AN OVERVIEW OF SMALLER LEARNING COMMUNITIES IN HIGH SCHOOLS

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I. INTRODUCTION

A persistent call for more effective schools echoes across the nation—from students and their families, from education reformers and researchers, from governors, state legislators, and the U.S. Congress. While many reform strategies have surfaced in our nation's schools, research to date has validated relatively few of them. One reform that continues to accumulate supporting research is the creation of smaller, more personalized high schools. Research and experience show that smaller learning communities can improve academic achievement for most students by contributing to a safer, more humane environment and a more positive overall educational experience.[1]

Research findings support the notion that high school students are more successful when they attend small schools. Small school environments positively affect student achievement with noted improvements in grades, test scores, attendance rates, graduation rates, drug and alcohol use, and school safety (Klonsky, 1998). There is also evidence that large high schools that have been restructured into smaller learning communities yield similar benefits, especially when the sub-school units are separate and distinct (Cotton, 2000).

Making high schools smaller is not a panacea for secondary education, but smaller, more personalized learning structures provide fertile soil for other high school improvement strategies to take root and succeed. Because change is easier to implement in a smaller setting, smaller learning environments create a context hospitable to reform. As Wood (1992) documented in *Schools That Work,* making schools smaller is the first step toward enhancing school conditions and improving student outcomes.

To help large districts and schools personalize the high school experience, the U.S. Congress has again appropriated funding for the Smaller Learning Communities (SLC) program. This program supports strategies that result in smaller, safer learning environments at the high school level. In FY 2001, the U.S. Department of Education will award up to $125 million in competitive grants to help local education agencies (LEAs) create smaller, more supportive learning communities as a foundation for their broader school improvement strategies.

This background paper is designed to help policymakers and school leaders use the new Smaller Learning Communities program to implement small school strategies in large high schools and within school districts. The paper describes the federal initiative, highlights small school structures and strategies that may be implemented with grant

[1] Although there is no consensus on the dividing line between small and large schools, most researchers suggest that a size of 400 to 800 students is the appropriate range for a high school, and many prefer schools no larger than 400 or 500 (Cotton, 1996). Those researchers who use the lower enrollment range to define small schools tend to value small size because of its impact on the school as a community, while those whose work emphasizes small schools' impact on academic effectiveness as measured by test scores tend to accept a relatively higher upper limit for small schools (Raywid, 1999). In *Breaking Ranks*, the National Association of Secondary School Principals called for self-operating units of no more than 600 students (NASSP, 1996).

funds, reviews the context of the growing consensus around smaller schools, and summarizes the research that undergirds the new grant program.

II. Personalizing the High School Experience: A Federal Initiative

> *What's wrong with high school? … Too many high schools are overly large and impersonal; their schedules are too regimented, adults are too busy to get to know students; athletics are more valued than academics. All too often, critics say, high school is a place that stifles creativity while fostering competition, conformity, intolerance, and mean-spiritedness.*
>
> Lawrence Hardy, *The American School Board Journal.*

To help large high schools and school districts make schools smaller, Congress earmarked $45 million in the FY 2000 Appropriations Act for the Department of Education to fund Section 10105 of the Elementary and Secondary Education Act. This section of the act, entitled the Smaller Learning Communities program, was designed to help LEAs plan, develop, implement, or expand smaller, more personalized learning communities in large high schools. Of the $45 million appropriated for the SLC program, the Department awarded $42.3 million in support of 149 grants to LEAs. The secretary awarded 84 one-year planning grants and 65 three-year implementation grants. A total of 349 schools, serving more than 450,000 students, benefited during the first year of the program. The secretary reserved the remaining $2,250,000 to fund national leadership activities.

Using additional funds appropriated in FY 2001 for school year 2001-2002, the Department will award up to $125 million to LEAs under this program. These funds will assist up to 200 school districts across the country to implement their restructuring and personalization plans.

The Smaller Learning Communities program is an opportunity for high schools to receive assistance in their efforts to raise academic achievement. By supporting smaller communities within large schools, the program sets the stage for students achieving to higher standards as it helps students stay in school and participate more fully in the school community. Additionally, in the wake of highly publicized school violence, the program can help LEAs personalize the high school experience by strengthening interpersonal relationships between students and staff. Finally, as states and LEAs implement comprehensive school reform, smaller learning communities are one way to keep student achievement at the center of those reform initiatives.

