A Qualitative Meta-Analysis of the Literature on Planning & Sustaining of Small Learning Communities

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Margaret Mead wrote these words the year I met her. I was somewhat overawed as a college newspaper editor meeting the aging, irascible legend of Anthropology who appeared wearing a native dress and carrying a large staff to lecture at Baldwin-Wallace College. Little did I realize that Mead was already sensing the need to reform our education systems and presaging not only the information age but the impact it was having on the emerging generation.

Mead’s words are a logical beginning point for any discussion of small learning communities and specifically, the small high school movement. What Mead had to say in the 70’s comes as no surprise to those who are now charting generational changes in American society. Today’s students are different than the students of the 50’s, the 60’s and even Mead’s 70’s. They are the “Millennials” and they are different from those who are tagged as “Gen Xers” or “Baby Boomers”. Fundamentally, it is the belief of this author that they often know more than their adult counterparts in terms of raw information.

In the Pacific Northwest, there is a web site called studentbylines.com. Here students can publish their work “electronically” for the whole world to view and even get paid for submissions. The reality is that while English teachers are grading essays or papers, often half-heartedly done by students, those same students already have the potential to publish and, in some cases, have published internationally. “We look...

1 Gregory (2000) also effectively uses this quote in his article, School reform and the no-man’s land of high school size
for work that raises the bar of teen writing and art. We know this can be a difficult feat to accomplish. That is why we offer a free critique service for writers--Student Bylines is here to help in any way we can,” says the site. (2005)

Through Internet instant messaging and other means, the students of today share information in ways that adults can only mimic. Students have created a whole sub culture on the web. They can, and do, readily gather information and communicate on a world-wide basis, nearly instantaneously. They are the first generation to do so and adults who barely comprehend this reality are left in the dust.

For the most part, however, we are still attempting to educate this new generation in high schools eminently designed for the 1950’s. They know more; yet, it is not organized and students no matter how technologically adept lack the life experience to organize and process such information. Herein lays the advantage of adults and the “key” as to why schooling, particularly high school, is still important.

There is a drawback, however. We have seemingly found that the large “industrial” high school of 1500 or 2500 students doesn’t seem to work, particularly in urban areas. The “why” is of course a critical consideration.

The solution, at least in the waning years of the 20th Century and beginning years of the 21st, appears to be vested in the “small high schools” movement. Literally, taking the large and presumably impersonal schools and breaking them down into smaller components of no more than 400 students.

Does this really work? If so, how?

The answers will soon become very critical as the convergence of two major high school restructuring efforts and the wishes of the Bush administration to extend the No Child Left Behind (NCLB) Act into the high school arena converge.

This work originates in part from the Federal Small Learning Communities (SLC) grant awarded to the Canton City Schools in which I play the role of outside evaluator. It was also promised in the initial grant application.

Any evaluation presumes a set of criteria against which to evaluate. Some of these criteria are evidence-based and lie in the domain of numbers, standardized test scores, and statistics. That is the easy part.

What we are interested in looking at for the purposes of the evaluation is more akin to what Assistant Secretary of Education Grover J. Whitehurst once described as Evidence Based Education as “the integration of professional wisdom with the best available empirical evidence in making decisions about how to deliver instruction” (Whitehurst 2003)

The Central Park East Secondary School, one of New York City's first small public high schools, was once a beacon of educational innovation. But in the two decades since it opened, the graduation and attendance rates have plummeted to below citywide averages.

Even the founding principal has not visited in years, saying she finds the school’s fate heartbreaking.

In Chelsea, the New York City Museum School, another pioneering small school, is thriving, even as it struggles with financial difficulties. Students there make regular pilgrimages to museums throughout the city, though they spend less time on such trips than they did a few years ago.

One of Mayor Michael R. Bloomberg’s chief strategies for transforming the city’s school system is the creation of 200 small schools, including 53 secondary schools that opened in September. But the idea is not new - there was an explosion of such schools in the early 1990’s - and a look at this older generation of small schools shows that size itself has not been a silver bullet. (Gottman and Herszenhorn 2005)
That professional wisdom most assuredly is to be found locally in the practices of teachers and administrators. It is also to be found in the literature in the collective wisdom of numerous authors and practitioners who have embarked on the journey of reform which is exemplified in the small high schools movement.

This work will look at what they have found, but why is this important?

Consider the following:

There is no long term evidence that small high schools, in and of themselves, really work. The key phrase is “in and of themselves”. To be sure, increases in student achievement often highly correlate with the size of the school, but size appears to be only an enabler for other more substantive instructional and relational constructs to be implemented.
Introduction: Converging Streams of Change

But first we have to understand that today’s high schools are not the cause of the problem; they are the result. The key problem is political will. Elected officials have not yet done away with the idea underlying the old design. The idea behind the old design was that you could train an adequate workforce by sending only a third of your kids to college – and that the other kids either couldn’t do college work or didn’t need to. The idea behind the new design is that all students can do rigorous work, and – for their sake and ours – they have to. Fortunately, there is mounting evidence that the new design works. (Gates 2005)

The 2005 National Education Summit on High Schools may have been a far more historic event than thought by the summit’s sponsors.

For the first time, the summit brought together the country’s three “major streams of change” for high school reform.

The first “stream” was the work so far advanced by the Bill and Melinda Gates Foundation to increase the number of effective small high schools across the country. In this regard, the world’s largest foundation has already expended nearly $1.2 billion on efforts to improve the education of children, including the formation of nearly 2000 small high schools across 41 states and the District of Columbia.²

The second “stream” was the focus of the Summit itself which emerged from the National Governors Association (NGA) its partner, Achieve, Inc., and

² See: http://www.gatesfoundation.org/Education/RelatedInfo/EducationFactSheet-021201.htm
sponsoring organizations, Business Roundtable, the Education Commission of the States and Hunt Institute. Early on in his tenure as chairman of NGA, Virginia Governor Mark Warner, made it clear that “given that the economic prospects of states, and this nation, are at stake, blindly conducting “secondary education” as usual is unacceptable. As this increasingly global economy demands more from our students, we should demand more from our high schools.” (Warner 2004)

This stream transcended the issue of high school size and program effectiveness by focusing on high schools as the bridge to higher education, noting “and the bridge is increasingly in danger of collapse.” (NGA 2005).

In essence, the Summit placed high schools squarely within a P-16 continuum. It also reinforced the critical economic realities facing the country and individuals well into the 21st Century. High school, for the first time, was seen as being on the “front-line” of international economic competition.

The third “stream” was that of the Federal government, embodied in the remarks of Education Secretary Spellings to the governors and assorted state leaders present. Spellings referenced the President’s new High School Initiative which would provide in the Fiscal Year (FY) 2006 budget, $1.2 billion for a High School Intervention program to help states hold high schools accountable for teaching all students and to provide effective interventions for those students who are not learning at grade level. In return for a commitment to improve academic achievement and graduation rates for secondary school students, states under the Bush plan would receive the flexibility to choose which programs are the most effective in serving the needs of their high school students. An additional $250 million would be requested for state assessments to ensure that high school diplomas are truly meaningful with required state assessments in high school.

Presidential budgets, however, are often problematic. Though they represent the policy “wish list” of an administration, they are subject to the consent of Congress. While the Bush administration, for instance, wants to fund its high school initiatives through the elimination of narrowly focused or ineffectual existing programs, Congress may not agree.

In addition to the President’s initiatives and budget request, the U.S. Department of Education has been increasingly focused on high school reform.

In October 2003, then Secretary of Education Rod Paige launched the Preparing America’s Future High School Initiative at the First National High School Reform in 2005
Leadership Summit in Washington. Over 700 policy leaders from the states assembled for this summit. These individuals, selected by the education leadership in their states, ostensibly would return to form state-level teams to focus on high school reform.

The initiative was designed to support state and local leaders on these teams in creating educational opportunities to fully prepare American youths for success in further education and training, as well as to prepare them to be participants in a highly skilled U.S. workforce and productive and responsible citizens.

The three goals of Preparing America’s Future are to:

1. Equip state and local education leaders with current knowledge about high schools through special forums, print and electronic materials, and targeted technical assistance;

2. Develop the expertise and structures within the Department of Education to provide coordinated support and outreach toward helping state and local education systems improve high schools and outcomes for youths; and

3. Facilitate a national dialogue to raise awareness about the need for significant reform in American high schools. (OVAE 2004)

Following the summit, the department organized seven regional summits to allow state-level teams the opportunity to work on formulating high school plans, and also formed partnerships for outreach and technical assistance with the National Association of Secondary School Principals, the High School Alliance, the Council of Chief State School Officers, the National Governors Association, the Council of Great City Schools, the U.S. Department of Labor, the National Football League, and other organizations.

A second National High School Leadership Summit was also held in Washington in December of 2004. As with the first summit, education and community leaders from the states convened to have the “opportunity to share information on a peer to peer basis, as well as hear about current reform efforts on the high school level from content experts and Department of Education officials.” (OVAE 2005)

The three “streams” often build on each others’ efforts and often coordinate. The degree to which these “streams” interconnect and correspond in the future will, however, be critical.

