

**DOES SCHOOL SIZE MATTER?
A SOCIAL CAPITAL PERSPECTIVE**

A Review Of Educational Policy Literature

By

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DOES SCHOOL SIZE MATTER?

Background

The Parent's Advisory Council of College Park Elementary issued a call for background information on the issue of school size and educational benefits to present to School District 43. Professors Schmidt and Murray commissioned a member of the graduate program in SFU's faculty of education, Hien Nguyen, to carry out a study of the educational policy literature exploring the impact of school size on educational quality and community benefits, with the guidance and assistance of Schmidt and Murray. The intent of this report is to counter the proposal to close eight schools on the Board's agenda by the end of February, 2007 with evidence-based research showing the unequivocal benefits of small schools and their effects on students' achievement, social skills, civic engagement, cost effectiveness, enhanced school safety, and better integration of immigrant and low socio-economic minority students. Evidence of declining enrollments and costs cannot be evaluated without a review of the benefits. The intent of this review is to identify where there is expert consensus that concrete benefits to small schools are found.

Executive Summary

School size matters. This review of educational studies commissioned for the College Park Elementary School Community clearly shows that there is a growing consensus that small schools not only have an academic achievement advantage but also:

- promote character development,
- emotional stability among their students,
- higher attendance,
- lower dropout rates,
- safer schools,
- collegial working environments and higher levels of job satisfaction for teachers,
- as well as an increased public confidence and parent satisfaction with the schools their children attend.

Most importantly, small schools improve educational outcomes. Students from small schools tend to complete more years of higher education and score higher on standardized tests.

There are other important social benefits. Recent research on educational policy suggests small schools are better at closing achievement gaps between socio-economically disadvantaged and advantaged groups, and better at including ethno-cultural minorities. Furthermore, some evidence suggests that when graduation rates are factored in, small schools are more cost effective on a per capita operating cost basis than large schools. Educators and policy experts are increasingly adopting a *social capital perspective* when looking at the balance sheet in educational planning.

Perhaps the most important finding is there is a small school movement emerging in the US and around the world, sharing the conviction that experience in small schools builds better citizens, and provides a better bridge to social equality and civic engagement in later life. The authors conclude Canada is falling behind in the educational debate over the impact of small schools on social cohesion and civic engagement.

Introduction

Debates about the social benefits of small schools¹ on student achievement, civic engagement and social behavior have persisted for decades. As is often the case in educational policy literature, there is a US focus, and a paucity of information about the Canadian experience. The 1999 Columbine tragedy escalated public, political and educational concerns around the implications of school size for student violence, but attention is shifting to the effect of size on teaching, learning and student achievement (Putnam, 2000). Contemporary North American discussions increasingly focus on the effects of school size on ethno-cultural inclusion of academically and economically disadvantaged students such as African American and Latino students (Fine, 1994; Howley, 1992, 1994 & 1996; Howley & Bickel, 2000; Lee & Smith, 1997; Wasley, Fine, Gladden, Holland, King, Mosak, & Powell, 2000).

There is evidence of a growing small school movement with educators, parents and teacher unions arguing that scale of learning environment is important to the overall quality of the learning experience. Researchers point to the Chicago public schools as the ‘birthplace’ of the small school movement (Cleary & English, 2005). Whether it is independent small schools or small schools within large schools, reformers argue that small schools promote social equity, close academic achievement gaps between socio-economically disadvantaged students and affluent ones (Nathan & Febey, 2001; Howley & Bickel, 2000; Lee & Smith, 1995; Wasley et al., 2000; Vander Ark, 2002); reduce student drop-out rates; and increase student, parent and community satisfaction. While the literature is extensive, this review will focus on several key themes by providing a synopsis of what small schools can offer our youth in the way of social benefits, school safety and cost effectiveness. An important element to this review is that there is an emerging theoretical interest in exploring school size and its impact on social capital. Social capital is defined as either an individual or group’s relation to ‘social networks’, including membership, sense of belonging, trust and resources for later life. In a social capital view schools are regarded as critical social structures in our society capable of reproducing/ or redressing inequities as well as cultivating norms and behaviors needed for students to achieve a sense of well being, security and success, and social responsibility in later life.