Use of Funds

The Smaller Learning Communities program can help LEAs and schools shoulder the initial costs associated with personalizing schools and scaling them down. Funds may be

used only for activities related to the implementation of a plan to establish smaller learning communities in high schools. These may include activities designed to commence implementation activities, reorganize schools, train teachers, build partnerships, acquire technical assistance, build data collection and evaluation systems, and provide extended learning time and support services for students.

Research demonstrates that smaller settings make it easier to implement other reforms and increase their effect. Smaller Learning Communities grants can be combined effectively with other high school reform initiatives. For example, the Department's Comprehensive School Reform Demonstration Program provides funds through states and LEAs for schoolwide improvements that support achievement of high academic standards, an outcome that some research correlates with smaller schools. Smaller Learning Communities grants can support extended learning time—an obvious link to the 21st-Century Community Learning Center grant program for school-community partnerships that keep schools open after school and during school breaks. Teacher Quality Enhancement grants, designed to increase student achievement by improving teacher quality, can help prepare teachers to build personal relationships with students through mentoring and advisory groups or prepare them to teach in alternatively configured schedules.

Funds may not be used for new construction of schools, and equipment purchases should be limited. Grant-funded efforts to create smaller learning environments must be connected to a comprehensive plan to improve student achievement for all students enrolled in the school.

Grant Applications

Districts may apply on behalf of one or more of their large high schools or for a district-wide initiative to plan, implement, or expand a common approach across all of their large high schools. For the purposes of this competition, a "large high school" is defined as a school that enrolls 1,000 or more students in grades nine through twelve; schools must already be in existence and must contain grades 11 and 12. Grants will be awarded for school-specific restructuring activities such as academies, house plans, schools-within-schools, and magnet programs or to implement personalization strategies such as alternative scheduling, teacher advisory systems, or adult mentoring programs in large high schools.

For a one-year planning grant, LEAs may request $25,000 to $50,000 on behalf of a single school. LEAs applying on behalf of a group of eligible schools may request up to $250,000 per planning grant. For a three-year implementation grant, LEAs may request $250,000 to $500,000 on behalf of a single school. LEAs applying on behalf of a group of eligible schools may request up to $2,500,000 per implementation grant. The maximum combined award amount for any district is $5,000,000.

The Department anticipates publishing an application package in November 2001. It will be available online at: http://www.ed.gov/programs/slcp/applicant.html. Applications for

funding must be received within 60 days of the date of publication of a notice inviting applications in the *Federal Register.* The Department anticipates awarding grants by April 2002. For further information about the grant or to learn more about the Smaller Learning Communities program, visit the Department's SLC Web site at: http://www.ed.gov/programs/slcp/ or e-mail the Smaller Learning Communities staff at: smallerlearningcommunities@ed.gov.

III. Implementation Structures and Strategies

> *…[R]esearch has consistently shown that when a school is too big, serious problems often arise. Smaller schools tend to have lower dropout rates, better attendance, fewer incidents of violence, and more student participation in extracurricular activities. Discipline problems can be more serious when students see themselves as being relatively anonymous…. As for academic achievement, the research suggests that at-risk students are at a particular disadvantage in overly large schools.*
>
> American Federation of Teachers, *Improving Low-Performing High Schools: Ideas and Promising Programs for High Schools.*

In a small school, every student has the opportunity to develop personal relationships with small groups of peers and teachers. When appropriate structures and strategies are in place, even students in large buildings and large school districts can gain the advantages of a small school.

This section identifies structures and strategies that local education agencies and school administrators should consider, whether or not they are applying for Smaller Learning Communities grant funds. Local education agencies and individual schools can use these strategies, often in combination, to create a small school feeling within a larger one.

Smaller Learning Community Structures

> *…[T]here is much more to the whole matter of scale. It is not only that each teacher must have a sensible load of students. It is that the school itself has to be of human scale—a place where everyone can know everyone else.*
>
> Ted Sizer, *Horace's Hope.*

Small schools can be defined numerically, though experts disagree on the exact upper limit for a small high school. Smaller school *structures* have a number of categories. Effective restructuring initiatives generally use multiple strategies to gain the full benefits of a small learning environment. Models have been identified, based on the degree of autonomy from the larger school in which they are located. Examples of smaller school structures include academies, house plans, schools-within-schools, and magnet schools.