The process of creating small high schools is highly complex and multi-faceted. The prospect of sustainability may be even more so. Ever since Lewin (1947) first proposed a theory of change which outlined the necessity of stabilizing or “re-freezing” any change as the new norm, organizational theorists have struggled with the precise dynamics of this methodology. Failure to “re-freeze” means, quite simply, that conditions inevitably return to the previous norm.

In the case of small high schools, the complexities surrounding their creation compels require the expenditure of energy on the part of faculty and school districts, not only to produce, but to sustain or “re-freeze” such change. Energy in any organization is finite and particularly so in schools which are often likened to “organized anarchies” (March and Olson 1976).

3 An excellent biography of Lewin can be found at: http://www.muskingum.edu/~psych/psycweb/history/lewin.htm
Over the last several years, an understanding has been developing within the literature as to those elements which can best combine to produce increased student achievement within a small school environment. Many see such elements as, relationships, standards, rigor, student engagement, and others as part of a comprehensive whole. What is not generally understood are the relationships between these elements or their relative strengths.

For instance, while some might argue the criticality of having all teachers teach within their content area, is this more critical than having a teacher who can develop successful interpersonal relationships with students?

Given, once again, finite organizational energy and finite resources, both in terms of grant funding, district, state and national resources, the following two research questions are posed:

- Which elements are the most critical in creating a successful small high school? Which elements are most critical in sustaining a small high school?

Commensurate with these, are several sub sets of questions.

1. What are the relative strengths of each element? How are they interconnected?
2. Which are absolutely necessary? Which can be done without if necessary?

There is also an added perspective which encases or encapsulates the issues in these questions.

No school, no matter how anonymous, exists in a vacuum. Many small school models...
recognize this when parent understanding and support and community involvement are called for in the design. Yet, few models seem to recognize that small schools are surrounded by circles which create a total P-16 environment. That these circles are not necessarily in alignment is a major supposition of this paper. That they must be aligned to sustain small high schools in the long-term is a major contention.

The circle at one level contains the district, central office, and parents. Even this circle contain several inner rings. Within the district are other schools. These are the “feeder” schools, both elementary and secondary and their respective faculties. There is the central office, both administrative and support staff. There are also the political realities of boards and associations.

Parents, parent, or extended families, or guardians come in a variety of dispositions and economic circumstances. Some are supportive of their child’s education; some are disinterested or disengaged. Some will support the small school movement, some will be disinterested or disengaged.

Community, itself, contains many nuances. There are multiple agendas within any community. Beyond this are regional considerations, state level education, political, funding, and associations. The same exist at the national level. Insofar as elementary and middle schools are feeder schools for small high schools, so too must those small high schools be feeders for higher education, careers and professions, and ultimately our systems of citizenship and economics.

The ultimate circles are national and global. Few studies on small high schools have considered the full relationship between these circles or what alignment of elements or conditions is necessary, not only for small schools to be created, but to thrive and be sustained.

None have looked at the necessity of creating and sustaining such schools within a P-16 continuum, literally considering how a seamless system of education, preschool through college is necessary to support the small high school movement.

This review will explore the literature imbedded in the major circles delineated by the P-16 model cited previously. The beginning point will be the small high school itself.
Small High Schools: What is Small? What Does It Mean?

Our officials should be lauded for their concern about high school graduation rates. But the governors should scrutinize with great care the popular reforms of the day before imposing them on their states’ schools. Just because Bill Gates is ready to pour millions of dollars into a big new idea doesn’t make it a good one. (Ravitch)

The governors had scarcely returned to their state capitals before the clamor began as Diane Ravitch’s opinion piece in the March 15, 2005 edition of the New York Times indicates. Ravitch cited a series of recommendations by the National Association of Scholars in support of her position. One specific recommendation questions the basic Gates stance that small high schools should have enrollments no larger than 400 students⁴.

High schools have student bodies of 500 at a minimum, in order to provide the necessary curriculum content and services, and ensure that the school’s curriculum or orientation is not dependent on the leadership and support of a few particular administrators or teachers who may leave the school or the field of education after a few years. But there is no empirical reason to set a cap on size, as no research studies show the overall superiority of small high schools to large high schools. (NAS 2005)

While it is difficult to establish “parenthood” the small high school movement, one person is generally identified as representing the large comprehensive high school. That person is James Bryant Conant, who in 1967 published The American High School based on the results of a study of questionnaires from over 2,000 high schools nationwide. Conant concluded that large “comprehensive” high schools were more cost-efficient, provided

⁴ This comes from the Foundation’s Theory of Change which states that such schools should be “Small size (100 students or fewer per grade)”.
a wider range of course options and hence provided higher quality schooling (Conant 1967).

The irony is that by the time Conant was studying the effects of large comprehensive high schools, small schools had begun to disappear from the landscape, particularly in urban areas. Berry tells why:

In the middle of the twentieth century, a quiet revolution remade public education in the United States. As late as 1930, American schools were small, community controlled institutions, most employing but a single teacher. From roughly 1930 to 1970, a rapid movement toward centralization and professionalization reduced the number of schools by more than 100,000, as nearly two-thirds of the schools that existed in the former year were eliminated through a process of consolidation. The average size of a school increased fivefold over this short period. In the process, school districts evolved into professionally run educational bureaucracies, some operating hundreds of schools and educating hundreds of thousands of students. It is difficult to imagine a more important change in the organization of public education in the past century. (Berry)

In 1964, however, the first questions were being raised about the suitability of large high schools. Barker and Gump published, Big School, Small School: High School Size and Student Behavior in which they argued that the number and the variety of extracurricular activities are significantly higher in small schools than in large ones. Hence, the student in a small school was also more likely to hold important positions in the activities in which they participated, resulting in greater satisfaction.

Morgan and Alwin were researching the effects of small schools on social participation nearly 25 years ago (Morgan and Alwin 1980). What is apparent, however, is that research in the late 80’s and early 90’s began to shift with a focus on school size and student achievement, particularly within the context of poverty or social-economic-status (SES).

In 1990, Williams looked at some of the early research and arrived at the conclusion that “research indicates that the effective size for an elementary school is in the range of 300-400 students and that 400-800 students is appropriate for a secondary school. Research also indicates that larger schools with enrollments in excess of 1,200 have not produced expected economies of scale and that sufficient numbers of students do not enroll in enhanced curricular offerings to justify availability.(Williams 1990)

Also in the early 90’s Fowler and Walberg found that there was a negative relationship between school size and achievement tests and that low achievers particularly seemed to benefit from small high schools (Fowler and Walberg 1991). Craig Howley was another early researcher. He found in a study of West Virginia schools that “the direct association of size and achievement is neither practically nor statistically significant, but, instead socioeconomic status governs the relationship”(Howley 1995).

Yet, there continues to be wide disagreement among researchers as to the “ideal” size for a small high school. One standard might be that arrived at by Lawrence and associates, who basing their findings on several key principles from the literature established “ideal upper limits of ‘small
size’ for schools with conventionally wide grade spans are as follows: High schools (9-12): 75 students per grade level (300 total enrollment)” (Lawrence, Bingler et al. 2002).

Another indication of what might constitute an “ideal” size came by way of inference from a Nebraska study which found that:

High school completion and postsecondary enrollment rates increase as school size decreases.

• The proportion of Nebraska students who graduate from high school without dropping out averages 97 percent in districts with less than 100 high school students, compared to the statewide average of 85 percent.

• High school completion rates are lowest for school districts with 600 – 999 high school students, averaging 80 percent.

• Nebraska postsecondary institution enrollment rates are 73 percent for counties that average less than 70 high school students per district, compared to 64 percent for counties that average 600 to 999 high school students per district.

• The percent of students who complete high school and enroll in a Nebraska college is 25 percent higher for counties with the smallest schools compared to those with the largest schools (Funk and Bailey 1999).

The relationship between size and meaning has perhaps best been described by the Bill and Melinda Gates Foundation Theory of Change for small high schools:

1. Large comprehensive high schools do not serve all students well, particularly because of their lack of personalization, fragmented focus, and low expectations.

2. High school students – particularly disadvantaged students – would enjoy better outcomes if given a choice of high quality educational alternatives, to suit the differing contexts and needs of particular communities and students.

3. Effective small high schools can be created that offer quality education for all students, particularly those in high-need urban areas. Effective models vary, but share some common characteristics:
   • Schools that are being created or redesigned must begin with a coherent vision and strategy, shared by all stakeholders.
   • These schools will be small (100 students per grade or less).
   • The following seven attributes should all be evident components of the vision: common focus, high expectations, personalized, culture of respect and responsibility, time to collaborate, performance based, technology as a tool.

4. The school attributes create conditions that are supportive of powerful teaching and learning in the classroom, characterized by active inquiry, in-depth learning, and performance assessment.

5. Success for students includes demonstration of deep learning, attainment, college preparedness, college matriculation, labor market participation, and involved citizenship.
6. Small effective high schools can become much more plentiful and more generally available than they currently are, through replication of successful school models and coherent approaches to reform within districts. Broad scale-up is possible if implemented and supported systemically.

