ABSTRACT
                Although there is controversy as to whether
middle-level education should be more comparable to high school or to
elementary school, this paper argues that the school within a school
(SWAS) concept effectively makes large schools seem small so that
they have more in common with a typical K-5 school than with a
grade-10-through-12 high school. The advantages of such an
arrangement permit medium-sized and large middle schools to divide
into smaller subunits called "houses." The house plan tends to
personalize teaching and learning. Students may leave the house for
specialized subjects such as music, foreign language, science,
health, and physical education. Evidence suggests that SWAS and
minischool programs have been shown to produce significant
achievement growth; to improve attendance and behavior; and to
generate student, staff, and parent satisfaction. The report
concludes by arguing that middle school policymakers should give
house plans and small schools within big schools a chance. Appended
are five pages of references. (JAM)

Making a Big School Smaller: The School-Within-a-School
Arrangement for Middle Level Schools.

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MAKING A BIG SCHOOL SMALLER:

THE SCHOOL-WITHIN-A-SCHOOL ARRANGEMENT FOR MIDDLE LEVEL SCHOOLS

The issue of the proper size of schools has been debated throughout this century. Typically, practitioners and researchers have agreed that the American high school, with the established purpose of meeting the subject matter needs of young adults, should be of sufficient size to cffer specialized courses (e.g., advanced algebra, foreign language, physics, chemistry) in an efficient and economic manner (Conant, 1959). Conversely, the elementary school, established to bring basic skills to prepubescent youngsters, has operated under the premise that the depth of required coursework was such that the generalist, or the self-contained teacher, could adequately provide instruction in a variety of fields, thus eliminating any great concern over minimum size. For some, the one room elementary schoolhouse is too small, but for others it is more than adequate--(Van Til, 1977). For middle level schools, the problem of optimum size has not been adequately researched, and within the research one finds conflicting opinions. Further, the opinions appear to be based upon the authors' notion about the purposes of middle level schooling (Garcia, 1961; Commission on Secondary Schools, 1958; Stemnock, 1974).

At the heart of the middle school size controversy is the question of whether middle level education should be more comparable to high school or to elementary school. Those who favor the high school concept argue for subject matter specialization, departmentalization, full vocational offerings and extracurricular sports. Obviously, a school must be of

reasonable size (500+) to offer these amenities. On the other hand, leaders of the middle school movement of the late 1960's, 1970's and 1980's have advocated transitional schools which are student-oriented rather than subject matter oriented, which emphasize interdisciplinary teaching teams and multi-period "core" block teaching in lieu of specialization and departmentalization, and which offer intramural rather than interscholastic sports (Eichorn, 1966; Alexander, 1968; Alexander and George, 1981). Although middle school advocates firmly recognize the differences between elementary students and so-called "transescents" (Eichorn, 1966), the schools they envision, although distinct from elementary schools, have more in common with a typical K-5 school than a grade ten through twelve high school. Consequently, middle school proponents will typically advocate that communities build small schools, or at least schools which "act" small (Alexander and George, 1981).

The idea of making large schools seem small is the cornerstone of the school-within-a-school (SWAS) concept. In sum, schools which operate under a SWAS arrangement will divide the student body in a number of semi-autonomous units (or houses, or mini-schools), each of which is staffed by a number of teachers and support personnel, offers a academic "core" of basic subjects, and has responsibility for the academic and social development of its students. The basic concept is that smallness fosters closer relationships between students and staff, more opportunities to focus upon psychological as well as academic development, and more opportunities for student participation in activities (Ramsey, et. al. 1967).

Before analyzing the SWAS in more detail, it will be helpful to briefly review the literature on three developments which have impacted

the acceptance of SWAS as an alternative middle level organizational
pattern. They are (1) the historical development of junior high/middle
schools, (2) the growth of alternative schools, and (3) the issue of
optimum size of schools.

DEVELOPMENT OF JUNIOR HIGH/MIDDLE SCHOOLS

Unlike the high school or elementary school, the junior high,
middle, or transitional school historically has operated without a firm
philosophy, vision or direction (Tye, 1985). This is not particularly
suprising given the wide range and sometimes confusing nature of the
expressed goals for middle level schools. For instance, between 1892-
1918, the formative period of junior high education, commission
recommendations ranged from introducing a few high school subjects in
grades seven and eight to beginning a specialization of subject matter at
an earlier age (Alexander, 1968). In the fifty years following the
establishment of junior high schools, purpose statements were added which
reflected a need to provide a transition from the self-contained
elementary classroom to the highly specialized high school, to offer a
number of exploratory experiences which would allow a sampling of subject
matters and skills prior to having students make curricular commitments in
high school, and to introduce guidance services to aid in academic,
vocational and personal matters (Alexander, 1968). As these goal
statements were developed many schools adopted policies which supported
them. At first, the practices seemed transitional and appropriate, but,
as the years passed, many schools de-emphasized self-containment in favor
academic specialization (Eichorn, 1966). In addition, when the Sputnik
scare of the late 1950's caused educational reformers to question the
amount of learning taking place in American schools, many junior high

school planners were forced to drop humanistic practices such as
multi-period, multi-subject, one teacher "core" blocks in favor of a daily
dose of six or seven "subjects" taught by six or seven "fully trained"
teachers in neat, forty-five to fifty minute divisions (Alexander and
George, 1981).