Combining several smaller school reforms with each other, as well as with other comprehensive reforms, is more beneficial than implementing one smaller school strategy in isolation. Small school structures, implemented along with other

complementary strategies that enhance student learning, are most likely to succeed.

Structure I: Academies are subgroups within schools, organized around particular themes. For example, career academies combine key principles of the school-to-career movement—integrating academic and vocational instruction, providing work-based learning opportunities for students, and preparing students for postsecondary education and employment—with the personalized learning environment of a small, focused learning community. Teachers and students integrate academic and occupation-related classes as a way to enhance real-world relevance and maintain high academic standards. Local employer partnerships provide program planning guidance, mentors, and work internships. Career academies share with other restructuring initiatives an emphasis on building relationships between students and adults (teachers as well as work-site supervisors and other employer representatives).

Structure II: House plans divide students in a large school into groups of several hundred, either across grade levels or by grade levels. Students take some or all courses with their house members and from their house teachers. House arrangements may be yearlong or multiyear arrangements. House plans personalize the high school experience but usually have limited effect on curriculum or instruction. Each house usually has its own discipline plan, student government, social activities, and other extracurricular activities, although students may also participate in activities of the larger school. Grouping ninth-graders into a separate house is one way to ease freshman transition to high school.

Structure III: A **school-within-a-school** is a small, autonomous program housed within a larger school building. Schools-within-schools are generally responsible to the district rather than to the host school's principal, and are formally authorized by the superintendent or board of education. Schools-within-schools have their own culture, program, personnel, students, budget, and school space (negotiating the use of common space with the host school in the same way office building tenants arrange for use of shared conference facilities). Like an academy, the school-within-a-school structure supports constructive relationships between and among students and teachers by grouping students together each year to take core courses with the same group of teachers, thus increasing the supports students receive from peers, teachers, and other adults.

Structure IV: Magnet programs use a specialty core focus (such as math, science, creative arts, or a career theme or cluster) to attract students from the entire school district. Some magnet programs have competitive admission requirements; others are open to any interested student. Students in a magnet program stay together for their core classes and may take other courses with non-magnet students.

Smaller Learning Community Strategies

> *Human scale is only the beginning. The culture of the place is also critical, [reflecting] the dignity deserved by teachers as well as students.*
>
> Ted Sizer, *Horace's Hope.*

Specific strategies that take advantage of a restructured school can be implemented at the sub-school unit level, within an entire building, or districtwide. Most of these strategies have the advantage of making students feel more connected to each other, to adults, and to their school group. Strategies that are particularly effective in making schools feel smaller are best implemented in conjunction with one of the structural approaches.

Strategy I: Freshman transition activities help ease the difficulties students often encounter as they move from middle to high school. Some schools place all first-year students in their own academy or house setting, sometimes in a separate wing or even a separate building, with extra support from adults. In other cases, freshman transition includes mentoring from older students or special career exploration classes designed to set the context for high school as a pathway to college and careers.

Strategy II: Multiyear groups, in which several teachers stay with a group of students over a period of two or more years, foster trust and intimacy between students and teachers. This strategy is similar to "looping," a strategy used in elementary or middle schools when groups of students stay together with a teacher for more than one year. A multiyear group is a strategy for keeping several teachers with a group of students for a set period of time.

Strategy III: Alternative scheduling allows teachers to develop lessons that are more compatible with learning objectives. Alternative scheduling is also conducive to arranging for work-based learning opportunities and integrating business and community volunteers into the curriculum. The length of the class period, the school day, and the school year can be changed to support academic achievement. This is most easily done in smaller schools. One of the more common alternatives, "block scheduling," provides extended class periods that provide teachers with the time necessary for in-depth lessons and experiential learning. These arrangements permit more time for tutoring and intensive projects, allow enrichment activities, and afford time to lagging students to catch up and advanced students to delve into topics more deeply. They give schools the ability to set a schedule that best suits their needs.