7. Demonstration of the effectiveness and sustainability of the small school alternative will engender demand for such schools. This demand derives from the information made available by the demonstration of success, and from community outrage over insufficiencies and inequities of the current comprehensive high school model.

8. Scaling up will be facilitated through establishment of a supportive infrastructure (including more supportive networks, the development of performance assessments, expanding the capacity of technical assistance providers, engendering district supports) and a more conducive political and resource environment (less single-minded focus on high stakes standardized tests, advocacy and political recognition of small school alternative, leverage of public and private monies) (2001).

One of the better recent reviews of the literature on school size was recently conducted by the Study of High School Restructuring at the University of Texas in Austin. That review cautioned, “most of the researchers cited in this issue brief have agreed that the effects of school size are indirect and that school size may only facilitate or inhibit conditions that promote student achievement” (Nguyen 2004).

As Nguyen states, size may well be only a facilitator. Yet, it is a facilitator which seems to work extremely well in helping to promote certain student outcomes.
Size may indeed only be the facilitator, but the number of articles and studies indicating that increased student performance is linked to small high school or small school environments is on the increase.

The literature on the impact of size on student outcomes dates back at least to the early 1960’s with the publication of Big school, small school. (Barker and Gump 1964)

A good deal of the research has dealt with the potential of small schools to erase deficits from low SES (socio-economic status) effects.

By 1994, however, the ERIC Clearinghouse on Rural Education and Small Schools was able to write:

During the past decade researchers have continued to pursue several lines of inquiry about the possible effects of school and district size on the cognitive outcomes of schooling. When all else is held equal (particularly community or individual socioeconomic status), comparisons of schools and districts based on differences in enrollment generally favor smaller units. (Howley 1994)

One of the earlier reviews on school size and student performance was conducted by Cotton (1996) who found mixed results. However, she noted “…we may safely say that student achievement in small schools is at least equal—and often superior—to student achievement in large schools.”

A study of costs and outputs in New York’s small schools (Stiefel, Iatrola et al. 1998) indicated that academic results were indeed better for students in schools of 600 or less. Interestingly, results were poorest in schools with 600 to 2000 students, while results began to improve in high schools with enrollments in excess of 2000. The researchers were unable to explain this increase.

In 2000 after a four state study, Howley and Bickle calculated the percentage of the variance in test scores which could be explained by the level of poverty, researchers found that “in all four states,
smaller schools cut poverty’s power rating by between 20 and 70 percent, and usually by 30-50 percent, depending on grade level.” (Howley and Bickle 2000)

In yet another study using a sample of 1100 Texas schools, Bickel and his associates found:

This line of research has, with unusual consistency, found an interesting interaction effect between socioeconomic status (SES) and school size in the production of achievement: as school size increases, school performance (aggregate achievement at the school level) decreases for economically disadvantaged students. In short, as schools get larger, those with poor children as students perform increasingly less well when achievement is the outcome measure. School size imposes increasing “achievement costs” in schools serving impoverished communities. (Bickel, Howley et al. 2001)

Later, Howley and Howley sought to correct shortcomings in previous analysis of the data in that no research had adequately examined the relationship of size and socioeconomic status (SES) with students as the unit of analysis. Using national student data (NELS) they found:

(1) smaller school size confers an achievement advantage on all but the highest-SES students, (2) smaller size mediates the powerful association between SES and achievement, (3) the relationship between school size and achievement is predominantly linear, and (4) size effects are at least as robust in rural schools as compared with schools overall.

This led the researchers to a series of policy recommendations which warrant inclusion:

1. Sustain the smallest schools in the poorest communities.
2. In communities that serve all social classes, do not build large schools.
3. In affluent communities (or attendance zones), do not build high schools larger than 1,000 students.
4. Keep elementary and middle schools proportionately smaller than high schools.
5. When building new, keep schools everywhere smaller than recommended in the 20th century.
6. Provide appropriate and adequate support to smaller schools: small size improves the odds of success, it does not guarantee it.
7. Attend to rural and urban issues of size with equal care.
8. Regard smaller school size and reform as distinct issues, but do not hesitate to innovate in smaller schools.
9. Base smaller schools in extant communities so as to avoid the intentional concentration of impoverished students from mixed-SES communities into smaller schools (e.g., as in contemporary “alternative schools,” so-called).
10. Doubt that an educationally-relevant lower limit of school size exists. Much depends on context, and even in the contemporary world, dedicated parents educate very small groups of children with remarkable success at home. (Howley and Howley 2004)
Methodology of the Study

The methodology chosen is a modified form qualitative meta analysis. As Reis and others (2002) have noted, “Although meta-analysis of quantitative research is a well-established technique, the synthesis or aggregation of qualitative studies remains rare and controversial. Questions of feasibility, validity, study selection, mechanism, and interpretation – and even ethics - are prevalent.” (Reis, Hermoni et al. 2002)

This study utilizes this specific variant, not because numbers are non-existent. This variant is used specifically because it is an approach towards formulating useful information and because the bane of classic “Meta Analysis,” the clinical study, or at least what would no meet the U.S. Department of Education’s criteria for evidence-based or scientific research in education is still limited to only a handful of studies. Many of these look at differences in student achievement between school size and economic background. While the results of these studies are gratifying, they are only part of the answer. As Rawyid (1997) said “…our efforts have taught us … that there is no fail-safe solution, no sequences or strategies that are guaranteed to work. The problem isn’t limitations in our knowledge. It’s in the nature of the case that there is nothing, no single thing, no practice or arrangement that works under any and all circumstances” (p.16.) The search engine, AlltheWeb.com, currently lists 10,400 separate sources under “small high schools”. Clearly, the literature base is large, even if truly scientific studies are limited.

As Moore, Zaff, and Hair have stated, “…not every intervention strategy lends itself to an experimental evaluation.” The same can be said for the small high school movement where the issue is not one of a single, i.e. reduction in school size strategy, but often, as Rawyid indicates, one of multiple intervention strategies.

In addition, the small high school movement is still relatively new. The large majority of such schools are still in the start-up or early operational phase. It was only in 2000 that the Bill and Melinda Gates Foundation, the major driving force behind the movement, gave the first high school transformation grant.3

3 See the website of the Bill and Melinda Gates Foundation under Education at: http://www.gatesfoundation.org/education/transforming/HighSchool/Grants/default.htm?showYear=2000
This poses one of the central quandaries of evaluation. Only a true experimental design can assess causality. However, quasi-experimental designs are the only feasible approach for evaluating some types of interventions”(Moore, Zaff et al. 2002).

It must be noted that this study represents a modified meta analysis of the literature and that the literature, per se, is not entirely comprised of studies or what one might assume are scientific studies in any direct sense.

To a degree, this study acknowledges what the U.S. Department of Education has to say about meta-analysis in that it categorizes this form of research among “studies that do not meet the threshold for ‘possible’ evidence of effectiveness” (Baron 2003).

While some cited sources reflect study considerations, many sources are compilations of information or interpretations from other sources. This specific review seeks to establish what current prevailing constructs are reflected in the sum of much of the literature, regardless of nature, which seeks to inform the small high school movement.

This study also recognizes that there is a “collective wisdom” of numerous authors and practitioners reflected in that literature. That wisdom can inform yet other practitioners.
Design of the Study: Framework & Definitions

Any analysis of the literature surrounding small high schools must begin with a conceptual framework. The author has derived this framework from four distinct sources. Each is, to an extent, complementary. Each source also concerns itself with the fundamental elements of school change and raising student achievement.

If small high schools are the facilitator, then certain specific outcomes can be anticipated. Presumably, these outcomes will be enhanced or magnified within the small high school environment.

The first section of this study will deal with those elements seen as being critical in the establishment of small high schools and perceived relationships to state and national developments as well as the P-16 continuum. This section will draw upon the literature which reflects the planning for, or planning stages of small high schools.

To an extent, this researcher agrees with Wallach and Lear in that:

The work of converting comprehensive high schools is in a relatively early stage. Whether conversions will be more than occasionally successful remains unclear, let alone whether it will become a “movement” that substantially changes the nature of high schools in this country. (Wallach and Lear 2003)

The era of “start-up” schools, literally new small high schools built as entirely new entities is probably coming to a close. The challenge will now be in the conversion of comprehensive high schools. Consequently, this first section will deal with process and outcomes, not the mechanics of establishing a new school.

A second section of the review will deal with those elements seen as being critical in implementing and sustaining small high schools within their communities, relationships to state and national developments as well as the P-16 continuum. This literature will draw upon what individuals have found in the implementation of small high schools.
This section will differ in that elements may be listed as present, or listed as present with the added notation that problems have been encountered in either implementing or sustaining those elements.

This part of the study will now focus on three sources from the literature which describe in similar, yet varying terms, the outcomes which might be anticipated or expected from small high schools.

One of the earliest comprehensive works which attempted to delineate such outcomes was Kathleen Cotton’s review of 69 documents attesting to a relationship between school size and some aspect of schooling for the Northwest Regional Education Laboratory. Forty of the articles dealt with secondary education, with another 19 at both elementary and secondary levels. This study remains one of the primary investigations of the programmatic aspects which are facilitated in a small high school environment. Cotton’s major findings have relevance for this investigation and will be cited here. Five of her findings dealt with structural or “school within a school” issues:

1. Academic achievement in small schools is at least equal—and often superior—to that of large schools.

2. Student attitudes toward school in general and toward particular school subjects are more positive in small schools.

3. Student social behavior—as measured by truancy, discipline problems, violence, theft, substance abuse, and gang participation—is more positive in small schools.