Although the transitional nature of the middle level of schooling
has never been denied, in practice the evolution of the typical junior
high school has been in the direction of a mini-high school (Alexander and
George, 1983). Like high schools, "good" junior high schools offered such
attractions as a complete departmentalized curricular organization staffed
by subject matter specialists, a vocational program with fully funded home
economics and industrial arts labs, and extracurricular competitive
programs like sports, clubs and cheerleading. One problem with this
arrangement was that a youngster's "transition" from elementary to
secondary school often took place in total on the first day that he or she
entered junior high school. With a seven period day with seven subjects
and seven teachers, the twelve year old entering junior high was often
shocked and bewildered. His or her home base, the self-contained
classrooom of sixth grade, was removed in a departmentalized junior high
school. In a world of sink or swim, the unwary seventh grader often sunk
(Alexander and George, 1981).

To combat what was perceived to be a harsh climate of curricular and
social rigidity, middle school proponents suggested a number of
organizational changes. First, interdisciplinary teams were created to
match groups of students with teachers who would share instructional
duties. Second, advisor/advisee programs were established to treat the
social and emotional development of students as a separate, non-academic

subject, and to create a bond between each student an an adult advisor. Parent conferences were often scheduled through advisory teachers. Third, competitive interscholastic sports were replaced by non-competitive, no-cut, intramural sports. Fourth, the number of exporatory courses were expanded but the depth and scope of many were reduced. The net effect was that more students were allowed to sample a greater variety of course offerings. Fifth, "modular" scheuules enabled teams of teachers to plan activities which exceeded the traditional fifty minute period, allowing greater lesson depth. And sixth, teaching strategies were expanded to include research on the characteristics of young adolescent learners. Cooperative learning, interdisciplinary units, hands-on, lab oriented lessons, and field experiences in the community are a few examples of activities which research indicated were appropriate for transescents (Merenbloom, 1986; Fenwick, 1986; Eccles, 1987).

Concurrent with the development of a body of knowledge revelant to middle level education was the development of a literature on effective schools. The work of Edmonds (1979), Rutter (1979) and Brookover (1979) lent credence to the notion that student/teacher relationships needed to be based more than on strictly curriculum and academics. Factors of schooling which seemed to correlate with good schools (e.g. high levels of reward and praise, consensus among staff members about curricular expectations, school norms and discipline, ample opportunities for students to participate in the operation of their school--Rutter, 1979) also seemed to be aligned with the middle school philosophy. Later, the work of Goodlad and associates in the Study of Schooling confirmed the worst fears of critics of traditional junior high schools. According to Kenneth Tye (1985):

> At the classroom level, we found little if any opportunity
> for teacher-pupil interaction which went beyond the concerns
> of the subject matter of the particular subject or class.
> Obviously, there is a need for some intermediate structure
> which can allow for students to interact with a sympathetic
> adult about their concerns, future plans and personal concerns.

In addition, Goodlad (1983) found ability grouping practices, widespread among traditional junior highs but less so in progressive middle schools, antithetical to the concept of educational equality as well as academically inefficient. According to Jeannie Oakes (1985), ability grouping has been found to be academically detrimental for low track students and has no discernable positive effect for high achievers. Again, middle school philosophy appeared to corroborate this research which suggests a return to heterogenous grouping practices (Alexander and George, 1981).

Middle schools, uncommmon in 1960, have grown steadily in number since then. By 1977, over 4000 schools nationwide considered themselves middle schools (Alexander and George, 1981). In terms of configuration, in 1960 eighty percent of the seventh through ninth graders were enrolled in a junior high school. By 1986 that figure had dropped to twenty-nine percent (Alexander, 1968; Merenbloom, 1986). Although admittedly many so-called middle schools are that in name only, and, similarly, many so-called junior high schools behave in ways which are compatible with a middle school philosphy (Tye, 1985), the fact is that the middle school movement has been responsible for a shift away from middle level schools as reflections of high schools. And with that shift has come a renewed need to consider the issue of optimum school size. Simply put, without departments, high and low tracks, full-blown vocational programs and competitive sports, there appears to be little need for a large student body.