Strategy IV: Adult advocate systems ensure that at least one adult knows each student well. One quarter of students report being concerned that they and their friends lack an adult who talks with them about problems and decisions (*Shell Poll*, Summer 1999). Teachers, counselors, community volunteers, and other school staff can fulfill this "caring adult" role, helping personalize students' experiences in even the largest schools. By meeting with 15 to 20 students, individually or in small groups, on a regular basis over several years, adult advocates can provide rapport, academic and personal guidance,

and links to additional resources when needed. Training for adult advocates and administrative support for the advocate system are critical elements for success.

Strategy V: Teacher advisory systems are similar to adult advocate systems; they organize adults to personalize the high school experience and support academic achievement, working with small groups of students. Some schools and districts establish advisory classes that meet weekly; others schedule students for less formal one-on-one or group time with teachers. Advisory activities may include helping students develop personal learning plans, introducing students to career clusters, helping students select courses, and working with students on postsecondary plans and preemployment skills.

Strategy VI: Academic teaming organizes groups of teachers across departments, so that teachers share the same students rather than the same subject. This strategy has much the same effect as a house structure. Teaming links teachers, who teach different subjects, in a team that shares responsibility for the curriculum, instruction, evaluation, and sometimes scheduling and discipline of a group of 100 to 150 students. Teams share the same planning time and sometimes share a specific area of the school building. Though more commonly used in middle schools, academic teaming is showing up in restructuring high schools as a way to personalize the learning environment by providing an integrated view of students' progress and creating a group of teachers who can focus together on the whole student. Teams can build a sense of community into the school, enabling students to learn more so they can meet higher standards (George and McEwin, April 1999; Legters, January 1999).

IV. THE ROOTS OF TODAY'S SMALLER LEARNING COMMUNITIES

> *Given the one-size-fits-all aspect of the American school system, large, impersonal schools made administrative sense, even if the educational benefits were hard to find…. But a system of schools dedicated to meeting as many diverse needs as possible almost demands that school boards encourage the establishment of much smaller and more humane environments.*
>
> David T. Kearns and James Harvey, *A Legacy of Learning.*

The 1983 publication of *A Nation at Risk* catapulted American education into an era of reform that continues today. *A Nation at Risk's* alarm gave rise to the push to improve student achievement through standards-based education, rigorous and challenging curriculum, business partnerships for school-to-work initiatives, and more. In response, some schools and districts began experimenting with ways to make the high school experience seem smaller and more personalized as a way to boost student achievement.

Studies since then have demonstrated the positive impacts of smaller schools on student achievement. A growing body of research suggests similar benefits may also be derived from school structures and strategies that create the same conditions as small schools.

Those research findings have motivated the growth of smaller schools and the creation of smaller learning communities within large, existing high schools.

During the past several decades, small school reform initiatives that have proven effective include New York City's Small Schools Network, the Small Schools Workshop based at the University of Illinois in Chicago, and the Coalition of Essential Schools (CES). Small size is a definitional concept for the first two networks, and is at the heart of the Coalition of Essential Schools, as demonstrated in one of that network's eight operational principles: "Since they have direct bearing on intellectual, interpersonal and organizational processes, CES work at all levels should be of a size and scale to allow for personalization," (www.essentialschools.org). Many more reform efforts have embraced this concept of creating small learning environments within larger schools, including California's career academies, the multistate charter schools movement, and urban reform efforts in New York, Philadelphia, Chicago, and other cities (U.S. Department of Education, March 1999).

In their 1996 report, *Breaking Ranks***,** the National Association of Secondary School Principals encouraged high schools to create self-operating units of no more than 600 students to reduce student feelings of anonymity. Although class size does not necessarily correspond to school size, *Breaking Ranks* warned that the average teacher sees far too many students each term to get to know each of them well. Some high school teachers see more than 150 students in their classrooms each day and teach four or five large classes with little time for individual attention. To enable teachers to get to know their students, *Breaking Ranks* recommended flexible approaches that would restrict teacher workload to a maximum of 90 students per term for most high school teachers.[2]

Breaking Ranks also proposed that every high school student should have an adult advocate to help personalize the high school experience:

> Each student needs to know that at least one adult in the school is closely concerned with his or her fate…. The relationship between the student and the advocate should ensure that no youngster experiences the sense of isolation that frequently engulfs teenagers during this critical period of their lives. Having someone on his or her side can help a young person feel a part of the school community.

