



## **The Importance of Connectedness to Teacher and School in Protecting Adolescents**

Dr. Paul Astin, Ed.D.  
February 2009

Any school seeking to instruct early adolescents is confronted with a number of challenges, many having to do with strong and subtle cultural misconceptions about, and attitudes towards young people. In addition, the way in which schooling for this age has been conceptualized, both in the public as well as private settings, has been extremely problematic. Historically, it is not uncommon for a society to blindly engage in collective destructive practices for extended periods of time and then, with the benefit of hindsight, to acknowledge their foibles at some later date. I believe this will be the case with middle schooling and our collective treatment of early adolescents. I will argue that middle schooling is so developmentally inappropriate as to be wholly irrational and therefore worthy of a complete and total dismantling. Reform may be out of the question, as the conditions are so maladapted to the real needs of young people this age. Still, a comprehensive overhaul of middle schooling is not likely to take place soon, and so a part of my goal here will be to articulate the most meaningful approaches to working with early adolescents that can be reasonably achieved in the current educational climate.

Research has shown us that the transition to middle school is associated with decreased motivation, lower self-esteem, plummeting test scores, and increased involvement in a host of health risk behaviors for children this age (Alspaugh, 1998; Anderman & Midgley, 1998; Juvonen, Le, Kaganoff, Augustine, & Constant, 2004; Midgley & Edelin, 1998; Wallis, 2005). These changes appear to be the result of a mismatch between the developmental needs of early adolescents, and the conditions



found in most large middle schools (Eccles et al., 1993). It seems clear now that the greatest obstacle to effectively educating early adolescents has a great deal to do with the impersonal nature of so many middle schools, and the absence of a structure in place to build a school culture of connectedness.

Efforts by educational reformers to create smaller, more personal schools, including Small Learning Communities in the Public sector, or small schools in the private sector, offer one of the most promising recent school reforms (Cotton, 2001; Edner, 2005; Gewertz, 2001; Klonsky, 1995; McRobbie, 2001; National Forum to Accelerate Middle-Grades Reform, 2004; Wasley et al., 2000). Smaller schools allow for the more personalized relationships which have been shown to ameliorate many of the negative emotional and academic impacts associated with the transition to middle school (Lambert, Lowry, Copland, Gallucci, & Wallach, 2004; Meier, 2000).

### **The Role of Personal Connections: A Personal Story**

I am the fourth generation of teachers in my paternal line. My great-grandfather, the headmaster and teacher at a school outside of Salt Lake, Utah, kept a journal of daily activities for almost three years. I have a copy of that thin journal, written in an ornate script just four years before his death from pneumonia at the age of 26. The brief, mostly one-sentence entries mention such mundane activities as the killing of a chicken or a visit to a neighbor, with no mention of what the visit entailed. One entry stands out among all the others, for it is the most lengthy and descriptive in the journal:

Today I have been obliged to talk to one of my eighth grade girls –a young lady of sixteen. It is not the first time I have spoken to her. I have done so several times before. Today after keeping her for nearly an hour while I did other work, I went to her and spoken in calm, earnest, yet penetrating manner for about 15 minutes, I pictured to her as best I could just what she was doing and what the



effect would [be]. She is a girl with a defiant expression in her black eyes. Usually she sits with an indifferent air to every word I say in trying to better her. *Today I spoke with a feeling of love (but not the less emphatic)* and before I finished she was weeping like a child. (Astin, 1902-1904).

What compelled an otherwise quiet and reserved teacher to write so passionately in his journal on that day? I imagine he had an experience, perhaps an epiphany even, regarding the power of personalizing one's relationship with one's students. The teacher tells of speaking emphatically that day, and yet "with a feeling of love," thereby reaching, for the first time apparently, a previously defiant and indifferent student.

### **Background to How Adolescents Ended Up in Such Impersonal Environments**

Those who advocate for the creation of smaller, more personal middle schools, envision such environments as places, "where every student is well known by a group of educators who advise/advocate for them" (Castillo, 2005). How can our society as a whole, move from a generalized culture of disconnectedness in most middle schools, to one in which there is an "adult advocate for every student" (National Middle Schools Association, 1995). To answer this question, it is important to understand how middle schools came to be such large, impersonal environments.