ALTERNATIVE SCHOOLS

Concurrent with the middle school and the effective schools movement has been a proliferation in the number and types of alternative schools. For instance, in 1982 the Project on Alternatives in Education (PAE) identified over 2,500 different alternative schools in the United States and Canada (Raywid, 1982). Alternatives can vary from separate schools established to meet an educational need or address a problem (e.g. disruptive students), to open schools, magnet schools, schools-within-schools, mini-schools, inter-district choice plans, or schools-without-walls. SWAS and mini-school programs comprise about twenty percent of the total number of alternatives (Raywid, 1985). Alternative schools have generally been successful. They have been shown to produce significant growth in achievement (cognitive, social and affective), improve attendance and behavior, and generate unusual rates of satisfication among students, staff and parents. Their success has been attributed to the benefits of choice, climate, size, degree of staff autonomy and a culture which emphasizes experimentation (Raywid, 1984; Jennings and Nathan, 1977; Barr, 1981; Fantini, 1973). Like middle schools, they tend to "personalize" the educational environment. Alternative schools typically emphasize independent study and experimental learning (Raywid, 1984).

Not all alternative school experiments, however, have been successful. For instance, federally funded projects in Alum Rock and Berkeley, California, Eugene, Oregon and Minneapolis, Minnesota met with varying rates of success (A Study of Alternatives in American Education. 1981). In Alum Rock, probably the most thoroughly studied alternative education program ever, a lack of true diversity in the offerings and a

lack of lead time to fully appprise parents of choices available to them led to the downfall of the program. Consistently, small school size and the element of choice for parents, staff and students appear crucial in predicting final effectiveness of an alternative education experiment (Raywid, 1984).

SWAS alternatives, at least in the PAE study, were characterized as "an administrative unit created within a larger school . . .separate and distinct by having its own teachers, its own courses and space and distinctive environment (Raywid, 1985)." They have tended to be small in relation to the parent school, offering varying amounts of separation. They have typically been established to ameliorate the perception of the school as a large, inhumane institution and to provide a special educational environment for students of special needs (Raywid, 1985). Much of the success of SWAS alternatives has been tied to the ability of the staff to achieve separateness from the larger school, allowing the establishment of a unique environment and consensus vision (Gregory and Smith, 1982). Again, the size of SWAS options has been consistently small.

Most SWAS alternatives have been high school experiments. Traditionally in middle level schools, many of the "house" or "mini-school" plans have not been considered alternatives because they typically rejected personalization in favor of uniformity. On the basis of equity this makes sense, but, with the placement of responsibility for the academic program on interdisciplinary teams, many current middle schools do in fact seek diversity among their houses and thus are more closely aligned with SWAS programs (Alexander and George, 1981; Merenbloom, 1986). I strongly suspect that middle school house programs

are underrepresented in SWAS (or alternative education) program counts.
They are certainly examples of SWAS schools, although their lack of
separateness from the main school may have the deleterious (and somewhat
ironic) effect of minimizing their effectiveness.

OPTIMUM SIZE

Like studies of alternative schools, much of the research on the
issue of optimum school size has also skipped the middle level. Most
studies, predictably, have considered size at the high school,
particularly so because of the administrative decisions which must be made
relative to consolidation of small, rural districts, construction of new
buildings, and inclusions of specialty courses in the curriculum. Conant's
(1959) recommendations, of course, created a considerable amount of
interest on this topic. Sadly, his work is often misinterpreted or
misapplied. He never advocated school sizes in the thousands; instead he
simply argued that graduating classes of less than 100 would be
inefficient and ineffective because the small number of students would
make it impossible to offer a sufficiently rich curriculum. (Conant,
1959, 1967; Goodlad, 1983).

Even so, many take issue with the 100 student floor. For instance,
studies of small high schools have consistently discovered the ad'antages
of smaller class size, familiarity among staff and students, and athletic
and activity participation (Barker and Gump, 1964; O'Connell and Hagans,
1985; Goodlad, 1983; Wilkinson, 1977). Also, studies of typically small
parochial schools have come to the same conclusions (Ayrault and Crosetto,
1982; Small Schools, Quality Schools, 1979). Proponents of small, rural
schools have also suggested that curricular variety can be provided (and
thus the consolidation efforts can be questioned) through measures such as

establishing regional academic centers (Heldman, 1970). An Australain
study indicates that the "Conant" problem occurs only when combined totals
of the last two years of a secondary school drop below eighty students
(Ainley et. al., 1982). English secondary schools are generally much
smaller than American high schools and allow a considerable amount of
autonomy for schools to plan their own program (Griffiths, 1972). On a
strictly supply and demand basis, advocates of a voucher system of school
funding have pointed out the economic benefits of many small schools
competing for student business (Chambers, 1981).