Analyses of high school reform efforts have underscored scaling down as a common condition conducive to academic success. Smaller schools can more readily provide students with mentors, tutors, and advisors; make learning more meaningful by linking it to work and community; and provide adequate time and support for mastery of knowledge and skills.

[2] The National Council of Teachers of English supports an even lower student-teacher ratio: a maximum workload of 80 students per teacher.

V. RESEARCH SUPPORTS SMALLER SCHOOL UNITS

Smaller is better in virtually every way you can imagine.

Kathleen Cotton, American Youth Policy Forum, April 14, 2000.

Smaller learning communities benefit students, teachers, and parents by making effective communication easier, offering opportunities for collaboration, and encouraging meaningful relationships between students and adults. Research confirms that smaller schools are more productive and safer because they can address students' needs more personally, reducing feelings of alienation, and connecting students with caring adults. All of these conditions create an environment that contributes to positive student outcomes: higher student achievement, improved attendance and graduation rates, and reduced violence and disruptive behavior.

The smaller learning community strategies identified in this paper are good for most students, but they are particularly effective for economically disadvantaged students in several respects. From an academic perspective, smaller schools and smaller sub-school units have a disproportionately positive effect on economically disadvantaged students, because those students tend to live in urban communities served by large school districts and large high schools. Smaller learning communities additionally create more safe environments.

The research findings summarized in this section provide evidence that small size is at least a condition of improved outcomes in schools. The potential challenges associated with restructuring large schools are noted as well. Findings on the effects of restructuring large schools into smaller learning communities, using strategies discussed in this paper, are fewer and more recent than the small school findings, but there is evidence that significant benefits can occur when the creation of smaller learning communities is accompanied by sufficient separateness, autonomy, and distinctiveness among the sub-school units (Raywid, 1996).

Research on Small Schools

We have confirmed [the positive effects of small schools] with a clarity and at a level of confidence rare in the annals of education research.

Mary Anne Raywid, *Current Literature on Small Schools.*

Leading analysts who have reviewed the large body of quantitative research on small schools agree that there is an impressive degree of support for smallness (e.g., Cotton, 1996 and 2000; Raywid, 1996; 1999; Klonsky, 1998). Indeed, empirical support or justification for the large high school is rare, and those few studies that cite positive benefits of large schools for some students find those benefits outweighed by the disadvantages of large schools for many others (Raywid, 1999).

In her comprehensive review of literature relating school size to other factors, Cotton (1996) found that, for students of all achievement levels and in all kinds of settings, small schools have proven superior to large schools on most measures of student performance and school climate. That same year, Raywid's analysis (1996) yielded similar findings:

> *…Reducing the size of schools can increase student participation, reduce dropout rates, improve academic achievement, and enhance teacher efficacy…. Downsizing stimulates the move toward personalized "communal" schools, which result in independent benefits with respect to enhancing student engagement and achievement…. School downsizing efforts may be necessary to restore the conditions human beings need in order to thrive: to function as engaged and committed agents in their own and others' education. Finally … downsizing may be necessary to schools' ability to effectively initiate the changes essential to improvement. While downsizing provides no guarantee that these other changes will follow, it may be a crucial step toward launching them.*

Major impacts associated with small schools are divided into academic and affective Outcomes and are summarized below.

Academic Outcomes:

Smaller schools support academic achievement. Students' academic achievement in small schools is equal to or higher than their achievement in larger schools. The findings on academic achievement are equally divided; approximately half the studies show that students do equally as well in small schools as in larger ones; while the other half finds students in small schools do better on measures such as school grades, test scores, honor roll membership, subject-area achievement, and higher-order thinking skills assessments (Cotton, 1996).

Research on the school-within-a-school model is growing, with increasing evidence that they can indeed produce comparable outcomes to those of freestanding small schools. For example, an analysis of the National Educational Longitudinal Study found that improved student learning was clearly linked to schools that were restructured into smaller "communal" schools (Lee and Smith, 1994).