4. Levels of extracurricular participation are much higher and more varied in small schools than large ones, and students in small schools derive greater satisfaction from their extracurricular participation.

5. Student attendance is better in small schools than in large ones.

6. A smaller percentage of student drop out of small schools than in large ones.

7. Student have a greater sense of belonging in small schools than in large ones.

8. Student academic and general self-concepts are higher in small schools than in large ones.

9. Interpersonal relations between and among students, teachers, and administrators are more positive in small schools than in large ones.

10. Students from small and large high schools do not differ from one another on college-related variables such as entrance examination scores, acceptance rates, attendance, grade point average, and completion.

11. Teacher attitudes toward their work and their administrators are more positive in small schools than in large ones.

12. Attributes associated with small school size that researchers have identified as accounting for their superiority include:

   - Everyone’s participation is needed to populate the school’s offices, teams, clubs, etc., so a far smaller percentage of students is overlooked or alienated.

6 Those five items are deleted from this list and the list is renumbered.
– Adults and students in the school know and care about one another to a greater degree than is possible in large schools.

– Small schools have a higher rate of parent involvement.

– Students and staff generally have a stronger sense of personal efficacy in small schools.

– Students in small schools take more of the responsibility for their own learning; their learning activities are more often individualized, experiential, and relevant to the world outside of school; classes are generally smaller; and scheduling is much more flexible.

– Grouping and instructional strategies associated with higher student performance are more often implemented in small schools—team teaching, integrated curriculum, multiage grouping (especially for elementary children), cooperative learning, and performance assessments.

13. Poor students and those of racial and ethnic minorities are more adversely affected—academically, attitudinally, and behaviorally—by attending large schools than are other students. Unfortunately, poor and minority students continue to be concentrated in large schools. (Cotton 1996)

Another major source delineating anticipated outcomes from a small high school is the Bill and Melinda Gates Foundation Listing of Attributes for High Performing Schools (Smeardon and Means 2004).
The third source for the conceptual base is the Stark County Theory of Action Model. This model was formulated by the Stark Education Partnership, Inc., the Stark County Educational Service Center and agreed upon by the 17 public school districts in Stark County, Ohio. Though not specifically originating from the small high school movement, the model parallels both Cotton’s findings and the Gates’ Theory of Change and Attributes of High Performing Schools. It remains a template for local implementation of school change, including the Gates’ funded Ohio High School Transformation Initiative (OHSTI) small high schools project at McKinley High School and the Federal Small Learning Communities (SLC) project at both McKinley and Timken High School in Canton, Ohio.
Definitions for the Elements in the Conceptual Framework

The following are definitions for the elements in the conceptual framework.

School Culture
- Coherent and shared mission – Is the mission clear, concise and understandable by all members of the school community? Does it directly address what the school is to do?
- Coherent and shared vision – Does the vision reflect a firm sense of belief that all children can learn?
- Coherent and shared beliefs – While similar to vision, this category reflects the operational beliefs reflected in the work of staff and faculty, i.e. not only that all children can learn, but that they can learn at high levels, high expectations for all, the importance of relationships and rigor.
- Coherent and shared goals – Goals are clearly defined, obtainable and understandable to all members of the school community.
- Coherent and shared common purpose to make a difference for students – This purpose is shared by all faculty and staff. The purpose is collaborative.

Raising Expectations
- All students will achieve at high levels – Not only does this reflect the beliefs of faculty and staff, but the expectation is translated to students, parents, and the community.
- Data driven – Data is used not only for formative evaluation, but also to inform individual and group instructional needs.
- Results oriented – While process is important, students, faculty and staff concentrate on the delivery of measurable results.

Size
- What size is the school planned for, or assessed in the literature? – There is no general consensus on size for small high schools: 400 students, more than 400 students, less than 400 students.

Building School Capacity
- Focused professional development – Professional development is targeted to meet the instructional needs of the school and individual teachers.
In achieving the school’s goals, there is collaboration with/among:
  – Teachers
  – Principals
  – Central Office
  – Parents
  – Students
  – Business Leaders
  – General Public, i.e. taxpayers without children in school

**Instructional Leadership**

**Teacher**
- Design of engaging student work—Challenging work that students persist with despite the difficulty.
- Reflection on engaging student work—Teachers are able to improve their own practice by studying what their students produce.
- Common teacher planning time—to develop curriculum, instructional strategies, instructional strategies for groups or individual students.

**Student**
- Students construction of knowledge and understanding—Students become knowledge workers. That work leads to understanding.
- Student role in deciding how to learn—Students are free to employ their own individual learning styles whenever possible.

**Rigor**
- High standards—There are high, agreed upon instructional standards (state and local)
- Curriculum aligned with standards—Both state and local
- Aligned instruction—Instruction is aligned with curriculum and standards.
- Aligned assessment—Assessment is aligned with curriculum, instruction and standards.

- All students take an academic core—There is no “tracking” or “dummy” courses.
- All students prepared for college—all students gain the requisite skills to succeed in college as a part of the school’s mission.
- Post secondary options are available—Students can take college coursework or enroll in dual credit courses while attending the small high school. The relationship between gaining early college credit and later success in college is understood.

**Relationships**
- No student is anonymous—Faculty know all students, students know faculty. Quality relationships are established targeted towards student academic and social success.
- Time for student/faculty exchanges and advising—Specific time is allocated outside of course time for faculty to interact with or advise students.
- School is a means to achieve socio-economic and academic equity—Literally, the school “levels the playing field” for low income and disadvantaged students.

**Environment for Learning**
- Use of choice or behavior theory—Glasser’s choice theory or a similar method or behavioral theory of empowerment for students is followed.
- Adequate and timely interventions—Behavioral and instructional interventions are put into place when students first exhibit difficulty. Interventions are sufficient to correct the difficulty.
- Adequate time for instruction and counseling needs—Time is configured to serve instructional
strategies, rather than instruction being a set number of periods or minutes. Students can receive academic or social counseling in a timely and adequate fashion.

- The fourth and final source derives from the researcher’s own experience as a member of the District Design Team for the Ohio High School Transformation Initiative (OHSTI) at McKinley High School in Canton, Ohio and as outside evaluator for the SLC grant at both McKinley and Timken High Schools in Canton. Specifically, this experience and faculty feedback has added the sections on School Leadership and Resources, Alignment and Relationship to External Forces to the analysis.

School Leadership and Resources
- Principal(s) leadership is seen as critical – The leadership of one or many principals (in large school conversions) is seen by multiple parties as being a critical factor in both establishing and sustaining small high schools.
- Distributed leadership is employed – Either by conscious design or by school culture, faculty and staff (not just the principal) can and do exercise leadership functions in a variety of circumstances.
- Adequate financial and material resources to sustain vision and mission – For example, if the vision is a small high school with a 25:1 student/teacher ratio, adequate time to develop and maintain personal relationships, etc., financial and material resources must be present to both create and sustain this reality.
- Budget and resources are autonomous – To a degree, the small high school has control of its fiscal and material resources.
- Degree of management autonomy – The small high school management has greater flexibility in decisions and resource allocation than its conventional comprehensive high school counterpart.

Alignment and Relationship to External Forces
- Fair and accurate community perceptions – Literally the school takes care to effectively communicate with the public so that the greater community understands why things are happening the way they are.
- Public support and engagement – These are actively sought, developed, and utilized by the small high school or additional partners. Such support and engagement is seen as critical to the present and future success of the school.
- District policies geared to create and sustain school – Policies should not be barriers, but rather reconfigured when necessary to meet the unique requirements of the school.
- Central Office support – Beyond policy, the central office staff understand and actively support the vision and mission of the school.
- Additional community or foundation fiscal support – Community members, businesses, and foundations are willing to donate time and money above and beyond standard school support to help the school achieve its vision and mission.
- Alignment with state high school policy – As states begin to rethink high school instruction, such as Ohio’s Quality High School Task Force Recommendations, the small high school’s policies and actions...
should be aligned whenever possible to encourage not only creation, but sustainability of the school.

- State funding formulas support small high schools – Literally, does state funding support the unique requirements of these efforts.
- Alignment with emerging federal policy and funding – Is the small high school configured to meet changing Federal requirements without sacrificing vision or mission? Is it configured to take advantage of Federal funding, such as for dual credit opportunities.
- Recognition of functioning within a P-16 context – Does the small high school recognize its overall role in a P-16 continuum? For instance, does it recognize its relationship to “feeder” middle schools and skills gained in elementary or preschool and not just its relationship to higher education and the workforce? Does it understand its economic value to the community.
Limitations

From the onset, this study was designed to be of use by the practitioner, more than the academician. As such, most studies cited are relatively easily available, with many on the internet, at no cost to administrators and teachers involved in small high schools.