Small schools appear to have additional advantages with respect to
lower crime rates and vandalism (Kalus, 1978). Safety, according to
Gottfredson (1985), is also related to size although poor communication
links between the office and the students, and not solely school size, may
be to blame. In the mid to late 1960's many districts with very large
high schools made efforts to reduce size on the theory that the climate of
the school would improve, and vandalism, crime rates and absenteeism would
decrease (Levine, 1968; Gold, 1975). The idea is that peace, intimacy and
peer interaction are fostered by smallness. Along this line, alternative
urban schools, which are small, may serve as a conduit for keeping at-risk
students in schools and out of the juvenile court system (Raywid, n.d.;
Graham, 1980).

In addition to the high school studies, some work has been completed
on the effect of school size in elementary schools. In one study,
students in small schools perceived a closer, warmer relationship with
their teachers, fellow students and other adults and a stronger connection
with the school (Moracco, 1978). Similarly, students transferring into
Australian secondary schools from small elementary schools construed the

transition in a more postive light (and adapted more easily) than did their large school counterparts (Cotterell, 1979). And Goodlad (1983) puts the upper limit of elementary schools at 300 students and roughly twelve teachers. He challenges anyone to show why an elementary school needs to be any larger. British infant schools, he points out, are rarely filled with more than 250 pupils.

The relationship between school size and academic achievement, at least achiv ement as measured by standardized test scores, is not clear. Some studies have indicated a positive relationship between achievement and small size although the cost per pupil in small schools was slightly higher (Bidwell, 1980; Palmer. 1978). Also, longitudinal studies of graduates of small and large high schools regarding success in college tend to reject the hypothesis that larger high schools prepare students better for college studies (Hoyt, 1959; Baird, 1969; Ansingh, 1987). Research certainly exists which suggests the need for relatively large and comprehensive high schools, but many of the recommendations for large size are based not upon achievement data, whether standardized or localized, but upon secondary factors such as teacher experience, percentage of teachers with masters degrees, average staff turnover rate and number of courses offered (Webb and Metha, 1983; Hess, 1978).

Small high schools have consistently been shown to produce better results than large schools in the areas of richness of the experience as a students and attitude toward school (Ainley, et. al., 1982). The work of Barker and Gump (1964) in studying the attitudes of students in small and large Kansas high schools is the classic piece of research on this topic. In sum, the Kansas study found that (1) the availability of extra-curricular activities was not directly proportional to size; (2) The

small school student was much more likely to be involved a wide range of activities/athletics than his or her large school counterpart; (3) small school students enjoyed advantages in terms of developing competence, being challenged, engaging in important actions, being involved in group activities, being valued by others (students and staff), and gaining moral and cultural values; and (4) small school students, especially those from lower economic and academic strata, experinced more pressure to participate-in school activities (Barker and Gump, 1964). Later studies, in the USA and abroad, have replicated these findings (Baird, 1969; Wicker, 1969; Grabe, 1981, Willems, 1967; Ross, 1972; Ainley, et. al, 1982). Lindsey (1982, 1984) corroborated the findings of the Kansas study and added research which indicates that the benefits of smallness are independent of rural or urban location, and that graduates of small high schools tend to participate more often in volunteer social activities as young adults than their large school counterparts. In addition, studies of attitudes of parents (School Size, 1982) and teachers (Mehaffie, 1983) confirm satisfaction with small high schools. Needless to say, many have used this body of knowledge to call for a return to small high schools (Sturges, 1974; Kozberg and Winegar, 1981; Gold, 1975).

Because of the lack of research on school size relative to middle level schools, the analyst is forced to extrapolate from high school and elementary data to predict with some sense of accuracy what should be the optimum middle school size. Obviously, the subject matter specialization needed in high school for basic skill subjects is not as crucial in middle level. If one accepts the notion that variety, and not depth, in exploratory elective courses is to be sought, then money need not be allocated for expensive pre-vocational industrial arts or home economics

labs and thus no economic need exists to fill the labs with full classes during every period of the instructional day. If one accepts the middle school philosphy that teachers should not teach in isolation, that students should be known and cared for by at least one adult in the school, and that teachers should teach students and not just subject matter, then schools need not be large. If one accepts the research findings that ability grouping is inefficient for all students and just plain inequitable for low achievers, then schools need not be large. And if one accepts the realization that middle school activities and athletics should be exploratory and experimental, not competitive and selective, then schools need not be large.

Goodlad (1983) asserts that a junior high school should not exceed 600 students. Alexander and George (1981), though stopping short of advocating any specific optimum size, are stongly supportive of tne house plan, which, like schools-within-schools, minimizes the deleterious effects of large size by breaking the school into sub-units. Goodlad, too, is supportive of schools-within-schools. Kenneth Tye (1985), concurs, although he refers to the sub-units as "learning communities". Joan Lipsitz (1984) argues that relatively small houses, or school sub-units, provide the individualized attention that youngsters need, and reduce the "(a)ntisocial behavior that results from randomness and brevity of student groupings in most secondary schools."