Educational Advantages

Research shows that smaller schools do a better job at promoting educational attainment through a cohesive sense of community, since they facilitate more intimate student relations with their schools and teachers and contribute to a participatory family-school environment (Friedkin & Necochea, 1988; Lee & Smith, 1995; Roeser, Midgley & Urdan, 1996). While large schools may provide more comprehensive instructional programs, research indicates that students who attend small schools, including those labeled “at risk”, outperform those who attend large schools, and are more likely to graduate high school and proceed to higher education. A growing body of evidence is showing that small schools provide the social and emotional structures needed to support high achievement. Major findings suggest that small schools:

¹ There is little consensus over the definition of small school around North America. In much of the literature cited, a small school might consist of 250-300 students. In Coquitlam, the small school ranges between 100-250. Retrieved January 31, 2007, from <http://www.smallschoolsworkshop.org/info1.html>.

- reduce student dropout rates and increase attendance (Fowler and Walberg, 1991; Wasley, Fine, Gladden, Holland, King, Mosak, & Powell, 2000; Fine, 1994; Oxley, 1995);
- enhance students' attachment to, and satisfaction with school, while improving the professional climate for teachers (Bryk & Driscoll, 1998; Lee & Smith, 1995, 1997; Oxley, 1995, Wasley et al., 2000; Copland & Boatright, 2004; Meier, 2002; Klonsky, 2003);
- decrease student violence and misbehavior (Klonsky, 2002; Zane, 1996; Kennedy, 2003; National Centre for Education Statistics, 1998);
- close achievement gaps between socio-economically disadvantaged and affluent students (Howley & Bickel, 2000; Howley & Bickel, 1999; Lee & Smith, 1995, 1997);
- foster strong relationships between students with teacher, families and communities (Wasley & Lear, 2001; Copland & Boatright, 2004)
- are cost effective (Wasley & Lear, 2001; Stiefel, Iatarola, Fruchter, & Berne., 1998; Lee & Smith, 1995; Vander Ark, 2002).

Students in small schools are more satisfied with their school experience, and are less likely to drop out than those in large and comprehensive schools (Putman & Haughwout, 1987; Fowler & Walberg, 1991). Meanwhile, large schools are considered to act more as a sorting mechanism for children, dividing learners according to their social and cultural capital than smaller ones (Oakes, 1985; Howley & Bickel, 2000). Working class and ethnic minority youth constitute the majority of students in large comprehensive schools that often have the reputation for being the lowest achieving schools (Wasley, et al., 2000). Students from socio-economically disadvantaged families are often placed in lower academic tracks with less-experienced teachers and large classes (Anyon, 1980; Coleman, 1987). The small school movement advocates that the best way to off set educational inequality is protecting educational policy which promotes diversity in school structures, and protects a place for smaller schools (Cleary & English, 2005; Howley & Bickel, 2000). Researchers have found that many students unsuccessful in large schools are able to catch up with their peers after enrolling in small schools (Nathan & Febey, 2001; Howley & Bickel, 2000; Howley, Strange & Bickel, 2002).

Bryk & Driscoll (1998), Wasley & Lear (2001), and Howley & Bickel (2000) reason that teachers and school administrators in small schools have the opportunity to invest personal time in each student and provide more interaction with them outside of the classroom. This also enables teachers to learn more about the complex personalities and needs of the individual students and their colleagues. They also find that teachers in small schools are able to serve as advisors, mentors or tutors in several subjects. In addition, because the staff of small schools can focus on a well-defined learning agenda, and know and be known by every student, small schools clearly offer success for every student, regardless of their background, ethnicity, or social status.

Since students and teachers in small schools know one another and have more contact time, there are more opportunities for students to discuss norms and expectations of the school with teachers, and for teachers to recognize and prevent potential negative problems, such as violence or vandalism. Klonsky (2002), Zane (1996), and Kennedy (2003), found that small schools experience fewer problems with violence from students.

A Social Capital Perspective

The theoretical motivation for a new trend in educational research is drawn from the concept of social capital, which was initiated by Bourdieu (1985), Coleman (1988, 1990a), and more recently Putnam (1993). In the context of the field of education, Bourdieu (1985)

differentiates between three forms of capital: economic, cultural and social, and their contribution to scholastic achievement. He defines the concept as “the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance or recognition” (Bourdieu, 1985, p. 248).

Coleman (1988) furthers this definition by introducing the idea that social capital facilitates certain actions among members of a social network within a social structure. These structures, (for example, schools, communities), are generally comprised of bounded spaces wherein members have obligations, which may be rewarded or sanctioned. In summation, Coleman (1990a) provides a theoretical foundation for linking individual, organizational and societal behavior with economic concepts of rational choice within social structures and their accompanying social choices. In this way, he uses an analysis of networks of social capital to explain social behavior.