While software exists for textual analysis (see RefViz analysis) the core of this study is based on the qualitative analysis conducted by the researcher individually reviewing each source through the lens of first hand involvement with small high schools and school reform.

This enables the potential to detect subtleties in the sources which computerized textual analysis might not be able to locate. The limitation is that the presence of specific elements in accordance with the qualitative taxonomy developed are the call of a single individual.
# Elements from the Literature on Planning Small High Schools

## Reviewed Literature

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## Raising Expectations

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7Parallels the Bill and Melinda Gates Foundation Theory of Change “Schools that are being created or redesigned must begin with a coherent vision and strategy, shared by all stakeholders.”

8This rating concerns the strategies section of the report only
## Literature Elements on Planning Small High Schools

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### Literature on Planning & Sustaining of Small Learning Communities

- A Qualitative Meta-Analysis of the Literature on Planning & Sustaining of Small Learning Communities
- Student role in deciding how to learn
- Rigor
  - High standards (state and local)
  - Curriculum is aligned with standards
  - Aligned instruction
  - Aligned assessment
  - All students take an academic core
  - All students prepared for college
  - Post secondary options are available
- Relationships
  - No student is anonymous
  - Time for student/faculty exchanges and advising
  - School is a means to achieve social-economic or academic equity
- Environment for Learning
  - Use of choice or behavior theory
  - Adequate and timely Interventions
  - Adequate time for instruction and counseling needs
### School Leadership and Resources

| Principal(s) leadership is seen as critical | X | X | X | X | X | X | X |
| Distributed leadership is employed | X | X | X | X | X | X | X |
| Adequate financial and material resources to sustain vision and mission | X |
| Budget and resources are autonomous | X |
| Degree of management autonomy | X | X | X | X | X | X | X |

### Alignment and Relationship to External forces

| Fair and accurate community perceptions | X | X | X |
| Public support and engagement | X | X | X | X | X |
| District policies geared to create and sustain school | X |
| Central office support | X | X | X | X | X | X |
| Additional community or foundation fiscal support | X |
| Alignment with State high school policy | X | X |
| State funding formulas support small high schools | X |
| Alignment with emerging federal policy and funding | X |
| Recognition of functioning within a P-16 context | X | X |
Leadership is seen as a key element in the establishment of small high schools. Quite often, this leadership is shared and infused with high moral purpose. If education is indeed democracy in action, the small high schools are seen by many as epitomizing high purpose. Leaders establish moral imperative with the school community based on the principles of democracy and social justice for all. There is an urgency for maximizing student-learning, professional community and program coherence leading to student achievement and civic engagement. Leadership is responsive, facilitative and distributed. Small schools build the capacity of principals, teachers, students, parents and community members to have multiple roles and responsibilities coupled with an internal accountability for achieving benchmarks of progress. (CELL, p.4.)

Size is the central component of small high schools. Yet, there is very little agreement as to what “small” is. A size of 400 or 500 students makes sense only if one’s intent is to continue to conduct business as usual, a routine of textbook-dominated classes that are designed to dispense a curriculum that emphasizes the transmission of information from the old to the young via group instruction delivered within the confines of the school building. (Gregory, 2000, p.13.)

Money and “experts” chase any new idea in school reform. Small schools, including small high schools, are no different. Yet, as with all new “big ideas” and trends, efforts to create small schools are susceptible to pitfalls, distractions, and the lure of deceptively easy solutions. The burgeoning interest in small schools has created a growth industry for people and businesses with, and often without, knowledge and experience in the small schools arena. Just as in the past - with ideas such as school-to-career, multiple intelligences, cooperative learning, standards-based reform, and test-based accountability - we are seeing a proliferation of “expert” consultants, make-it-easy handbooks, and “how-to” websites. (Myatt, 2004)
There is a growing awareness that the size only “facilitates” other practices. The scale allows skilled educators to employ what works best.

One reason why size appears so pivotal is that smallness permits and invites a number of practices and arrangements that have independently been found desirable. (Raywid, p.14.)

Part of the key to success is the enabling of teacher collaboration.

The number of teachers in a school needs to be reduced to the point where all teachers can sit down and plan the course of the school as a group. Much of the group dynamics research sets the maximum size of such work groups at about 12. (Gregory. 1992, p.8.)

Because the size only facilitates, indeed only serves as a precursor to change, schools must consider their core mission and be clear about what needs to be changed.

The first step for any school considering fundamental changes in the way it is organized is to state clearly why such changes are needed and how the changes will help the school accomplish its core mission. (Steinberg and Allen 2002)

Any substantive change, particularly a change which must of necessity confront embedded cultural norms such as those found surrounding large comprehensive high schools, needs time to work. Capacity is built over time.

Although looking too closely too soon can undermine new schools, which develop capacity, complexity and sophistication in layers that accumulate over time, no school is ever unaccountable for basic achievements, even in its first year. These include the foundation for a tone of respect, an intellectual community, and a commitment to the future. New schools can assess their achievement of a tone of respect by asking these and other questions: Is student and staff attendance high? Is there order? Do students feel physically, emotionally, and intellectually safe? Do students feel valued by faculty and their peers? Do faculty feel valued? Are students optimistic about their future? Do students feel they are learning? Is there a supportive rapport between faculty and students? Are parents satisfied with their role? These questions are important because small schools aim to be communities, not simply efficient institutions that deliver information. (Ancess 1997)

Many feel that small high schools must be “theme-based,” reminiscent of the academy movement. Are themes really necessary?

A number of groups at the conference were involved with efforts that sought to have schools adopt specific themes as part of small school reform. So is this a way to clarify a school’s vision, attract like-minded students, teachers, and administrators, and/or serve as the basis for enriched, integrated curricula and community-based learning? Are themes a touchstone for a school community? Or, are themes unnecessary distractions in a process that is already demanding and time-consuming? Is it enough to personalize relations within a school, promote high expectations for all students, and create engaging curricula? Indeed, could personalization, high expectations, and engaging curricula be a “theme” in and of themselves and thereby create the communal coherence that unites a small school? Ultimately, what conditions are necessary for creating a curricular focus? (McQuillan 2003)
As always, the point of delivery remains the student-teacher interface.

If high schools in America are to be reformed, renewed, restructured, revitalized, the payoff must come in the classroom—in the daily interactions between kids and teachers, in the place where learning is meant to happen. Everything else—small size, positive climate, student voice, and teacher leadership—ultimately leads to this. (Daniels, Bizar et al. 2001)

If there is a “mantra” for small high schools, a selling point for communities and politicians, it is increased student achievement however measured. This is the primary basis upon which small high schools will be judged.

Small schools have heightened expectations of student achievement. All graduates are expected to read and write at levels that prepare them to take advantage of a range of post-secondary options. (CSSI)

All schools, regardless of size, have missions. The difference is in buy-in among multiple constituencies.

A clear mission is not unique to small schools. Some large high schools have well-articulated mission statements. The difference comes down to buy-in. Small high schools are more effective in eliciting the help of all teachers and administrators in developing a mission and using it as a guide to educate students. Students typically feel more engaged in these schools as well. This results in a school culture in which learning, exploration, and collaboration are valued. (2004)

Small size may indeed create an optimal setting for high quality instruction.

What small size does is to provide an optimal setting for high-quality schooling to take place. It facilitates the use of organizational arrangements and instructional methods that lead to a more positive school climate and higher student learning. (Cotton 2001)

Involving parents and students in the planning process is a noble pursuit. This can backfire if care is not taken to have a clear mission and to educate and inform participants.

Parents and students should have understood the small schools research before participating in focus groups. Parents who attended information sessions and focus groups heard the goal of the conversion to be reducing the dropout rate through increased personalization, but they had children with high academic achievement. Many, therefore, did not want to lose any of Terrace’s curricular options, which contradicts the central small schools tenet of focus. Parents seemed unclear that changes in teaching and learning are a major goal of the reform process.

The student feedback must also be taken in context; they can only compare the SLC proposals to their current school environment. While many students disliked the idea of being assigned to a small group of teachers and students, they might not be able to conceive of the benefits that it will afford them. Now, the school’s challenge will be to redefine the purpose of small schools from one of reducing the dropout rate, to that which benefits students at all achievement levels. (Wallach and Lear 2003)

While themes can provide “anchors” they are secondary to more critical concern.

Career themes provide anchors for curricular planning and exposure to the
world of work. In addition, increased personalization and meaningful advisory/advocacy periods will provide teachers opportunities to get to know the interests of their students. (SDCS 2004)

The mere transformation of individual schools should not be the sole goal of the small high school movement. Larger systems must be changed.

If we truly want to transform our system of secondary education we cannot rely on the extraordinary efforts to transform individual schools. We can’t rely on what one commentator calls “random acts of innovation and heroic leadership.” Instead we have to identify the fundamental changes that have to be made in the education system in order to introduce an alternative to the comprehensive high school on a large scale. (Toch 2003)

Small high schools, lacking large system change, will always find a gap between what ought to be done and what can be done. Set priorities and creative thinking is often a key requirement.