If small schools and SWAS groupings in large schools are so uniformly praised for middle level, why, then, are large, departmentalized junior high or middle schools still so common in our school systems? It is beyond the scope of this paper to delve into issues concerning the existence of institutional barriers in public schools, inbred resistence

to change, bureaucratic awkwardness, uninspiring leadership, or local and state political factors which inhibit innovation and school improvement. I will, however, briefly review documented experiments with SWAS organizations before concluding with an appeal for large middle schools to adopt the SWAS or house plan.

SCHOOL-WITHIN-A-SCHOOL

School-Within-a-School arrangements are not new. Since 1924 the Evanston Township High School of Illinois has operated a SWAS model. At Evanston in 1969, 4,800 students were divided into four semi-independent schools of 1200 students each (Michael, 1969). The literature of the 1940's and 1950's refers to reports of "little schools" or "unit plans" (Raywid, 1985). Unfortunately, almost all of the data on SWAS plans are descriptive and not evaluative or scientific. Many articles have surfaced as SWAS plans were in the planning or start-up stages. These reports are helpful because they illustrate various models and provide a theoretical framework, but they lack an evaulative component (Ramsey and Henson, 1967; School Within A School, 1959; Carver, 1974; Smith, 1964; Barrett, 1964; Barry, 1967; Glatthorn, 1975). Studies which evaluated programs were often somewhat critical. Problems were identified with staffing assignments and personnel match (School-Within-a-School, 1970), lack of communication between houses and the main administration area, inconsistency in discipline among housemasters, low pay scale for housemasters (Yaglou, 1968), and a failure to generate more positive attitudes toward school as a result of the SWAS plan (Niehaus, 1971). However, these studies reported generally positive results in terms of student/teacher contact and personalization of the schooling experience. On a more upbeat note, Raywid (1985) reports that SWAS arrangements result

in generally positive marks so long schools "obtain sufficient
separateness and autonomy to permit staff members to generate a
distinctive environment and to carry out their own vision of schooling".
Also, case studies of middle school house plans by both Lipsitz (1984) and
Alexander and George (1981) lend much credence to the notion that
semi-autonomous sub-units can be successfully constructed in relatively
large middle level schools.

CONCLUSION

Small schools appear to work better for adolescents. In high school
the curriculum must be somewhat varied and the depth of courses
sufficiently broad to provide a basic education. High schools, therefore,
must be somewhat large, although Conant's figure of 100 per class may be
excessive. Middle level schools, however, need not be large. Small
middle schools of 200 or so can function very well and exisiting large
schools, which obviously cannot be reduced in physical size and must carry
sufficient numbers of students to meet minimum economic requirements, can
be broken into smaller sub-units to provide a feeling of smallness within
bigness. Indeed, the large physical plant of an operating junior high or
middle school can provide several educational advantages over a very small
school. For instance, the house plan can be used to arrange instruction
for students in a basic, core curriculum (e.g. writing, reading, math,
social studies) on a personalized, interdisciplinary basis and allow
students to leave the house for specialized subjects such as exploratory
electives, music, foreign language, science, health and physical
education. Large gyms, well-stocked industrial arts, home economics and
science labs, and specialists in art, foreign language and music all can
be a part of the large middle level school divided by houses.

So, in a classic case of an opportunity to have-your-cake-and-eat-it-
to, why don't large middle level schools give SWAS a try? The
institutional forces may be difficult (1), the staff may be recalcitrant,
and the community may be wary, but when presented with all of the reasons
why bigness should be turned into smallness, why would they not support
the experiment? Why, indeed?

ENDNOTE

(1) In addition to the list suggested above, I believe that in many communities the school athletic program creates a difficult barrier to adopting practices which emphasize smallness. This problem is acute in junior high schools and often insurmountable in high schools. High school athletics are an institutionalized cultural phenomenan in the United States and as close to a sacred cow as is anything in education. I believe observers advocating change in education have seriously underestimated the power of extracurricular programs in general and high school extracurricular programs in particular as barriers to meaningful change. High schools can have house plans, but a conflict is created when students are loyal to the house in academics and the total school in athletics. This tends to diffuse house affiliation and reduce personalization between teacher and student, especially when the system allows youngsters to be "cut" from a team or activity squad.

Again, for middle level schools, a ready solution is at hand. First and probably best, most middle school advocates opt for intramural, no-cut, participation-oriented athletic programs (Alexander and George, 1981). This type of program, however, is often controversial, especially when it replaces former "feeder" programs which were successful (in a competitive, won-loss sense). These changes tend to generate large amounts of parent criticism which often spill over from an athletic disagreement to an question of the propriety of the entire middle school program (Franklin Pierce and Bellevue School Districts, Washington State, 1983-1986).