More currently, Putman (1993) identifies social capital as “features of social organization, such as networks, norms, and trust that facilitate coordination and cooperation for mutual benefit” (p.36). He states:

Whereas physical capital refers to physical objects and human capital refers to the properties of individuals, social capital refers to connections among individuals – social networks and the norms of reciprocity and trustworthiness that arise from them. In that sense, social capital is closely related to what some have called “civic virtue”. The difference is that “social capital” calls attention to the fact that civic virtue is most powerful when embedded in a sense network of reciprocal social relations. A society of many virtuous but isolated individuals is not necessarily rich in social capital. (Putman, 2000, p. 19).

In his research, Putnam (1993) shows that: 1) trust has a positive impact on social life, particularly when networks of civic engagement foster solid norms of generalized reciprocity; 2) civic networks further coordination, communication and trustworthiness among its members; and 3) past collaboration successes are embodied in these networks, which can serve as “cultural templates” for future collaboration.

Indeed, researchers have increasingly recognized the importance of social support for students’ success, such as members of schools, families and communities (Lee & Croninger, 1994; Fortes, 1998; Stanton-Salazar, 1997; Howley & Bickel, 2000; Wasley & Lear, 2001; Copeland & Boatright, 2004). Teachers may use their social relations with students to encourage student commitment to academic pursuits. Students may foster relations with other students when teacher assistance is unavailable. Parents’ role in their children’s education is equally important since social investment in their children and the community, increases children’s odds of graduating from high schools and attending colleges (Furstenberg & Hughes, 1995). Furthermore, parental involvement, (for example, school visits and regular communication with teachers), often has a positive impact on student achievement (Wasley & Lear, 2001). Sergiovanni (1993) emphasizes the importance of the development of supportive and collegial professional relationships among school staff. When small schools are developed as communities, teachers are reported to enjoy their work more (Bryk & Driscoll, 1988), resulting in high staff morale.

A number of studies now demonstrate an empirical link between dropping out and low levels of social capital. Studies that focus on student-teacher relationships often use theories of alienation to explain the impact of such relationships on dropping out, student violence and achievement gaps between socio-economically disadvantaged students and affluent students (Fowler and Walberg, 1991; Wasley, et al., 2000; Klonsky, 2002). A few reasons why small schools may be considered safer are because there are fewer students to monitor; potential problems can be identified more easily and quickly addressed; and students become known not only by teachers but also by administrators and their peers. This lack of anonymity and alienation often reduces the desire for students to engage in mischievous behavior (Klonsky, 2002;

Kennedy, 2003; Lee & Smith, 1997). Furthermore, small schools promote conflict resolution and peer counseling within the community to increase a sense of identity and community; “students feel safer in their schools because they are learning the skills of conflict management and democratic relationship” (Wasley et al., 2000, p. 35). In small schools where teachers are responsible for far fewer students, there is a greater emphasis on addressing the learning needs of each student. This explains why small schools often fare better at closing the achievement gap that often separate students by social class and racial groups in larger schools (Wasley et al., 2000; Howley & Bickel, 2000).

When Coleman (1990a) views social capital as a public good, there is some concern that it has the potential to exclude those who are not in the group reducing the effectiveness of trust, productive relational networks, and norms. Despite this concern, Wasley et al., (2000) and Howley & Bickel (2000) argue that the benefits may outweigh this concern when parents of ethnic minority and socio-economically disadvantaged students in particular are able to stay in touch with teachers and their children’s progress in school. This is a promising finding in light of Stanton-Salazar’s (1997) work, which suggests that ethnic minorities and socio-economically disadvantaged students may benefit the most from the social solidarity that social capital offers.

Social Benefits: Structures, Management & Relationships

Research suggests that small schools often promote high standards for achievement, particularly in academic areas, and provide high levels of support for getting there (Wasley et al., 2000; Howley & Bickel, 2000). Small schools have learner administrative structures, without specialized academic departments. Principals or directors often teach part of the day, and teachers make administrative decisions about matters directly affecting students (Wasley & Lear, 2001; Lee & Smith, 1995), all of which creates the supportive working environment within entire schools. Members of the faculty in these schools have a collective understanding of, and support for, the mission, vision and goals of schools (Wasley et al., 2000). This includes understanding the need to raise student achievement and acknowledging school size as the facilitating factor for teaching and learning. Principals in these cases often indicate that the school mission and vision are used to attract and recruit like-minded educators to join the staff. Further to this, such schools commonly employ school-based management practices whereby curriculum, staffing, class schedules and funding decisions are made as close to the classroom and community as possible. Under this decentralized decision-making model, small schools foster a sense of managerial autonomy, possess a compelling vision, have a personalized atmosphere, support teaching, and hold themselves accountable to students and district standards (Cotton, 2001; Holland, 2002). Sergiovanni (1993) and Holland (2002) suggest that a positive working environment in schools helps produce faculty cohesion, and positively influences students’ perception of schools.

