2010, April) Understanding the Ecology of the Interdependent Relationship Between School Climate and Student Achievement. A paper presented at the Annual Meeting of the American Educational Research Association.

Wang, M. C., Haertel, G. D., & Walberg, H. J. (1993). Toward a knowledge base for school learning. Review of Educational Research, 63(3), 249–294.