Of course, collaborative planning takes time. Since most U.S. teachers have only one 45-minute planning period a day (often less in elementary school), they have nowhere near enough time to engage in this work, and the time they do have is not generally scheduled to allow collaboration with other members of a department or teaching team. But if collaborative planning and professional development are a priority in school design, it is possible, even on a meager budget, to reallocate resources, organize the schedule, and assign enough staff as teachers so that teachers teach fewer hours during the day and have at least five hours a week to work together. (Darling-Hammond 2002-2005)

One added advantage for a small high school is that size creates opportunities to goal set in a manner not often possible with larger schools.

One advantage of a small school is that agreement on goals and a distinctive educational approach is far more likely to occur when fewer people are involved. It is also far more likely to occur if all involved actively make a choice to be part of the school. The creation of small schools is also more politically feasible if parents and students can make choices about whether and how to be involved (Nathan and Hare 2004)
# Elements from the Literature on Sustaining Small High Schools

**Key**

- $X = \text{Seen as critical in implementing or sustaining and implemented as planned}$
- $X- = \text{Seen as critical in implementing and sustaining, with problems in implementation}$

### Reviewed Literature

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### Raising Expectations

| All students will achieve at high levels | $X$ | $X$ | $X-$ | $X$ | $X$ | $X-$ | | | | | | | | | | | | | | |
| Data driven | $X-$ | $X$ | $X$ | | $X$ | | | | | | | | | | | | | | | | |

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*Elements from the Literature on Sustaining Small High Schools*
| Key | X = Seen as critical in implementing or sustaining and implemented as planned  |
| X– = Seen as critical in implementing and sustaining, with problems in implementation |

| Results oriented | X |
| Size | |
| Size: 400 | X | X- | X- | X- | X- | X- |
| Size:>400 | X | X |
| Size:<400 | X | X- | X | X | X | X |
| Building Capacity | |
| Focused professional development | X | X | X | X- | X |
| Collaboration and consensus in achieving goals with/among … | |
| - Teachers | X- | X | X | X | X- | X | X | X | X | X | X | X |
| – Principal | X- | X | X |
| – Central Office | X- | X- | X | X |
| – Parents | X | X- | X | X | X- | X | X | X | X | X |
| – Students | X | X- | X |
| – Business Leaders | X | X | X | X | X | X |
| – General public (w/o children in school) | X | X | X | X | X | X | X |
| Instructional Leadership | |
| Teachers | |
| The design of Engaging student work | X- | X | |
| Reflection on Engaging student work | X | X |
| Common teacher Planning time | X | X |
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### Students

- Student construction of knowledge and understanding
- Student role in deciding how to learn

### Rigor

- High standards (state and local)
- Curriculum is aligned with standards
- Aligned instruction
- Aligned assessment
- All students take an academic core
- All students prepared for college
- Post secondary options available

### Relationships

- No student is anonymous
- Time for student/faculty exchanges and advising
- School is a means to achieve social-economic or academic equity

### Environment for Learning

- Use of choice or behavior theory
- Adequate and timely interventions
- Adequate time for instruction and counseling needs

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**Key**

- X = Seen as critical in implementing or sustaining and implemented as planned
- X- = Seen as critical in implementing and sustaining, with problems in implementation
## Literature Elements on Sustaining Small High Schools

### Key

- **X** = Seen as critical in implementing or sustaining and implemented as planned
- **X-** = Seen as critical in implementing and sustaining, with problems in implementation

### School Leadership and Resources

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### Alignment and Relationship to External Forces

| Fair and accurate community perceptions | Acent 2003 | X- | X |
| Public support and engagement          | Acent 2003 | X- | X |
| District policies geared to create and sustain school | Acent 2003 | X- | X |
| Central office support                  | Acent 2003 | X- | X |
| Additional community or foundation fiscal support | Acent 2003 | X- | X |
| Alignment with state high school policy | Acent 2003 | X- | X- |
| State funding formulas support small high schools | Acent 2003 | X- | X |
| Alignment with emerging federal policy and funding | Acent 2003 | X- | X |
| Recognition of functioning within a P-16 context | Acent 2003 | X |

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*A Qualitative Meta-Analysis of the Literature on Planning & Sustaining of Small Learning Communities*
Illustrations from the Literature on Sustaining Small High Schools

Because small high schools by their very nature are student focused and often incorporate specific curriculum or testing variances, such as performance-based assessment, they can be easily sidetracked by state policies and standardized state testing systems such as the Massachusetts Comprehensive Assessment System (MCAS).

The initiation of district initiatives to prepare students for the MCAS at the same time that the five Option One schools began restructuring had a profound impact on the schools’ structures and instructional focus. (Allen, Almeida et al. 2001)

Whereas small high schools, particularly considering the financial benefits which accrue by diminishing the drop out rate, may indeed be no more expensive than conventional large comprehensive high schools, Howley and Harmon point out that such schools can be very susceptible to the political whims of vocal individuals or groups.

The notion of “sustainably small” schools is not simple, nor is it easily grasped. Small schools are affected by a web of influence, rather than a single path of influence. Some of these influences are susceptible to local action; others require concerted action at the state, regional, or national level. Most of these influences cannot be strictly controlled by anyone. (Howley and Harmon 2000)

As with the case of many education reform efforts, teachers, foundations, school districts and communities...
often invest countless person hours and substantial resources in programs which produce results, only to wonder if contrary regulations and policy will minimize or overturn efforts.

However, despite public and private financial, professional, and personal investments in these innovative schools and despite an emerging evidentiary base indicating their success, they are unprotected from the vicissitudes of the regulatory agencies that oversee them. (Ancess and Ort 1999)

State education departments are subject to external influences as well. When whole schools and districts are judged on the basis of single administration tests, even the presence of well developed standards, parent and community involvement, aligned and innovative instruction can not minimize the reality that the “test” becomes the overarching standard in itself.

In many cases, state commitments to NCLB legislation and local high-stakes assessment undermine efforts to enact small school reform: i.e., draining time needed for reform planning that is instead spent helping faculty prepare students for exams, and simply limiting the amount of time schools have for reform-related work because of the time given to administering exams. (McQuillan 2003)

This debate has also had its parallel in New York where faculty believe that standardized testing is at odds with the type of inquiry-based teaching and performance assessments which have evolved in their schools.

CCSP (Coalition Campus Schools Project) faculty believe that teaching to the largely multiple-choice Regents exams is at odds with the kind of teaching needed to encourage in-depth inquiry and analysis. Because the schools’ portfolio assessment systems are integral to every aspect of their instructional programs, faculty believe that a discontinuance of the waivers will compromise educational coherence. The New York City Board of Education’s Division of Accountability has supported the schools’ claims, as it has moved toward greater use of performance assessments over the last decade. Others in the New York State Department of Education argue that if the quality of education in the schools is high, students should be able to take and pass the Regents examinations without deflecting the schools from their efforts. The comments of one school leader capture the level of tension felt by most school insiders: “What is hanging over us now is the imposition of Regents [examination] without any commitment beyond the waiver. I don’t sleep nights over this. If we are forced in this direction it will absolutely alter what we are doing with portfolio. They are incompatible.” (Darling-Hammond, Ancess et al. 2002)

Most large comprehensive high schools, no matter where they are located, have always been wildly successful with some kids. To these kids and their parents, the goal of creating a small high school to “reduce the dropout rate” does not resonate. Parents and students need to be clear in advance that there are multiple benefits in creating small high schools for all children.

Parents and students should have understood the small schools research before participating in focus groups. Parents who attended information sessions and focus groups heard the goal of the conversion to be reducing the dropout rate through increased personalization, but they had children with high academic achievement. Many,
therefore, did not want to lose any of Terrace’s curricular options, which contradicts the central small schools tenet of focus. Parents seemed unclear that changes in teaching and learning are a major goal of the reform process. (Wallach 2002)

Any change in education that departs substantially from the “norm” of the traditional, or what is perceived to be the traditional, way of schooling creates fragility. Small high schools are particularly susceptible.

Fragility is an important feature. One of our most provocative findings was that small schools appeared fragile. Many closed during our two-year study. Others nearly collapsed when a principal or a teacher left. We must be careful not to interpret this as a weakness. In part, small schools are fragile because of the ecology of the schools themselves; they are more interdependent by their very nature. The key factors that make them work for teaching and learning are also what make them more difficult to sustain. (Wasley, Fine et al. 2000)

While small high schools are successful because the create an environment or structure for creative and effective approaches, some approaches appear more powerful than others.

Teachers who have been part of an effective advisory system describe it as the single most important design element for making possible a high level of personalization. (Wasley and Lear 2001)

However, it is not only the advisories in themselves. Personalization and solid relationships underpin any and all successes in a small high school environment. If these elements are not present, success is problematic.