In addition, small schools tend to concentrate on a few goals and insist that all students meet them, finding ways to honor student choice through the development of projects or other learning activities within a course rather than through an extensive course catalogue (Wasley & Lear, 2001; Holland, 2002). Lee & Smith (1995) confirm:

Our evidence supports the positive values of a narrow and academic curriculum, with a strong organizational push for all students to take and master these courses... Results indicate quite consistently that in such ‘core curriculum’ schools, students learn more, and learning is more equitably distributed (p. 268).

As a result, students from small schools tend to complete more years of higher education, accumulate more credits, and score slightly higher on standardized tests (Fine, 1994; Oxley, 1995, Bryk & Driscoll, 1998; Lee & Smith, 1995).

Researchers also find that small schools develop strong professional communities, which reflect strong relationships between students, teachers and staff, enhancing student engagement and achievement (Wasley et al. 2000, Sergiovanni, 1993; Lee, Smith & Croninger, 1997). These relationships develop most often through extensive advisory systems. Teachers serving as advisors stay in contact with parents, work with each advisee to develop a personalized learning plan, and serve as advocates for the students with other staff and community and social service organizations as necessary (Wasley & Lear, 2001; Wasley et al., 2000). Many focus on skills, conflict management, team building, and goal setting (Wasley & Lear, 2001). Through these and other types of advisories, students are more likely to acquire sustained relationship with caring adults, sometimes over multiple years (Cotton, 2001; Stiefel, et al., 1998). Students benefit from the stability of this small school structure, which enables them to build trust and take more academic risks than they might with a teacher who disappears after one semester or one school year (Copeland & Boatright, 2004).

Scale of school has a direct impact on teacher-parent communication. In many small schools, advisors and parents communicate regularly, not simply when a student experiences problems. Parents are always informed about the progress of their children, and could be partners in the student's academic and social development (Wasley et al., 2000; Lee, Smith & Croninger, 1997). Students are reportedly more connected with adults in these schools, more satisfied with their school experience, and are less likely to drop out than students in larger schools (Putman & Haughwout, 1987; Wasley et al., 2000; Croninger & Lee, 2001). Meanwhile, teachers reportedly have a greater sense of efficacy, job satisfaction, and connection with parents, as well as more opportunities to collaborate with other teachers, build coherent educational program, use a variety of instructional approaches, and engage students in peer critique and analysis (Wasley et al., 2000; Copeland & Boatright, 2004).

School Safety

In light of the Columbine tragedy, educators and communities are increasingly turning to small schools for solutions to enhance school safety, reduce school violence, bullying, intimidation, racial conflict, and self-inflicted incidents (Klonsky, 2002). When asked what he would do about the increase in school violence, James Garbario, director of the Family Life Development Centre and professor of Human Development at Cornell University, answered "At the adolescent level, if I could do one single thing, it would be to ensure that teenagers are not in a high school bigger than 400-500 students" (*What can be done*, 1994).

According to a 1998 report by the National Centre for Education Statistics (National Centre for Education Statistics), serious violent crimes were more likely to occur in large schools. Large schools had a ratio of 90 serious violent incidents per 100,000 students, compared with 38 per 100,000 in medium-sized schools. The 1999 report shows that large schools (those with more than 1000 students) are eight times more likely to report serious violent incidents than small schools (those with fewer than 300 students). Small schools can offer alternatives to such approaches. Deborah Meier (1995), a pioneering small schools advocate, insists that small schools "offer what metal detectors and guards cannot: the safety and security of being where you are known well by people who care for you" (p. 112). Other research also indicates that small schools are safer, reporting fewer fights, and fewer incidents of serious violence (National Centre for Education Statistics, 1998; Zane, 1996), because they reduce the frequency of negative behaviors both in and beyond school by creating intimacy and deep relationships with students.