Although compulsory schooling for early adolescents has existed for at least 160 years, the wide-scale introduction of separate schools for such students emerged less than 100 years ago. Middle schools were a product of the early 20<sup>th</sup> century. In the late 19<sup>th</sup> century, the most popular grade-configuration in the United States was the kindergarten through 8<sup>th</sup>-grade school, followed by a four-year high school for grades 9-12. In the early 1900s, the first proposals were made –by then-president of Harvard Charles Eliot, that courses be shortened and enriched to allow students to enter the university at an



earlier age (McEwin, 1983). At this same time, there were several social forces prompting a reconfiguration of schools included: (1) increased immigration which burdened primary school enrollment; (2) rapid industrialization demanding a better educated workforce; and (3) established educators (including Eliot) calling for college preparatory course to start before 9th grade. The National Education Association (NEA), as early as 1899, argued for a reconfiguration of grade spans, believing that adolescents could handle the more rigorous curriculum, and saying that through a special school for early adolescents, students could be eased into the shock of the “special teachers” encountered in high school. The NEA’s Committee on the Economy of Time in 1913 and the Commission on the Reorganization of Secondary Education in 1918 both recommended that secondary schools be divided into junior and senior levels. The first junior high school actually appeared in 1910 (Juvonen, Le, Kaganoff, Augustine, & Constant, 2004). The numbers of such schools increased six-fold between 1922 and 1938. Prior to 1910, students aged 11-14 did not attend separate schools with multiple class changes as they do now. As I will show, this change has had dramatic impacts on the health, safety and academic success of early adolescents.

At the time of the creation of junior high schools, the high school had existed for nearly a century and was the crown jewel of American public education. The high school quickly became the unwitting model for the new junior high school, which even borrowed its name from the senior high school (Cuban, 1992). In the next few decades, shifts from the K-8 model to the junior high school increased dramatically. While in 1920, 80% of high school graduates had attended a K-8 elementary school, by 1960, 80% of high school graduates had attended a K-6 elementary school, a three-year junior high,



and a three-year senior high (Paglin & Fager, 1997). By the 1940s, these stand-alone schools for early adolescents had fully emulated the high school model, with multiple class changes during the day, rote learning, departmentalization, ability-level tracking, and increased work-loads (Gruhn & Douglass, 1947, 1971).

### **Early Middle School Reform**

Overlapping precisely with the middle school years of grades six through eight, is the developmental period known as early adolescence. This period is defined by the maturational changes --physical, cognitive, social and emotional-- that begin with the onset of puberty, and which span the ages of 11 through 15 (Cobb, 2001). As the numbers of students attending junior high schools increased throughout the 1900s, psychologists and developmental theorists began to consider anew the specific needs of early adolescents and to evaluate the success of schools in meeting those needs.

In the late 1940s, in a book entitled *The Modern Junior High School*, William Gruhn and Harl Douglass articulated a number of issues that weren't being addressed in middle schools and that were critical and specific to the developmental needs of such students. Current perspectives regarding the function of middle schooling years are still widely influenced by these early writers, who called for efforts to create better personal connections with students, among other things. In 1989, The Carnegie Council on Adolescent Development issued a report entitled *Turning Points: Preparing American Youth for the 21st Century*. This report concluded that: "A volatile mismatch exists between the organization and curriculum of middle grade schools, and the intellectual, emotional, and interpersonal needs of young adolescents" (Carnegie Council on Adolescent Development, 1989, p. 32). This report reiterated earlier findings, including



those of Gruhn reported 40 years earlier. Considering the different role of elementary versus middle school teachers, Gullota (1983) noted that, “young people are [now] being left to raise themselves as the educational profession seeks to redefine its role from *companion* and *guide* to values and knowledge, to *communicator* of values and knowledge” (p. 153).

### **Fixing the Schools by Changing the Name: A Failed Reform**

Beginning in the 1960s, and later implemented on a wide scale in the 1980s, another grade-span reconfiguration took place; namely, the change from “junior high schools” to “middle schools.” In this model, 6<sup>th</sup> grade was moved from the elementary school to the junior high school, and 9<sup>th</sup> grade was returned to the high school. This reconfiguration was prompted mostly by demographic and economic concerns, namely the overcrowding of the K-6 elementary schools. By this time, many educators and policymakers had come to see that the junior high school model was fraught with problems. Therefore, efforts to reform the middle-grades were introduced together with the new configuration. In addition to the symbolic change of the name from “junior high school” to “middle school,” other goals were articulated, including the introduction of more child-centered instruction, flexible scheduling, advisory teams, and interdisciplinary team-teaching. While all three of these practices are advocated by the Carnegie Council on Adolescent Development, the National Middle Schools Association (NMSA), and the National Forum to Accelerate Middle School Reform, they have received very sporadic and incomplete implementation. In many large public schools, they remain non-existent. Specifically, Mac Iver and Epstein (1991) have found evidence that both advisory program and interdisciplinary team teaching are often enacted only superficially in



middle schools (Mac Iver & Epstein, 1991), and overall, schools have paid little more than lip-service to such suggested changes\* (Juvonen, Le, Kaganoff, Augustine, & Constant, 2004).