Students and teachers build a close bond through advisory groups and home visits. Across all five of the sites, teachers are grouped with five to ten students and expected to keep close contact with them in their four years of high school. Additionally, at least two of the sites have staff conduct home visits to meet with students and their families in an attempt to build a stronger network of support for these students. All schools in this study cite the importance of these close relationships. (Huebner and Corbett 2004)

Last year, the strengths of the Small Schools Initiative were the successful increase in personalization, thereby improving relationships within the school community. “Because of smaller class size,” said one principal last year, “there appear to be more powerful staff-student relationships.” This year, like last year, the increase in personalization and/or closer staff-student-principal relationships was one of the more commonly mentioned positive teacher comments about the Small Schools Initiative. (Goldfeder and Ross 2003)

Napier believes that teachers at Sunbright are better able to identify student need because of the school’s size. “Because we know most members of the community, we are better able to identify the weaknesses in a student’s support structure and, more often than not, someone will step in and take up the slack for a child.” (Yaunches 2002)

Howley, however, seems to indicate that the way to mitigate adverse state influences is through adaptation, coupled with local community engagement.

Adapt to state policies in ways that further local purpose. This is quite a trick. But it’s something that experienced rural superintendents have mastered. They turn challenges,
such as unreasonable or misguided accountability demands, into opportunities to advance local purposes. Obviously, superintendents need to help to define those local purposes. Full engagement with the community is a definite plus. (Howley 2003)

While adverse state policy and regulations can prove inimical to small high schools, the far greater threat may be issues of state funding and school support. Budget curtailments do seem to disproportionately impact small high schools. The focal point often seems to be the reduction in numbers of teaching staff which constrains the notion of personalization and erodes the element of time.

Representatives of several districts (Oklahoma City, Baltimore, Oakland, Detroit) reported that budget crises at the state level were dramatically affecting the implementation of small schools in their districts. Each of these representatives warned that future plans for district reforms, including small schools, were in jeopardy if funding resources from the states remained at the current level or worsened. These fiscal woes were causing teacher layoffs, which disproportionately affect small schools. Small schools have fewer teachers, so that the loss of a few teachers or even a single teacher can seriously undermine the school program; moreover, as noted in AIR/SRI (2003), many of the small-school teachers are relatively new to the teaching profession, making them first in line to be cut. (Smerdon and Means 2004)

Cushman further describes this dilemma. We do not tend to structure modern high schools to build relationships. Politics and economics often dictate what kind of structures we will have. The risk to small high schools is that these forces might prevail, even in the face of contrary evidence.

In truth, despite unequivocal research in favor of small schools, the size of schools across the country seems often to have more to do with politics, economics, and social factors than with what works best for students. And the cycle perpetuates itself. “The larger and more anonymous are the institutions that come in contact with the community,” asserts Bill Ayers of the Small Schools Workshop, “the more likely that individuals-parents, businesspeople, community organizations-feel like part of a mob.” Young people respond to the same factors, he adds; when schools are impersonal, they drop out. “Kids need a place where they are known and valued by adults they care about,” Ayers declares. “They drop out when they feel that “nobody cares if I stay. Educators see that as an indictment of parents, but it is an indictment of us-our structures don’t let us tell kids it matters to us. We have too many kids and too little time. That’s a structural issue, and it undermines our intent. We need to create a new structure to tell 200 kids it matters.” (Cushman 1997)

Even in large high schools, the core elements to insure student success are often present. The issue, according to Flaxman, is how we alter these variables within the new environment of a small high school.

In most attempts at reconfiguring large high schools, nearly all of the potential variables that have a powerful effect on the instructional core remain constant: the students, teachers and staff, facility, and community are fundamentally the same as they were before. But without altering these variables in some way,
it is close to impossible to transform the educational program. I believe that within its constraints, it is crucial for a school to introduce as much change as possible in order to avoid replicating old patterns and old outcomes. Whether the change is in the staff, the students, the facility, or the professional development, the more the balance is shifted from the old to the new, the better. (Flaxman 2004)

Relationships, however, again emerge as the key, or rather the capacity to develop meaningful relationships.

Fifteen years of innovation within the Coalition of Essential Schools demonstrate that no one structural alteration - innovative schedules, team teaching, advisories, or others - is enough to guarantee that a school will maintain sustained, meaningful connections among students, teachers, community members, and parents. These structures, however, allow the possibility of achieving substantive goals: the need for in-depth discussions, the time to develop complicated relationships, the creation of trust among teachers and students. (Davidson 2002)

Those relationships must go beyond the realm of student and staff and must extend well into the community to parents and others.

Parent and community satisfaction with the NSA schools can be evaluated in a number of ways. On a broad, public level, parent involvement in fighting for the NSAS district policy and in defending the new small schools during a time of district fiscal crisis is perhaps the most obvious. At the school level, the degree and form of parent involvement varies, but can be generally characterized as very high, and going well beyond having mandated parent representation on the official School Site Council or English Learners Advisory Committee (ELAC). This holds true for NSA middle schools and high schools as well — a marked contrast to the usual drop-off in parent participation beyond elementary school. Turnout at student-parent-teacher conferences and larger school events is high, and parents feel their children are in a safer learning environment in the NSA schools. In addition, teachers or principals at two schools reported making home visits to every family to establish a strong connection between school and home. (Little and Wing 2003)

Why expanded relationships are critical is because the "culture" of the former big school, as remembered by students, parents, and community will always tend to try to reassert itself. Gregory in his view of the Schools Within a School (SWAS) movement indicates the risks that small high schools face in both trying to increase personalization while retaining larger cultural elements - elements which have most often in the past garnered public and parental support.

An oft-stated goal of breakup efforts is that the former big school with all its traditions - interscholastic sports, clubs, music groups - will remain. These entities are the very - arguably the only - cultural glue that still binds together all the disparate pieces of big, anonymous schools. Mixed allegiances are difficult to maintain. The long established big school culture tends to kill off the nascent small school cultures. Some services - counseling, discipline, food service - may also remain centralized, either to nurture the big-school identity, comply with its notions of specialization, or achieve economies of scale in the big building's infrastructure. Because these services remain the tasks of specialists, each tends to become depersonalized

**Literature Illustrations on Sustaining Small High Schools**
and remote from the more local lives of the SWAS. These factors undermine SWAS efforts to build their own identities. (Gregory 2001)

Gregory added another caveat.

Schools shouldn’t attempt to be “comprehensive” if such a claim is made at the expense of that central purpose; instead, they ought to be simple in structure so that the learning which goes on there can be complex. (Gregory 1992)

Even small high schools, allowed to remain small, can be in trouble. That is once again because size only empowers, acts as a catalyst, or structurally enables other things to happen. As a view of Alaska’s small high schools illustrates:

It is not size but other conditions that distinguish the small high schools that are working from those that are in trouble. In small high schools that are working well:

1. The community and the school have forged an educational partnership and support each other.

2. The school has developed some clear focus that unifies and gives purpose to the educational program. This focus (or theme) might be language development, college preparation, cultural maintenance, or leadership development.

3. The school staff consists of enterprising educators who are not hide-bound to a single image of what a high school looks like and who can design a program fitted to a particular situation.

4. The school staff has the broad intellectual range and broad interests (such as dog mushing, taxidermy, writing, art, music, house building, flying a plane) that add variation to the program.

5. The school is in a district where the central office administrators encourage local professionals to consult with the community and to fit the instructional program to community priorities. (Kleinfield, McDiarmid et al. 1985)
To some, the small high school movement is yet another “flavor of the month” in the ice cream shop of school reform and both teachers and administrators have consumed a lot of ice cream in the near quarter of a century since A Nation at Risk was published. Yet to many others, small high schools make sense. Professional intuition, if you will, dictates that smaller schools will promote better relationships, increased time for teacher collaboration, advisories, and additional focus on many of the good reform “toppings” which have made “flavorable” sense in the past.

The ice cream analogy aside, the literature on small high schools is expansive but seldom focused. While there exists substantial evidence linking increases in student academic results to the small high school environment, particularly in urban and rural districts, the general literature has produced no overarching model explaining how or why this happens.

Part of this is because schools remain very linked to their communities, the composition of their staffs, and the need to work within a wide variety of often similar, sometimes dissimilar constraints. As Cushman (1997) says, “in truth, despite unequivocal research in favor of small schools, the size of schools across the country seems often to have more to do with politics, economics, and social factors than with what works best for students.”

This analysis has reviewed only a relative handful of sources. In some defense, it might be argued that many of these are the major sources which have fueled much of the development and chronicled much of the success or failure in sustaining such schools.

Some factors appear quite clear from the analysis, but first a caveat. As there has hitherto been no general model or agreement as to why small high schools work, or do not work, many have focused on and recorded only those things which appear to be significant.
While this study has attempted to view the literature against a template, no generalized template really exists. The closest are Cotton’s (1996) findings and the Bill and Melinda Gates Foundation Listing of Attributes for High Performing Schools.

Few authors, for instance, mention mission as critical in either establishing or sustaining small high schools. Nearly half of the sources reviewed, however, did list vision as being critical. Goals, surprisingly, emerged as a consideration only clearly in two sources.

Does this mean that mission and goals are not critical? Not necessarily. For one thing, vision and mission are often confused or used interchangeably. Many authors may largely assume that readers understand that a school has a mission and goals (don’t all institutions?) and not consider them worthy of mention.

Vision
Vision, however, does appear to be a driving force.

There is an idealism which infuses the small high schools movement. This is not a “seen through rose colored glasses” idealism, but one which emerges from foundations, academicians, and practitioners alike. At the core of this idealism is the fundamental notion that education, particularly public education, can succeed for all children. Here in the small high school environment, that idealism is magnified. The idealism fuels the vision of what such schools can do. It is positive and necessary.