Smaller schools promote academic equity. Small schools help close the achievement gap between students from higher income, mostly white and Asian families and students from lower-income, mostly African American and Hispanic families (Klonsky, 1998). For ethnic minority students and students of low socioeconomic status, the effects of small schools are especially positive, helping reduce the damaging effects of poverty on student achievement; conversely, large schools have an especially negative impact on those students relative to all students (Cotton, 1996; Howley and Bickel, 2000).

According to a continuing Rural School and Community Trust study called the Matthew Project, smaller schools and smaller districts help narrow the achievement gap between students from poorer communities and their peers from wealthier communities. (The project takes its name from a passage in the Book of Matthew which reflects a concern

that large schools may benefit children from higher income communities at the expense of children from lower income communities.)

This four-state study of 13,600 public schools in Georgia, Montana, Ohio, and Texas, demonstrated that reducing school size produced proportionately greater results for schools with more students from low-income families and that smaller schools reduced the negative effect of poverty on school performance by at least 20 percent and by as much as 70 percent in both urban and rural schools.

Initial results support these conclusions (Howley and Bickel, 2000):

- The larger the school, the greater the negative effect of poverty on student achievement. The less affluent the community, the smaller a school should be to maximize performance as measured by standardized tests.
- The correlation between poverty and low achievement is as much as 10 times stronger in larger schools than in smaller ones.
- Although the relationship between school size, poverty, and achievement holds true for all races, minority children are more likely to be enrolled in large schools.

In 1995, Patterson High School in Baltimore, Md., restructured its 2,170 students and 110 faculty into five schools-within-a-school with the help of the Johns Hopkins Center for Research on the Education of Students Placed At-Risk (CRESPAR). Other changes included: a self-contained ninth-grade academy with interdisciplinary teacher teams; four-by-four block scheduling, an after-hours "twilight school" for students with serious behavior problems or criminal records; intensive professional development and planning time; and state-of-the art technology and communications systems.

Two years after the restructured Patterson High opened, overall school climate had improved dramatically, as had teachers' and students' perceptions of the school. Attendance and promotion rates had also risen. The school's rating on the state of Maryland's school performance index, based on attendance, retention, and functional test scores also jumped. Patterson went from having the second worst school performance index among Baltimore's nine comprehensive high schools from 1994 to 1995, to the second highest rating two years later (Legters, 1999).

Smaller schools prepare students for the future. Students from small high schools do as well or better on college-related variables—such as entrance examination scores, acceptance rates, attendance, grade point average, and completion—as students from large schools (Cotton 2000). Additionally, many smaller school structures focus on career-focused curricula.

The block scheduling that is increasingly used in schools-within-schools supports small learning communities, interdisciplinary teaming, and career-centered curricula because it enables teams to adjust schedules. Recent studies have found that students in block-scheduled schools score higher on standardized subject tests than comparable students in non-block-scheduled schools, and that block scheduling helps increase on-time graduation rates, college attendance, and improved test scores. Because block scheduling

causes students to spend less time in the halls, it also contributes to reductions in discipline referrals and class tardiness (Legters, 1999).

Career academies are especially beneficial for students at high risk of failure, according to a study that examined the extent to which career academies affected students' engagement, performance, achievement during high school, and the extent to which they prepared students for the transition to college and work.

The Manpower Demonstration Research Corporation's career academies evaluation (Kemple and Snipes, 2000) confirms that career academies reduce dropout rates, increase credits earned toward graduation, and increase preparation for college among students with a high likelihood of dropping out of high school. The students considered at lower risk also benefit (although not as dramatically as high-risk students), with an increased likelihood of earning enough credits to graduate and completing more career-related courses and work-based learning activities without reducing their academic courses. Students at medium risk of school failure benefited from career academies when the school-within-a-school was most separate from the larger school and when they had access to large increases in interpersonal supports, suggesting that career academies' small-school features may be as potent a factor as their career focus.

Attendance is higher and dropout rates lower in smaller schools. Smaller schools have higher attendance rates than larger schools, and attendance improves for individual students who transfer from large to smaller schools. Small schools have a relatively greater effect on the attendance of minority and low socioeconomic status students and have lower dropout rates and higher graduation rates than large schools; states with the largest schools and school districts have the highest dropout rates (Cotton, 1996).