Growing concern over how to make middle schools more developmentally responsive has been accompanied by increasing evidence that American youth are facing numerous crises in their social and emotional development.

### **Problems Affecting Middle School Age Children**

The problems affecting secondary schools and secondary school students during the 20<sup>th</sup> century are considerable. Nationwide data for school-age youth paint a grim picture of our system of public education, and the status of youth in general. In 2003–04, 36% of students in urban schools reported the presence of gangs at their schools, compared with 21% of suburban students, and 6% of rural students. In 2004, students aged 12 to 18 were victims of 1.4 million non-fatal crimes while at school, including 107,000 who experienced the violent crimes of rape, sexual assault, robbery, and aggravated assault. The percentage of public schools experiencing one or more violent incidents increased between 1999 and 2004, from 71 to 81 percent. In 2005, 28% of students ages 12–18 reported having been bullied at school during the previous six months. Ten percent of teachers in urban schools in 2003-04 reported that they were threatened with injury by students. Between 1992 and 2005, 316 students aged 5 to 18 were killed by homicide

---

\* By way of personal anecdote, in March 2007, I toured a large middle school of over 2,200 students with a group of 6th-grade students who would be attending that school the following year. After I noticed that the schedule had only 39 and 49-minute classes, I asked the principal leading the tour if the school had an ‘advisory program’ for students, the linchpin of personalization. She looked a bit flustered by my question, but eventually said “no, but that it had been discussed *for awhile*.” Indeed! The first calls for the establishment of advisories happened in the 1960s, well before I had attended that very same middle school over 30 years ago.



while at school, and an additional 74 committed suicide. Homicides of teachers, staff, and other adults at schools accounted for an additional 266 deaths during this time period (Dinkes, Cataldi, Kena, Baum, & Snyder, 2006). Crimes reported by schools nearly doubles per student, from elementary to middle school; academically, 70% of 8<sup>th</sup> graders in the United States fail to perform at proficient levels; twelve year olds in middle schools have lower self-esteem and greater instability of self-image than the twelve year olds still in elementary school; compared to children in other countries, U.S. students report higher levels of emotional and physical problems, and rate their schools and peer culture more negatively; pregnancy rates and suicide rates among young adolescents have continued to increase nationally over the past 20 years; in a study of 1,917 students across age levels, the lowest self-esteem ratings were among subjects aged 12 and 13 (Carnegie Council on Adolescent Development, 1995; Currie et al., 2004; Juvonen, Le, Kaganoff, Augustine, & Constant, 2004; Simmons, Rosenberg, & Rosenberg, 1973; Yecke & Finn, 2005) (McNeely, Nonnemaker, & Blum, 2002). While popular explanations for this crisis often posit blame on the youth themselves, on their “rebelliousness” or their hormones, research indicates that the structures of our schools play a big part in creating and sustaining these problems. Eccles, et al. (1993) conclude that in middle schools,

There are developmentally inappropriate changes in a cluster of classroom, organizational, instructional, and climate variables, including task structure, task complexity, grouping practices, evaluation techniques, motivational strategies, locus of responsibility for learning, and quality of teacher-student and student-student relationships. We suggest that these changes contribute to the negative change in students' motivation and achievement-related beliefs assumed to coincide with the transition into junior high school. (p. 92-93).



Clearly, there seems to be a lack of fit, or a “volatile mismatch” (Carnegie Council on Adolescent Development, 1989. p. 35) between the structures of middle schools and the developmental needs of early adolescents, both socially and academically.