To avoid political ill will, many districts stay with interscholastic athletics in a modified sense. First, for large number sports such as football, wrestling and track, few problems exist with excessive numbers so the need to trim the squad does not exist. Second, "cutting" students is prohibited in low number sports such as volleyball, baseball and basketball. This allows more participation but often taxes the physical limitiations of facilities and the psychological limitations of coaches. In such cases, I advocate forming "house" teams separate from the school which compete as a separate team in the league (Kleinert, 1969). Gym space may have to be rotated or practices scheduled every other day, but the advantages of mass participation outweigh the disadvantages of competitive selection. The net effect of all this is that participation is up (and slow-developing future athletes are spared being lopped from the team and thus keep up interest until the time when they mature), house affiliation is encouraged, and parent criticism is minimized. Goodlad (1983) says that he is unwilling to put the welfare of the football team ahead of the welfare of the educational program. I agree, but in practical, political terms, one must find ways to implement change within the context of the local conditions. SWAS with interscholastic sports is better than no SWAS at all.

REFERENCES

Ainley, J. P., Keeves, J. P., McKenzie, P., & Sturman, A., (1982). RESOURCE ALLOCATION IN THE GOVERNMENT SCHOOLS OF AUSTRALIA AND NEW ZEALAND, ACER RESEARCH MONOGRAPH N. 15. Victoria, Australia: Australian Council for Educational Research, Limited.

Alexander, W. M. (1968). THE EMERGENT MIDDLE SCHOOL. New York: Holt, Rinehart and Winston, Inc.

Alexander, W. M. & George, P. S. (1981). THE EXEMPLARY MIDDLE SCHOOL. New York: Holt, Rinehart and Winston, Inc.

Ansingh, P. (1987). School Size as it relates to Satisfaction With High School Education: A Survey of High School Graduates. WASHINGTON STATE SCHOOL MANAGEMENT AND RESEARCH SERVICE: MANAGEMENT INFORMATION, 6(4), 12-18.

Ayrault, A. D. Jr. & M. Crosetto (1982). Small Size, a Chief Advantage of Most Nonpublic Schools. NASSP BULLETIN, 66 (452), 60-66.

Baird, L. I. (1969). Big School, Small School: A Crtical Examination of the Hypothesis. JOURNAL OF EDUCATIONAL PSYCHOLOGY, 60 (4, Part 1), 253-260.

Barker, R. G. & Gump, P. V. (1964). BIG SCHOOL, SMALL SCHOOL. Stanford: Stanford University Press.

Barr, R. D. (1981). Alternatives for the Eighties: A Second Decade of Development. PHI DELTA KAPPAN, 62 (8), 570-573.

Barrett, R. E. (1971). A DESCRIPTION AND APPRAISAL OF THE SCHOOL-WITHIN-A-SCHOOL PLAN OF SECONDARY ORGANIZATION, INCLUDING A DETAILED LOOK AT TWO TYPICAL PLANS IN OPERATION. Ed.D. Ann Arbor: University Microfilms International.

Barry, R. J. (1967). PRACTICES OF HIGH SCHOOLS ORGANIZED ON THE SCHOOL-WITHIN-A-SCHOOL PLAN. Ph.D. Storrs: The University of Connecticut.

Bidwell, C. E. & Kasarda, J. D. (1980). Conceptualizing and measuring the effects of schools and schooling. AMERICAN JOURNAL OF EDUCATION, 88, 401-430.

Brookover, W. B. & Lezotte, L. W. (1979). CHANGES IN SCHOOL CHARACTERISTICS COINCIDENTAL WITH CHANGES IN STUDENT ACHIEVEMENT. East Lansing: Michigan State University, College of Urban Development.

Carver, F. D. (1974) An Approach to Secondary School Organization. EDUCATIONAL FORUM, 38 (2), 171-181.

Chambers, J. G. (1981). An Analysis of School Size Under a Voucher System. EDUCATIONAL EVALUATION AND POLICY ANALYSIS, 3 (2), 29-39.

Commission on Secondary Schools and Commission on Research and Service. THE JUNIOR HIGH PROGRAM (1958). Atlanta: Southern Association of Colleges and Schools.

Conant, J. B. (1959). THE AMERICAN HIGH SCHOOL TODAY. New York: McGraw-Hill Book Company, Inc.

Conant, J. B. (1967). THE COMPREHENSIVE HIGH SCHOOL. New York: McGraw-Hill Book Company, Inc.

Cotterell, J. L. (1979). Expectations and Realities: A Study of Transition from Primary to Secondary School. THE AUSTRALIAN JOURNAL OF EDUCATION, 23 (1), 21-31.

Eccles, J. S. (1987). A Two Year Study of Junior High Schools in Michigan. Paper presented at the annual conference of the American Educational Research Association, Washington, D. C., April.