Smaller schools provide challenging curricula. The increased variety of courses that larger schools can support tends to include a broader range of introductory courses in non-core areas rather than higher-level courses in, for example, math or foreign languages. Also, only a small percentage of students take advantage of the extra courses in large schools (Cotton, 1996). A high school of 400 can offer a curriculum comparable in breadth and depth to that of a much larger school (Monk, 1987), especially when supplemented with distance learning and other technologies.

Affective Outcomes Contributing to Academic Achievement:

Student attitudes and behaviors are more positive in smaller schools, with minority and low socioeconomic status students most profoundly affected. Multiple studies have associated small schools with students' positive attitudes toward school, as well as with lower incidences of negative social behaviors such as truancy, classroom disruption, vandalism, aggressive behavior, theft, substance abuse, and gang participation (Cotton, 1996).

One study of high school violence concluded that the first step in reducing school violence is personalizing large schools by creating smaller communities to combat anonymity (Toby, 1993, as cited in Klonsky, 1998). Along the same lines, Cornell

University Family Life Development Center's director, James Garbarino, listed smaller high schools as his first recommendation for reducing violence among adolescents (Klonsky, 1998).

Extracurricular participation rates are higher in smaller schools. Students in small schools participate in extracurricular activities to a greater extent and in a wider variety, than in large schools (Cotton, 1996). This is doubly significant because extracurricular participation is associated with other desirable outcomes, such as positive attitudes and positive social behavior. Students in small schools generally enjoy participating in extracurricular activities more than students in large schools because their participation is valued more when there is a smaller pool of potential participants.

Smaller schools reduce alienation. Small schools foster a sense of belonging and minimize student alienation. This is especially important because students who feel alienated from their school environment tend to lack confidence, self-esteem, and responsibility for self-direction. Alienated students also participate less in extracurricular activities (Cotton, 1996).

The National Longitudinal Study of Adolescent Health (Blum and Rinehart, 1997) found that students who felt connected to their school reported lower levels of emotional distress. Feelings of connectedness to school were also associated with lower levels of violent behavior, less frequent substance abuse, and a delay in early sexual activity. What seems to matter most for adolescent health is "that schools foster an atmosphere in which students feel fairly treated, close to others, and a part of the school."

Students feel better about themselves and others in smaller schools. Students' perceptions of themselves academically and generally are higher in small schools, and they feel more connected to teachers and to each other. Interpersonal relations are better, both among students and between students and teachers (Cotton, 2000).

VI. IMPLEMENTING SMALLER LEARNING COMMUNITIES

Small Size Plus Other Reforms

Making schools smaller seems to work in large part because school staff and students can more easily implement and adjust effective practices in smaller environments than in larger ones. Even the most vocal advocates for small schools admit that size alone is not the answer; rather, smaller size makes other reforms possible. Researchers concur with this view that school size has an indirect effect on student learning by making other desirable practices easier (U.S. Department of Education, October 1999). Conditions that promote student achievement—such as teacher collegiality, personalized teacher-student relationships, and less differentiation of instruction by ability—are more often found and sustained in small schools than in larger ones.

Smaller learning communities can be more flexible and student-centered than larger units, students take more responsibility for their own learning, and students and staff feel

more effective when they have more control. Teaching teams, cooperative learning, content integration across subjects, experiential education, and other instructional approaches are more often found in small schools, probably because alternative teaching strategies are easier to implement in small settings.

Smaller learning communities make innovation possible by laying the groundwork for school as a communal organization rather than a formal, rigid, bureaucratic entity. Change becomes not only possible but expected. The midcourse corrections and "just-in-time" adjustments so lauded in the business world become routine in small school settings. According to Deborah Meier, former principal of New York City's Central Park East Secondary School, "The school must be small enough so that everyone can know everyone else, and respond easily to needed changes…. Simple changes that would be impossible to make in a mega-school can be decided around the table one afternoon and implemented the very next day in a small school."

Finally, smaller schools contribute to educational equity, especially for minority and lower socioeconomic status students. Although small schools have proven beneficial for all types of students, minority and poorer students benefit disproportionately. Ironically, minority and lower socioeconomic status students are more likely to be in large schools and large districts, raising serious equity questions.