As I indicated at the onset, there is a great deal of evidence that connections to adults are a critical component to creating a successful environment for early adolescents. Not surprisingly, these vertical, cross-generational relationships provide something which cannot be found in the peer group. Among the most severely disoriented and maladjusted youth, a significant connection with an adult may be the only thing capable of bringing them back. A probation officer, interviewed by a national news magazine, articulated this reality with the following words:

I’ve seen the worst possible cases. I’ve seen kids die on the streets, I’ve seen kids fade away in detention and prison, and I’ve also seen kids turn their lives around beating all the odds. I’ve also seen 14-year old, drug-using gangsters pull through and make it. I’ve seen homeless teenage moms get their lives together, finding work and a place to live. I’ve seen boys hardened by gang life, crime and drugs, graduate from high school. And I can say that for these kids who survive a violent and turbulent adolescence in the criminal justice system, they have one thing in common: They have at least one adult in their life who sticks by them, who helps them through, listens to them, and sticks by them consistently through the rough times. The adult may be a relative, or may be a teacher, or that rare social worker. The kids who survive the worst situations all share this common factor: they have a meaningful relationship with a caring adult who helps see them through the most troubled time.

### **Connections to Adults: A Missing Ingredient in Middle Schools**

What does the research say about the importance of connections to adults in the middle school environment? When eleven to twelve-year old children enter middle school, they are at a critical developmental stage. As early adolescents, they are navigating significant cognitive, physical, hormonal, and emotional changes (Cobb, 2001; Lipsitz, 1980). As noted above, upon the transition to middle school, many



children lose academic motivation, experience lowered self-esteem, and begin to engage in a host of health risk behaviors. One significant predictor that a child will undergo such negative changes is the degree to which the student reports a lack of connectedness with adults in the school environment. Students who feel connected to their teachers or feel a sense of belonging at their school, adjust to the transition to middle school much better, both academically and emotionally. Unlike elementary schools, where students spend the day with one teacher who knows them well, traditional middle schools are much larger, and much more impersonal. Students may see up to seven teachers in a day, and teachers may teach 150 different students. In the elementary school, there may be several adults, among present and past teachers, who know each student by name. According to the 2003 California Healthy Kids survey, nearly two-thirds of 5<sup>th</sup> graders report “high levels of a caring relationship with a teacher or other adult at their school.” Among 7<sup>th</sup> graders, only one-in-four students report such relationships (Tash, 2006).

When middle school students feel disconnected from school, or don’t experience a sense of belonging, they are at much greater risk for engaging in a host of problematic behaviors, of experiencing low motivation, low self-esteem, and suffering from low academic achievement. In a study of 1,959 students in grades 7 through 12, decreasing school connectedness was positively correlated with declining health status, increased school nurse visits, cigarette use, and lack of extracurricular involvement (Bonny, Britto, Klostermann, Hornung, & Slap, 2000). In another study of 9,142 students in grades 7 through 12, school connectedness was shown to bolster familial connectedness in protecting against the risk of adolescent suicide (Kidd et al., 2006). Examining the academic achievement of 296 8<sup>th</sup> graders, researchers found a positive correlation



between students' reported sense of belonging, and their academic achievement as well as their feelings of academic efficacy (Roeser, Midgley, & Urdan, 1996). Additional studies further support these findings (Blum, 2005; Hunt et al., 2002; King, Vidourek, Davis, & McClellan, 2002; Thorpe, 2003).

### **The Small Schools Movement and the Impact of Small Schools**

Teachers working in large, comprehensive middle schools have routinely viewed their teaching role as that of delivering academic content. They are not normally oriented towards the 'whole child,' or students' affective concerns, as are teachers in elementary schools. This lack of orientation towards students' emotional lives stems in part from the large student load carried by secondary teachers, which can average over 150 students per day (Lambert, Lowry, Copland, Gallucci, & Wallach, 2004). One hopeful reform in the public sector is the Small Learning Communities (SLCs) movement. These SLCs, created when large comprehensive middle and high schools are broken into several separate smaller schools, have been shown to foster significantly greater sense of belonging and "personalization" among students and staff. They continue to be among the most innovative public school reform efforts to be undertaken on a wide-scale (Ancess, 1998; Ayers, Klonsky, & Lyons, 2000; Cotton, 1996a, 1996b, 2001; Klonsky, 1995; Quint, Bloom, Black, & Stephens, 2005; Wasley et al., 2000). One teacher whose school became an SLC, stated:

the shy ones...now ask questions because they trust me, the unmotivated ones...now come in for help because they know I'll be supportive, and the defiant ones...now recognize that I'm an ally who cares for them.