Edmonds, R. R. (1979). Some Schools Work and Others Can. SOCIAL POLICY, 9, 28-32.

Eichorn, D. H. (1966). THE MIDDLE SCHOOL. New York: Center for Applied Research in Education, Inc.

Fantini, M. D. (1973). PUBLIC SCHOOLS OF CHOICE. New York: Simon & Schuster.

Fenwick, J. F. (1986). THE MIDDLE SCHOOL YEARS. San Diego: Fenwick Associates.

Garcia, G. B. (1961). JUNIOR HIGH SCHOOL SIZE. Ed.D Dissertation. Los Angeles: University of Southern California.

Glatthorn, A. A. (1975). ALTERNATIVES IN EDUCATION. New York: Dodd, Mead & Company.

Gold, A. (1975). The Resurgence of the Small School in the City. PHI DELTA KAPPAN, 56 (5), 313-315.

Goodlad, J. I. (1983). A PLACE CALLED SCHOOL: PROSPECTS FOR THE FUTURE. New York: McGraw-Hill Book Company.

Gottfredson, D. C. (1985). SCHOOL SIZE AND SCHOOL DISORDER. Baltimore: Johns Hopkins Center for the Organization of Schools.

Grabe, M. (1981). School Size and the Importance of School Activities. ADOLESCENCE, 16 (61), 21-31.

Graham, R. A. (1980). Practical Alternatives for Educating the Poor: Education Remedies for Youth Unemployment. A REVIEW OF YOUTH EMPLOYMENT PROBLEMS, PROGRAMS, AND POLICIES, V. 3. Washington, D. C.: U. S. Department of Labor Employment and Training Administration.

Gregory, T. B. & Smith, G. R. (1982). The Impact of Social Climates: Differences Between Conventional and Alternative Schools. EDUCATIONAL HORIZONS, 60 (2), 83-89.

Griffiths, D. E. (1972). Making Schools Liveable for Students: London After the Blitz. PHI DELTA KAPPAN, 54 (1), 57-59.

Heldman, L. J. (1970). The Regional Academic Center. NASSP BULLETIN, 54 (348, 21-25.

Hess, F. (1978). School Size and Its Effect on Achievement and Other Educational Issues. Chapter 1 of ISSUES IN EDUCATION: A DOCUMENTED LOOK AT SEVEN CURRENT TOPICS (ERIC EA 010 80).

Hoyt, D. P. (1959). Size of High School and College Grades. PERSONNEL AND GUIDANCE JOURNAL, April, 569-573.

Jennings, W. & Nathan, J. (1977). Startling/Disturbing Research on School Program Effectiveness. PHI DELTA KAPPAN, 58 (7), 568-572.

Kalus, J. M. W. (1978). ANALYSIS OF HAWAII SECONDARY SCHOOL DISCIPLINE VARIABLES. Ph.D. Dissertation. Honolulu: Walden University.

Kleinert, J. E. (1969). Effects of High School Size on Student Activity Participation. NASSP BULLETIN, 53 (335), 34-46.

Kozberg, G. & Winegar, J. (1981). The South Boston Story: Implications for Secondary Schools. PHI DELTA KAPPAN, 62 (3), 565-569.

Levine, D. U. (1968). Unequal Opportunities in the Large Inner-City School. NASSP BULLETIN, 52 (November), 46-55.

Lindsay, P. (1982). The Effect of High School Size on Student Participation, Satisfaction and Attendance. EDUCATIONAL EVALUATION AND POLICY ANALYSIS, 4 (1), 57-65.

Lindsay, P. (1984). High School Size, Participation in Activities, and Young Adult Social Participation: Some Enduring Effects of Schooling. EDUACTIONAL EVALUATION AND POLICY ANALYSIS, 6 (1), 73-83.

Lipsitz, J. S. (1984). SUCCESSFUL SCHOOLS FOR YOUNG ADOLESCENTS. New Brunswick: Transaction Books.

Mehaffie, S. (1983). QUALITY OF EDUCATION AND EFFECTS OF SIZE IN SMALL WEST-TEXAS HIGH SCHOOLS: 1973 VS. 1983 SURVEYS. ERIC 230 363.

Merenbloom, E. Y. (1986). THE TEAM PROCESS IN THE MIDDLE SCHOOL: A HANDBOOK FOR TEACHERS. Columbus, Ohio: National Middle School Association.

Michael, L. S. (1969). Alternative Methods of Organizing Secondary
Schools. In HUMANIZING THE SECONDARY SCHOOL. Ed. Hamilton,
N. K. & Saylor, J. G. Washington, D. C.: Association for
Supervision and Curriculum Development.

Moracco, J. C. (1978). The Relationship Between the Size of
Elementary Schools and Pupils' Perceptions of Their Environment.
EDUCATION, 98 (4), 451-454.