The Challenges of Creating Smaller Learning Communities

> *…Benefits are contingent upon the extent to which the downsized unit becomes a point of identification and affiliation for students and teachers.… [Schools-within-schools can be] divisive and likely to introduce contention.*
>
> Mary Anne Raywid, *Taking Stock.*

The research on small high schools and smaller learning communities is extensive, and their benefits are well documented, compelling, and persuasive. However, few changes occur without difficulties, and the process of creating smaller learning communities within larger high schools is no exception. Restructuring carries challenges beyond those associated with start-up of a small school, according to Raywid, because it requires teachers and administrators to do two jobs at once: operating the old system while initiating the new one.

Schools and school districts that embark on restructuring and personalizing their schools need to be aware of problems that may occur. A common danger is the notion that school size alone will improve student outcomes. Reducing school size is worth the effort only when it is one element of comprehensive school reform, accompanied by strategies specifically designed to personalize the learning experience and take advantage of the flexibility small schools offer. New school structures can provide the opportunities for success, but Raywid cautioned that structural change must be accompanied by changes in school culture to take full advantage of those opportunities

Raywid found that one or more of three shortcomings tend to be present when smaller learning communities in large high schools fail to yield positive outcomes: insufficient faithfulness to the small school concept, either in design or implementation; insufficient autonomy and separateness of the subunit or sub-school; and failure of cultural change to accompany structural change.

Schools-within-schools can lead to competition among the smaller schools, undermining the cultural climate of the larger school. Sub-school units have also been criticized for their potential as a mechanism and a rationale for tracking. Given the relationship between differentiation and effectiveness for restructured schools, the challenge is how to differentiate without tracking students by ability and excluding or isolating special needs students. Awareness of this challenge, and explicitly confronting it in the planning and implementation stages, can prevent it.

Students may have fewer class choices in smaller schools (although smaller schools may offer more depth through integrated curricula) and large schools are sometimes able to offer more, or at least a greater variety of, work-based learning experiences and other school-to-work activities.

Raywid identified four main issues at the root of concerns about restructuring into smaller learning communities: cost, staff conflict, student grouping, and conflicts with effective schools principles. Raywid cites research documenting other problems such as: allegations of favored treatment for students in sub-school units, isolation of small groups of faculty from the larger school faculty, unhealthy competition among faculty members, lack of consensus about direction and mission, and scheduling problems and space constraints.

Staff tensions may also arise as school culture changes, altering previous relationships and communication patterns. There may be rivalry among the subunits, as they compete for resources and seek distinctiveness and autonomy at the expense of the larger school. Groups of restructured schools offer ample strategies that help resolve staff conflict. Professional development, both preparatory and ongoing, is essential.

VII. CONCLUSION

Researchers emphasize that conditions designed to simulate small schools must be authentic; that is, the more independent they are, the more likely it is that smaller learning communities will match small schools' benefits. "Schools-within-schools, pods, house plans are administrative arrangements to simulate school size," Ohio University researcher Craig Howley cautioned. "The problem with [some] simulations is that they don't respect reality" (Robelen, 2000). Without a separate space, autonomous administration and budget, designated faculty, and distinctive philosophy, small school simulations likely offer diminished benefits, or none at all.

Three characteristics are necessary if smaller learning communities are to maximize the potential benefits of smallness (Raywid, 1996): *separateness* (establishing a collective

identity); *autonomy* (projecting clear, identifiable boundaries); and *distinctiveness* (displaying differences that are perceptible to students). Only when these characteristics are fully implemented, allowing for complete administrative separation of the subschool and the creation of a separate identity are benefits of smaller schools most likely to be realized. Other essential elements are staff and student support, as well as support from the superintendent, school board, and school principal (Dewees, 1999).

The conditions created by smaller learning communities offer large high schools an opportunity to improve student achievement. However, smaller learning communities deliver on their promise only to the extent that they have independent control over school budget and staffing, space, schedule, curriculum, and culture. When those conditions are met, students in smaller learning communities may derive the same kinds of benefits as students in smaller schools in terms of academic achievement, attendance, college-going rates, social behavior, attitudes, and student-teacher relations.

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