*(Teacher at Benjamin Franklin Intermediate School, a conversion SLC in Daly City, California. (School Redesign Network, 2001)*



The evidence remains extensive regarding the improvement of affective, cognitive, and school climate factors in smaller schools. Cotton's (1996a, 1996b) analysis of 103 studies of small schools concluded that these schools positively impacted students' personal self-concept, academic self-concept and sense of belonging. In addition, at smaller schools, there was a higher quality of personal relations, increased collaboration and cooperation between administrators and teachers, higher staff morale, higher levels of extracurricular participation, as well as more varied extra-curricular participation, and higher rates of parental involvement. Furthermore, staff and students felt more effective, and students took more responsibility for their own learning. Finally, at small schools there was greater incidence of integration of subject matter content, team teaching, multi-age grouping and cooperative learning activities, use of performance assessments, and experiential learning (Cotton, 1996a, 1996b). The School Redesign Network's (2001) studies of smaller schools found that such schools led to better attendance rates, lower dropout rates, higher grades, fewer failed courses, and less vandalism. These researchers found especially strong outcomes in all areas for low-income students and students of color. Other studies have further confirmed these findings for lower SES students (C. Howley, Strange, & Bickel, 2000; Lee & Smith, 1997; McRobbie, 2001). Wasley and colleagues' (2000) longitudinal study of Chicago small school outcomes found that students from such schools accumulated more academic credits, scored higher on standardized tests, and completed more years of higher education. Cotton's (2001) examination of small schools found that student attitudes were better in small schools; student achievement was improved; and that low-SES students were especially sensitive to positive changes in both attitude and



achievement in smaller schools. Incidence of truancy, discipline problems, violence, theft, substance abuse, and gang participation were lower in smaller schools. Teacher attitudes towards both their work and their administrators were better in smaller schools. Finally, there was greater and more varied student participation in extracurricular activities in smaller schools (Cotton, 2001).

Analyzing data from the National Assessment of Educational Progress for 38 states, Walberg (1992) found that 8<sup>th</sup>-grade math proficiency was negatively correlated to average school size, average district size, and percentage of educational funding paid by the state. Pittman and Haughwout's (1987) study of 744 public high schools found a strong correlation between school size and the dropout rate, which was attributable almost entirely to social climate factors reported at the larger schools. They calculated that the dropout rate increases 1% for every 400 students a high school adds to its enrollment. Examining 11,794 tenth graders in 830 high schools, Lee and Smith (1995) found that "higher and more socially equitable engagement and achievement were consistently associated with smaller high schools" (Lee & Smith, 1995). An earlier study by the same researchers revealed similar outcomes for middle school students (Lee & Smith, 1993). In a study of 29 sets of test scores from Georgia, Ohio, Montana and Texas, Howley and Bickel (2000) found that as schools become larger, the negative effects of poverty on student achievement increases. The correlation between poverty and low achievement can be as much as ten times stronger in larger schools than in smaller schools. "Small schools cut poverty's power over achievement...by between 24 and 90 percent" (C. B. Howley & Bickel, 2000).



While evidence has been available for decades, indicating that small schools produce these positive outcomes for students, policymakers had largely ignored the data until incidents such as the school shootings at Columbine raised the profile of these large, impersonal schools and the isolation that students in such schools were experiencing (Raywid & Oshiyama, 2000; Wasley & Lear, 2001).

### **Understanding Small Schools: Models and Mechanisms of Efficacy**

Meier (1996) offers seven reasons why smaller schools are more effective schools: (1) *governance*, in which faculty and administrators can meet around a common table; (2) *respect*, whereby members of an educational community really know each other and can show genuine respect for one another; (3) *simplicity*, where with a large bureaucracy, the schools simplify kids with one-size fits all, rather than simplifying the organization in the service of kids; (4) *safety*, smaller schools are safer schools because they avoid the anonymity of larger schools; (5) *parental involvement*, where in smaller schools parents are less intimidated to become involved and to have a voice in the school; (6) *accountability*, in which an administrator does not need long computer printouts to know what people are doing, but rather can simply walk around the school and observe; and (7) *belonging*, in which every student is known by others and feels that they part of a cross-generational community of learners (Meier, 1996).

Stanford University's School Redesign Network identifies a number of features of effective schools, suggesting why smaller schools are better schools. These features include personalization, continuous relationships (through "looping," or the practice of having the same subject teacher for consecutive years), performance-based assessments, an authentic and relevant curriculum, flexible pedagogic approaches, collaboration



among staff, and democratic administrative processes. They note that smaller schools are in a far better position to implement such processes. For example, having flexible pedagogic approaches, what Robert Glaser (1994) calls “adaptive education,” or “adaptive pedagogy” (Darling-Hammond, Aness, & Ort, 2002; Glaser & Silver, 1994) requires teachers to know their students well enough to adjust their teaching to individual student learning styles. In all areas, smaller schools are better positioned to apply known strategies for school improvement.