Any change which seeks to counter an entrenched culture and which is often at odds with budget cuts and policies needs for its people to be strong.

Size
There is no generalized agreement on the size of a small high school. Size is not a major factor in the literature on planning. It emerges more substantially in sustaining. Here, the tendency is to want to sustain schools at less than 400 students. Several sources cite difficulties in being able to maintain this or the round number of 400. As state and district budgets become tighter, the pressure may begin to gradually increase the size of small high schools or at the very least reduce staff size.

Raising Expectations
While there is not universal reference to the role of small high schools in raising expectations, when coupled with the elements of data and results, this emerges as a substantial factor as might be imagined. When added to the element of high standards, the results clearly underscore the academic focus of small high schools.

Professional Development
Fifteen of the forty sources cite the importance of focused professional development.

Collaboration and Consensus
Twenty-four sources cite the importance of collaboration and consensus among teachers and to varying degrees with other constituencies to both plan and sustain small high schools. The teacher element is the clearest with the involvement of parents coming next.
Leadership
Leadership is a critical element in planning and sustaining small high schools when both the elements of principal leadership and distributed leadership are viewed in tandem.

Relationships
The literature strongly supports the notion of powerful relationships in the small high school setting. That no student be anonymous is a theme in twenty-six of the forty sources. Half of the sources mention advisories as being critical both in the planning and in sustaining small high schools.

Alignment to External Forces
Clearly this is a greater concern in sustaining, rather than planning small high schools as perhaps might be expected. Many reforms, particularly those fueled by grants, start with higher degrees of external support. Once operational and once the grant funding begins to run out, schools face a different set of realities.

Instructional Leadership
While teachers are clearly important and relationships and achievement are major drivers in the small high schools movement, there is scant overt evidence of the design of engaging student work or the reflection on such work and student participation in its design. This is not to mean that teachers are not employing advanced instructional strategies.

College and Post Secondary
Interestingly, the notion of preparing all students for college and offering post secondary options is more prominent in the literature on planning than sustaining.

Autonomy and Resources
The notion of management or budgetary autonomy appears in slightly less than half the sources. Why this is needed or desired is perhaps more ambiguous. Those who support autonomy appear to strongly support such autonomy. It may well be that if central office support is high that this becomes a moot point.

P-16
While the notion of preparing all students for college is present, only three sources evidence any understanding of small high schools as part of a total P-16 continuum and even then, the term is not directly used.
Across the country handfuls of teachers and administrators, the epitomes of education trailblazers (Schlechty 1993) are leading schools and communities “back to the future”. Small schools, and particularly small high schools, are not a new concept in American education. For most of our history, small schools were the norm. Why, then, is this concept from the past becoming so powerful in the 21st Century.

One of the reasons is that a great deal has changed since the days of the one room to “know more.” With the landmark cases of Brown vs. Board in the 1950’s and the advent of No Child Left Behind in 2001, America became in essence the first nation and society to say that we will educate all children through high school.

Soon, this researcher believes, that paradigm will shift again to include at least some form of post secondary instruction. Yet, in a nation where states can not agree upon a common measurement for high school graduation and drop out rates, the evidence (Warner, Huckabee et al. 2005) seems to indicate that the first is declining, while the second is increasing. At the same time, families, communities, and society are increasingly becoming impersonal places for adolescents who are themselves becoming “a tribe apart” (Hersch 1999).

Pockets of poverty and high wealth, with numerous socio-economic stratifications in between define our districts and schools. Options of a hundred years ago for teens to work in family farms and businesses in close relationship and learning with adults have diminished while we largely relegate our young people today to menial highly automated jobs requiring little thought or creativity.

In the midst of all of this, adolescents today possess, or at least have at their disposal, more raw knowledge than any previous generation and many adults. Theirs is a new world of instant communication, high audio-visual stimulation, and often questionable substance.

Into this world, the small high school has emerged as an enabler to reconnect.

9It is estimated that only 68 out of every 100 9th graders graduate from high school on time, four years later.
young adults with the learning process defined by a society of adults. It is only fitting at this point that we return to the core questions asked at the beginning of this study:

“Which elements are the most critical in creating a successful small high school?”

‘Which elements are most critical in sustaining a small high school?’

Commensurate with these, are several sub sets of questions.

1. What are the relative strengths of each element; how are they interconnected.

2. Which are absolutely necessary; which can be done without if necessary.

As this study has indicated, relationships-powerful and meaningful relationships with adults in an educational environment-are the coinage of small high schools.

First, and foremost, this is what is important to small high schools. Size is only the enabler. Unless adults and students are given the opportunity to foster such relationships, the prospect of success for many students will be diminished no matter what the size of the school. This is true both for creating and sustaining.

The concept of relationship must also include other significant adults. Parents must most certainly be included whenever possible. Not all will ever be there but when that happy occurrence of a parent-student-teacher partnership in a child’s learning takes place, it should be treasured. Mentors and other significant adults from the business community should be employed when such relationships can be meaningful. The same can be said to be true for service learning, but only when meaningful.

Time is also important for small high schools. Adequate time must exist to build and sustain relationships, for advisories, for teacher collaboration and planning for the success of all students.

Time to reflect on student work and assessments, time to plan and execute thoughtful interventions is critical. An adjunct to this is staffing. There must be enough staff to successfully do all of this within reason. The number and level of the staff required is highly dependent on the individual and collective needs of the students.

Support is important for the small high school. This support comes in several forms and at several different levels. Parent and community support is critical. The small high school must become adept at communicating. What the public perceives has to be based in reality and not in hearsay or misconception. Successes and challenges must both be accurately communicated. Public ownership must be paramount.

Central office and school board support is likewise critical. Policies and regulations will always be there but insofar as possible must serve to support, not to inhibit, small high schools. States need to stop seeing such schools as experiments. Here legislative and state board policy must work to recognize and support such schools as long-term constructs.

Results are important for small high schools. There will be detractors and those who will want to return to “what was good enough for me”. Ultimately, only document able success will
save the small high school and make believers. The irony here is that the readiest form of documentation is the state standardized test. The test cannot become the standard. Teachers and students both must build confidence in the notion that successful strategies will eventually lead to successful test scores.

Leadership is important for small high schools. Distributive leadership is a valid concept, but has seldom worked effectively in K-12 education. Part of the problem is that some mistakenly feel that each and every decision must be made by committee. Teachers should be involved in decisions but this needs to be balanced with the concept of strong principal leadership, literally a person who can create, manage, and maintain the conditions for teachers to teach.

Innovative instruction is important to small high schools. If the same lesson plans and same lectures and same assignments given in a large comprehensive high school are merely transferred to a small high school intact, then little has been gained in this arena. Stronger relationships, collaborations, and hopefully more time should enable teachers to discover and adapt the best modes possible. Students need to be treated as knowledge workers. Unfortunately, much of the literature fails to reflect any such change.

P-16 is important to small high schools. High school is only one stop along a continuum leading to college, careers and lifetime learnings. Several small high schools have created partnerships with higher education. This is to be commended. These relationships need to be strengthened as well as relationships with the entire system.

One major problem is that when budgets become tight, programs seen as being beyond the “core” mission of the high school are often curtailed or scrapped. All high schools must accept as part of their core mission the preparation of all students for college and post secondary. As no middle school can think of itself as a terminal diploma program, no high school should do so.

National policy is important to small high schools. Increasingly, politicians and policy makers are becoming just as concerned about the U.S.’s educational competitiveness as its economic competitiveness. The realization is there that the two are inseparably linked. When seen as part of a P-16 system, many high schools are not producing the educational results needed today. The irony is that the U.S. system has consistently educated more children and in larger numbers than any other society. This condition, however, is changing. With China and India both with over one billion in population, their “percentages” do not have to be as large as the U.S. to create larger numbers of graduates. In other words, they can surpass us in shear numbers.

From the U.S. Department of Education to the National Governors Association to the Bill and Melinda Gates Foundation, the national press is on to reform the American high school. Whether that reform will ultimately be friendly or inimical to small high schools will lie in the hands of the Federal and individual state governments and in the formulation of policy and budgets. It will rest in the alignment of the circles of influence surrounding small high schools.
This leads to the question, “what can small high schools do without?”
Small high schools can do without the type of autonomy which separates them from central offices, other schools, and state and national policy. In order to survive in the long run, small high schools must be recognized and integrated into the main stream.

No amount of grant funding, no dazzling results, no best-selling books will ever compensate if small high schools are not part and parcel of how education business is done.

Herein lies a caveat.

It is equally risky to make the small high school the only configuration for secondary schooling. Clearly large comprehensive high schools work very well for some communities and many students.

Above and beyond the structure lies once again the aspect of meaningful relationships-relationships which empower the learning process. That is, perhaps, the ultimate lesson that small high schools teach.
In addition to the charted analysis of sources, thirty-two source abstracts were processes through textual analysis software (RefViz).

The results of that analysis supported the findings that relationships on all levels, i.e. community, were critical. Teachers, and learning also ranked the highest number of indicated key word references.
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