Coleman's (1990b) findings also support the view that small schools foster higher achievement by virtue of a reduction of distractions related to negative behavior. These findings complement other studies that have linked small schools to lower rates of bullying, crime and misconduct (Klonsky, 2002; Zane, 1996; Kennedy, 2003; National Centre for Education Statistics, 1998). Possible explanations for this link, may rest with the isolation and poor peer

relations students experience in larger schools leading to feelings of distress and destructive behaviour (Brage, 1995; Gernefski & Okma, 1996). Sadly, children from impoverished families and communities often attend large schools (Howley & Bickel, 2000; Howley, Strange & Bickel, 2002), where they often experience isolation and class discrimination.

In contrast, small schools are found to promote character development, because they are more successful in drawing students into participation of extracurricular activities (Wasley et al., 2000; Wasley & Lear, 2001), especially students from the socio-economically disadvantaged group. As a result, students from the socio-economically disadvantaged families and communities are found to perform better in small schools (Howley & Bickel, 2000; Howley, Strange & Bickel, 2002), and to develop positive attitudes towards their studies and their commitment to communities (Wasley & Lear, 2001; Wasley et al., 2000). Studies have shown that violent student behavior in large schools, ceased after these same students attended small schools (Klonsky, 2002). Small schools are committed to providing the care and concern that today's students and families need. Small school researchers are increasingly observing a sense of belonging for students and teachers, high student engagement, and fewer distractions within the learning environment (Wasley et al., 2000; Meier, 2002). Thus, by reducing isolation, fostering the close relationships between students-teachers-peers-parents, small schools seems to successfully reduce student violence resulting in safer schools.

Cost effectiveness

Many fear that small schools are not cost effective. Yet in various studies of comparative operating costs, researchers (Stiefel et al., 1998; Lawrence, Bingler, & Diamond, 2002; Krysiak & DiBella, 2002) have found that small schools are actually *more* cost effective on a per capita student basis than larger schools if dropout versus completion rates are factored in. Further, Vander Ark (2002) asserts that the graduation rate in small schools is actually higher than that of large schools, resulting in small schools being *more* cost effective per graduate than large schools (Wasley & Lear, 2001; Stiefel et al., 1998; Wasley et al., 2000).

To be sure, it is difficult to conclusively report whether small schools are more cost effective than larger schools since reports treat operating and capital costs quite differently. However, a number of researchers (Howley, Strange, & Bickel, 2002; Raywid, 1999; Wasley et al., 2000) underline the importance of the reduced costs associated with less frequent student discipline issues. As our report indicates, violence, and even vandalism, are less frequent than in larger schools (Krysiak & DiBella, 2002). When comparing the "cost per student" and "cost per graduate", small schools might cost more upfront if capital and other costs are considered. By contrast, large schools may carry more costs in the long run, if negative externalities are traced. A compelling argument can be made that funding a completed education is much more cost-effective than continually paying for the risk costs for those who experience psychic and emotional damage due to a cycle of interrupted schooling as a result of poverty, unwanted pregnancies, and crime (Wasley & Lear, 2001; Stiefel et al., 1998; Wasley et al., 2000; Howley & Bickel, 2000).

Conclusion

This report shows clearly that there is a growing expert consensus that small schools not only have an academic achievement advantage but also promote character development, emotional stability among their students, collegial working environment for teachers, as well as an increased public confidence and parent satisfaction with the schools their children attend. A social capital approach to educational planning (Coleman, 1987) suggests the need for public policy that creates more institutions that foster "attention, personal interest, intensity of involvement, and... intimacy" (p. 38). While the value of small schools has been widely

accepted, there is less agreement how to monetize the demonstrated social benefits. It is usually argued that the high standards, standardized curriculum, and intimate environments of small schools create a sense of community and responsibilities that foster emotional adjustment, student attendance, academic achievement and safer schools (Bryk & Driscoll, 1998; Coleman, 1990b; Lee & Smith, 1995, 1997; Wasley et al., 2000; Klonsky, 2002; Zane, 1996). Research suggests that small schools benefit children from the socio-economically disadvantaged groups more than affluent ones (Howley, 1996; Howley & Bickel, 1999, 2000). Educators and policy analysts are developing better tools to adopt a *social capital* perspective in policy analysis. In this view, there is some indication that small schools are more cost-effective in relation to their high graduation rates and reduced expenses due to disruptive behavior, violence and vandalism compared to their larger school counterparts. Without a significant presence in original research and development in assessing the policy implications of this debate, these authors argue that Canada is falling behind in understanding the impact of small schools on social cohesion, civic engagement and equitable life chances on entry into Canada's knowledge economy.

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