### **A Caveat: What to Avoid in Creating a Personalized Middle School**

While there are many vocal advocates for increasing personalization at the secondary level (Cresswell & Rasmussen, 1996; Dyer, 1996), it is important to point out that the structure of personalization must be considered. Michael Fielding, a leading English educational reformer and theorist in personalization as it relates to schools, has developed a four-part typology of schools as concerns personalization. Building first on the ideas of the 20<sup>th</sup> Century Scottish philosopher John Macmurray, Fielding differentiates *functional* relationships from *personal* relationships. For example, one’s relationship with the man selling tickets for a train ride to the countryside would be a *functional* relationship, whilst one’s relationship with one’s traveling companion would be a *personal* relationship. He elaborates on this concept with regards to schools: “Within systems of compulsory public education, schooling (the functional) is for the sake of education (the personal); within schools themselves, administrative, management and other organizational arrangements (the functional) are for the sake of the vibrant and creative community (the personal)” (p. 352). Here, he proceeds to identify four types of public schools: (1) *impersonal organizations*, in which the functional marginalizes the



personal; (2) *affective communities*, in which an overemphasis on personalization allows the personal to marginalize the functional; (3) *high performance learning organizations*, in which the personal is used for the sake of the functional; and finally (4) *person-centered learning communities*, in which the functional is for the sake of or expressive of the personal. He advocates for this last structure, and warns against the others. In the *impersonal organization*, we experience the kind of large middle schools implicated in so many of the adverse impacts on early adolescents. In the *affective communities*, the degree of personalization, and the positive experience that deeply authentic relationships can create, may distract participants from attending adequately to the functional roles of schooling, which include the development of both a knowledge base, and the intellectual and organizational skills necessary to acquire and use knowledge effectively. In the *high performance learning organizations*, personalization can serve to create a kind of totalitarianism within the school, where students are manipulated through personal relationships to service the functional goals of the school. In the area of high-stakes testing, these high performance learning organizations operate in a totalitarian way, in which they “treat personal forms and human relations as the servant of wider functional ambitions and intentions” (p. 356). In support of the *person-centered learning communities*, Fielding stresses that,

The revival of *schools within schools* [SLCs]...exemplify commitment to more exploratory modes of being and development. Such schools deliberately develop more participatory, less hierarchical forms of engagement and decision-making... boundaries between status, role and function are increasingly transgressed through new forms of radical collegiality (360-361).



## **Conclusion**

There is a great deal of evidence that smaller schools provide the kind of personal and meaningful connections with adults that help students to survive the rigorous emotional and personal ordeals so often confronting children at the age of early adolescence. Given the broad range of very troubling statistics for middle schoolers in the areas of diminished self-esteem, engagement in risk behavior, loss of interest in academic issues, plummeting test scores, depression and suicide, involvement in criminal behavior, and given the protective influence of personal relationships in each of these troubling areas, it is shocking that 98% of early adolescents still attend publicly funded schools where few teachers know their students by name and where personalization is near to impossible given the inherent structure of such schools. It is no surprise that students who attend smaller schools, in particular private schools where teacher-to-student ratios are the lowest, report the greatest sense of personal, emotional, and academic satisfaction and adjustment.



## References

- Alspaugh, J. W. (1998). Achievement loss associated with the transition to middle school and high school. *Journal of Educational Research*, 92(1), 20-25.
- Ancess, J. (1998). Urban dreamcatchers: Launching and leading small schools. In M. Fine & J. I. Somerville (Eds.), *Small schools, big imaginations: A creative look at urban public schools*. (pp. 166p.). Chicago: Cross City Campaign for Urban School Reform.
- Anderman, L. H., & Midgley, C. (1998). *Motivation and middle school students*. *ERIC Digest* (No. ED432410). Champaign: ERIC Clearinghouse on Elementary and Early Childhood Education.
- Astin, J. A. (1902-1904). The diary of John Andrew Astin (pp. 61).
- Ayers, W., Klonsky, M., & Lyons, G. (Eds.). (2000). *A simple justice: The challenge of small schools*. New York: Teachers College Press.
- Blum, R. W. (2005). A case for school: Students are more likely to succeed when they feel connected to school. *Educational Leadership*, 62(7), 14-20.
- Bonny, A. E., Britto, M. T., Klostermann, B. K., Hornung, R. W., & Slap, G. B. (2000). School disconnectedness: Identifying adolescents at risk. *Pediatrics*, 106(5), 1017-1021.
- Carnegie Council on Adolescent Development. (1989). *Turning points: Preparing American youth for the 21st Century. The report of the task force on education of young adolescents*. New York: Carnegie Council on Adolescent Development.
- Carnegie Council on Adolescent Development. (1995). *Great transitions: Preparing Adolescents for a new century*. New York: Carnegie Council on Adolescent Development.
- Castillo, L. L. (2005). *Policies and procedures governing the development and implementation of small learning communities in middle schools and high schools*. Bul-1600.
- Cobb, N. J. (2001). *Adolescence: Continuity, change, and diversity*. (4th ed.). Mountain View, CA: Mayfield Publishing Company.