Niehaus, S. C. (1971). THE SCHOOLS-WITHIN-A-SCHOOL: ITS EFFECT ON
STUDENT ATTITUDE IN A LARGE SECONDARY SCHOOL. Ph.D. Dissertation.
Evanston: Northwestern University.

Oakes, J. (1985). KEEPING TRACK: HOW SCHOOLS STRUCTURE INEQUALITY.
Hew Haven: Yale University Press.

O'Connell, C. & Hagans, R. (1985). STAFF DEVELOPMENT IN RURAL SCHOOLS.
Portland: Northwest Regional Educational Lab.

Palmer, K. F. (1978). Smail Is Beautiful: Schools As If Kids Mattered.
THE CLEARING HOUSE, 51, 436-438.

Ramsey, R. D., Henson, O. M. & Hula, H. L. (1967). THE SCHOOLS-WITHIN-A-
SCHOOLS PROGRAM. New York: Parker Publishing Company, Inc.

Raywid, M. A. (1982). THE CURRENT STATUS OF SCHOOLS OF CHOICE IN PUBLIC
SECONDARY EDUCATION. Hempstead, N. Y.: Project on Alternatives
in Education, c/o Hofstra University.

Raywid, M. A. (1984). Synthesis of Research on Schools of Choice.
EDUCATIONAL LEADERSHIP, 41 (7), 70-78.

Raywid, M. A. (1985) Family Choice Arrangements in Public Schools:
A Review of the Literature. REVIEW OF EDUCATIONAL RESEARCH, 55
(4), 435-467.

Raywid, M. A. (n.d.). Opinion: Keeping At-Risk Youth in School.
STATE EDUCATIONAL LEADER, Spring, 4-6.

Ross, J. M. (1972). Does School Size Matter? The Research. NEW
SOCIETY, June, 55-56.

Rutter, M., Maughan, B., Mortimore, P. & Ouston, J. (1979). FIFTEEN
THOUSAND HOURS: SECONDARY SCHOOLS AND THEIR EFFECTS ON CHILDREN.
Cambridge: Harvard University Press.

School Size: A Reassessment of the Small School. Research Action
Brief Number 21. (1982). Eugene, Oregon: ERIC Clearing House on
Educational Management.

School Within a School: A Better Way to Organize a High School? (1959)
SCHOOL MAMAGEMENT, 3, 33-36, 64-66.

School-Within-a-School: Hilo High School Report, 1969-1970 (1970).
    Honolulu: Hawaii University Social Welfare Development and
    Research Center.

Small Schools: Quality Schools. Five Rooms or Less. Information
    Bulletin. (1979). St. Louis: Lutheran Church, Missouri Synod.

Smith, H. J. (1964). THE SCHOOL-WITHIN-A-SCHOOL CONCEPT. Ed.D.
    Dissertation. Los Angeles: University of Southern California.

Stemnock, S. K. (1974). SUMMARY OF RESEARCH ON SIZE OF SCHOOLS AND
    SCHOOL DISTRICTS. RESERACH BRIEF. Washington, D. C.: Educational
    Research Service.

A STUDY OF ALTERNATIVES IN AMERICAN EDUCATION, VOL. VII: CONCLUSIONS
    AND POLICY IMPLICATIONS (1981). Santa Monica: Rand Corporation,
    Education and Human Resources Program.

Sturges, A. W. (1974). The Small School: A Rediscovered Resource in
    American Education. THE NORTH CENTRAL ASSOCIATION QUARTERLY, 49
    (2), 291-293.

Tye, K. A. (1985). THE JUNIOR HIGH. Lanham, Maryland: University Press
    of America.

Van Til, W. (1971). The Second Coming of the One-Room Schoolhouse.
    EDUCATIONAL HORIZONS, 50 (1), 30-32.

Webb, L. D. & Metha, A. (1983). Educational Program Quality and School
    District Size. TEXAS TECH JOURNAL OF EDUCATION, 10 (1), 21-28.

Wicker, A. W. (1969). School Size and Students' Experiences in Extra-
    curricular Activities: Some Implications for School Planning.
    EDUCATIIONAL TECHNOLOGY, 9 (5), 253-260.

Wilkinson, H. C. (1977). A Small Human School. EDUCATION CANADA, 17
    (2), 14-21.

Willems, E. P. (1967). Sense of Obligation to High School Activities
    as Related to School Size and Marginality of Student. CHILD
    DEVELOPMENT, 38, 1247-1260.

Yaglou, E. P. (1968). IMPLEMENTATION OF A SCHOOLS-WITHIN-A-SCHOOL
    ORGANIZATION IN AN URBAN HIGH SCHOOL. Ed.D. Dissertation,
    Cambridge: Harvard University.