- Cotton, K. (1996a). *Affective and social benefits of small-scale schooling*. Las Cruces, New Mexico: ERIC Clearinghouse on Rural Education and Small Schools.
- Cotton, K. (1996b). *School size, school climate, and student performance*. Portland: Northwest Regional Educational Laboratory.
- Cotton, K. (2001). *New small learning communities: Findings from recent literature*. Portland: Northwest Regional Educational Laboratory.
- Cresswell, R. A., & Rasmussen, P. (1996). Developing a structure for personalization in the high school. *Bulletin: National Association of Secondary School Principals*, 80(584), 27-30.
- Currie, C., Roberts, C., Morgan, A., Smith, R., Settertobulte, W., Samdal, O., et al. (2004). *Young people's health in context: International report from the HBSC 2001/02 survey*. Copenhagen: World Health Organization
- Darling-Hammond, L., Aness, J., & Ort, S. W. (2002). Reinventing high school: Outcomes of the Coalition Campus Schools Project. *American Educational Research Journal*, 39(3), 639-673.
- Dinkes, R., Cataldi, E. F., Kena, G., Baum, K., & Snyder, T. D. (2006). *Indicators of school crime and safety: 2006*: National Center for Education Statistics.
- Dyer, T. (1996). Personalization: If schools don't implement this one, there will be no reform. *Bulletin: National Association of Secondary School Principals*, 80(584), 1-8.
- Eccles, J. S., Midgley, C., Wigfield, A., Buchanan, C. M., Reuman, D., Flanagan, C., et al. (1993). The impact of stage-environment fit on young adolescents' experience in schools and families. *American Psychologist*, 48(2), 90-101.
- Edner, C. (2005). *The effects of small learning communities on students' academic achievement in urban secondary schools*. Unpublished Dissertation, University of Massachusetts, Boston.
- Fielding, Michael. (2006) *Leadership, personalization and high performance schooling: naming the new totalitarianism*. School Leadership and Management, vol. 26, no. 4. September 2006. pp. 347-369.
- Gewertz, C. (2001). The breakup: Suburbs try smaller high schools. *Education Week*, 20(33), 1,16,18-19.
- Glaser, R., & Silver, E. (1994). *Assessment, testing, and instruction: Retrospect and prospect*. Los Angeles: Regents of the University of California.



- Gruhn, W. T., & Douglass, H. R. (1947, 1971). *The modern junior high school*. New York: The Ronald Press Company.
- Howley, C., Strange, M., & Bickel, R. (2000). *Research about school size and school performance in impoverished communities* (No. ED448968). Charleston, WV: ERIC Clearinghouse on Rural Education and Small Schools.
- Howley, C. B., & Bickel, R. (2000). *When it comes to schooling...small works: School size, poverty, and student achievement*. Randolph, VT: Rural School and Community Trust Policy Program.
- Hunt, M. E., Meyers, J., Davies, G., Meyers, B., Grogg, K. R., & Neel, J. (2002). A comprehensive needs assessment to facilitate prevention of school drop out and violence. *Psychology in Schools, 39*(4), 18.
- Juvonen, J., Le, V.-N., Kaganoff, T., Augustine, C., & Constant, L. (2004). *Focus on the wonder years: Challenges facing the American middle school*. Santa Monica: RAND Corporation.
- Kidd, S., Henrich, C. C., Brookmeyer, K. A., Davidson, L., King, R. A., & Shahar, G. (2006). The social context of adolescent suicide attempts: Interactive effects of parent, peer, and school social relations. *Suicide and Life-Threatening Behavior, 36*(4), 386-395.
- King, K. A., Vidourek, R. A., Davis, B., & McClellan, W. (2002). Increasing self-esteem and school connectedness through a multidimensional mentoring program. *Journal of School Health, 72*(7), 294-299.
- Klonsky, M. (1995). *Small schools: The numbers tell a story. A review of the research and current experiences. The small schools workshop*. Chicago: Illinois University.
- Lambert, M. B., Lowry, L., Copland, M., Gallucci, C., & Wallach, C. A. (2004). *Knowing and being known: Personalization as a foundation for student learning*. Seattle: Smalls Schools Project.
- Lee, V. E., & Smith, J. B. (1993). Effects of school restructuring on the achievement and engagement of middle-grade students. *Sociology of Education, 66*(3), 164-187.
- Lee, V. E., & Smith, J. B. (1995). Effects of high school restructuring and size on early gains in achievement and engagement. *Sociology of Education, 68*(4), 241-270.
- Lee, V. E., & Smith, J. B. (1997). High school size: Which works best and for whom? *Educational Evaluation and Policy Analysis, 19*(3), 205-227.



- Lipsitz, J. (1980). *Growing up forgotten: A review of research and programs concerning early adolescence*. New Brunswick, CT: Transaction Books.
- Mac Iver, D., & Epstein, J. L. (1991). Responsive practices in the middle grades: Teacher teams, advisory groups, remedial instruction, and school transition programs. *American Journal of Education*, 99(4), 587-622.
- McEwin, C. K. (1983). Schools for early adolescents. *Theory Into Practice*, 22(2), 119-125.
- McNeely, C. A., Nonnemaker, J. M., & Blum, R. W. (2002). Promoting school connectedness: Evidence from the National Longitudinal Study of Adolescent Health. *Journal of School Health*, 72(4), 138-146.
- McRobbie, J. (2001). *Are small schools better? School size considerations for safety & learning. Policy brief*. Washington: WestEd.
- Meier, D. (1996). The big benefits of smallness. *Educational Leadership*, 54(1), 12-15.
- Meier, D. (2000). The crisis of relationships. In W. Ayers, M. Klonsky & G. Lyons (Eds.), *A simple justice: The challenge of small schools* (pp. 33-37). New York: Teachers College Press.
- Midgley, C., & Edelin, K. C. (1998). Middle school reform and early adolescent well-being: The good news and the bad. *Educational Psychologist*, 33(4), 195-206.
- National Forum to Accelerate Middle-Grades Reform. (2004). *Small schools and small learning communities* (Issue 4). Newton, MA: Education Development Center.
- Paglin, C., & Fager, J. (1997). *Grade configuration: Who goes where? By request series* (ERIC Document ED 432-033). Portland, OR: Northwest Regional Educational Laboratory.
- Quint, J., Bloom, H. S., Black, A. R., & Stephens, L. (2005). *The challenge of scaling up educational reforms: Findings and lessons from First Things First. Final report*. New York: MDRC.
- Raywid, M. A., & Oshiyama, L. (2000). Musings in the wake of Columbine. What can schools do? *Phi Delta Kappan*, 81(6), 448-449.
- Roeser, R. W., Midgley, C., & Urdan, T. C. (1996). Perceptions of the school psychological environment and early adolescents' psychological and behavioral functioning in school: The mediating role of goals and belonging. *Journal of Educational Psychology*, 88(3), 408-422.



- School Redesign Network. (2001). *Redesigning schools: 10 features of effective design*. Stanford: Stanford University.
- Simmons, R. G., Rosenberg, F., & Rosenberg, M. (1973). Disturbance in the self image at adolescence. *American Sociological Review*, 38(5), 553-568.
- Tash, L. (2006). Results from the California Healthy Kids Survey for LAUSD. Los Angeles: California Department of Education.
- Thorpe, P. K. (2003). *School context, student connectedness and mathematics classroom performance*. Lanham, Maryland.
- Wallis, C. (2005, August 8, 2005). Is middle school bad for kids? *Time*, 48-51.
- Wasley, P. A., Fine, M., Gladden, M., Holland, N. E., King, S. P., Mosak, E., et al. (2000). *Small schools: Great strides. A study of new small schools in Chicago*. (ERIC Document). Chicago: Bank Street College of Education.
- Wasley, P. A., & Lear, R. J. (2001). Small schools, real gains. *Educational Leadership*, 58(6), 22-27.
- Yecke, C. P., & Finn, C. E., Jr. (2005). *Mayhem in the middle: How middle schools failed America and how to make them work*. Washington D.C.: Thomas B. Fordham Foundation.