

Organizing Schools into Small Units: Alternatives to Homogeneous Grouping

Ms. Oxley demonstrates the advantages of small-unit organization for all students - particularly low-achieving students - and describes an approach to small-unit organization that provides alternatives to the practices of sorting students and grouping homogeneously.

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Phi Delta Kappan, MARCH 1994, pp. 521-526

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LARGE SCHOOLS are primarily a tool of curriculum specialization. During the last several decades, as economic demands for workers with higher-level skills grew, fewer and fewer students left school early to take jobs. Educators responded by diversifying the curriculum and encouraging growth in school size, since a large school population is needed to support a large number of specialized courses. Students were steered into different academic tracks in an effort to match their varied interests and abilities with different curricula.¹

Educators altered the curriculum rather than their teaching methods, on the assumption that students have different aptitudes for learning and thus require educational materials of varying difficulty. Revised theories of learning and intelligence have severely challenged these assumptions.² Further, research³ indicates that academic tracking is neither a clearly effective nor an equitable method of organizing instruction. Remedial courses tend to allow students to fall further and further behind until, eventually, they drop out. Special needs programs have proved inadequate.⁴ Finally, secondary school curricula are out of step with the economic demand for both a greater mastery of basic skills and the ability to use higher-order thinking skills. "Less is more" proponents have largely succeeded in focusing curriculum reform on enhancing instruction in academic core subjects.⁵

Today, the alienating effect of large schools is more profound than ever. High schools in the United States often enroll as many as 3,000 students. Yet schools this large are difficult to defend on educational grounds.⁶ Research indicates that large school size adversely affects attendance, school climate, and student involvement in school activities and contributes to higher rates of dropping out, vandalism, and violence.⁷ Further, the social and psychological support formerly provided by families and communities appears to have declined, especially among the urban poor, which suggests that today's students may be even less able to cope with large schools.

Dividing large schools into small units, or subschools, however, creates a context for teaching and learning that is more stable, more intimate, and more supportive. When schools are organized into units, small numbers of students and teachers interact with one another, share an expanded range of activities, and remain together across years. Under these conditions, students and teachers are more likely to get to know one another and therefore to respect and support one another.

Organizing schools by units encourages a coordinated, cross-disciplinary approach to instruction. Within a unit, teachers share a group of students in common rather than a discipline. They take collective responsibility for their students' success, and they work together to unify instruction and allow students the opportunity to exercise skills and knowledge across subjects.

Small-unit organization also has the potential to bring about significant changes in the traditional shape of school governance. Small units lend themselves to a decentralized system in which unit leaders assume the authority to orchestrate unit activities. Unit leaders are better positioned than administrators to communicate with teachers, students, and parents, while not so burdened by administrative work that they are unable to teach any classes. The tension between administrators and instructors that normally exists in large schools with centralized management is less likely to develop. Here again, the research bolsters the claims it suggests that large school size contributes to negative student outcomes by adversely affecting school management, particularly in the areas of consensus building and staff involvement in decision making.⁸ At a time when school-based management and broadened

input into decision making have become the watchwords of the reform movement, small-unit organization can provide the structural underpinnings for such changes.

Despite the enormous potential of small-unit organization, it carries a risk. If educators allow subschools to segregate students of differing achievement levels and socioeconomic backgrounds, as academic tracks and special needs programs currently do, the subschool concept will fail to help low-achieving students. My purpose here is to demonstrate the advantages of small-unit organization for all students - particularly low-achieving students - and to describe an approach to small-unit organization that provides alternatives to the practices of sorting students and grouping homogeneously. Since this approach challenges deeply rooted educational methods, I also discuss some of the ways that educators have overcome professional and political obstacles to reform.

LOOKING OUTFOR EDUCATIONAL EQUITY

The current climate for reform would seem to bode well for small-unit plans. Some educators see in the small-unit plan a means of broadening the array of programs from which students can choose. Many district and building administrators want to extend greater choice to students, particularly in inner-city neighborhood schools with limited curricular offerings. They also see the plan as a way of improving these schools' marketability. To the extent that subschools are made to offer distinctive academic programs, they may allow neighborhood schools to compete with magnet programs for higher-achieving students and thus to create a more diverse student body.

Expanding student choice has merit, but the history of school reform suggests that, when educators try to fit programs to students' interests and needs, they fail to maintain high expectations of academic achievement for all students. Concern for the kinds of practices that enable all students to reach high levels of achievement is often overridden by interest in curriculum development. Consequently, small-unit plans designed to create differentiated educational programs pose the real danger that students will continue to be held to different standards, as is currently the case in different academic tracks and special needs programs.

Can the provision of meaningful educational options be reconciled with the need for higher educational attainment for all students? Mandating that subschools of choice be designed for heterogeneous groups of students would be a step in that direction, but much more is needed. Educators have some knowledge of effective classroom practices for heterogeneous instructional groups but lack information about how to reorganize instruction on a schoolwide basis to provide equal access to high-quality instruction. Such reorganization requires radical changes in the structure of special needs programs, the curriculum, and the roles of teachers. There is not even a consensus yet among educators that academic tracks should be eliminated or that all students should be required to demonstrate minimal educational outcomes. Providing equal access to educational opportunity requires the successful negotiation of normative and political obstacles as well as the devising of a technical plan that specifies changes in school organization, curriculum, and instructional technique.⁹ In addition, educators need to be able to examine successful models firsthand.

The designs of two schools I am about to describe exemplify an approach to small-unit organization that is geared towards meeting students' diverse academic needs in "regular" classrooms. These schools incorporate structural features of small unit design that have come to be associated with greater teacher knowledge of students, a sense of community among students, and higher rates of attendance and academic achievement.¹⁰ They also employ the kinds of alternative methods that need to accompany structural reorganization.¹¹

One of the schools is Köln-Holweide, German comprehensive secondary school. American educators became interested in German comprehensive schools a few years ago because of their extraordinary commitment to democratic school governance and teaching methods.¹² The school contains grades 5-10, plus an upper school of grades 11-13 for college-bound students. Köln-Holweide currently serves a student body of 1,600, about 25% of whom are immigrants, mostly Turkish. Many students are from poor, single-parent families. Almost all students complete 10th grade on time, compared to a national dropout rate of 14%.

The second school, William Penn High School, is located in Philadelphia. The school serves 1,800 students in grades 9-12, nearly all of whom are African American. A large majority are poor and qualify for the free lunch program, and a high number are eligible for Chapter 1 and special education programs. As part of a district-wide high school restructuring initiative, staff members at William Penn are organizing the school into several charter schools. One of these sub-schools was designed to demonstrate effective organizational and instructional methods for heterogeneously grouped students.

KÖLN-HOLWEIDE COMPREHENSIVE SCHOOL

Köln-Holweide uses a horizontal small-unit plan in which all the students at a given grade level are grouped with the same teachers for six years. The German education ministry determines what knowledge and skills should be mastered at each grade level. Standards for completion of the lower school (grades 5-10) are high. At the same time, the course of study offers a variety of topics and opportunities to pursue individual projects.

Each grade level is organized as a semi-autonomous unit, comprising approximately 225 students and 18 to 22 teachers. Units are headed by a grade leader, who is relieved of six periods of teaching (one-quarter of the class load) to coordinate instruction and provide representation on the school governance council.

Within each unit, teachers are organized into three teams of six to eight teachers, depending on the number of part-time teachers. The latter group includes the principal and assistant principals, all of whom teach a reduced classload. Each team is responsible for the entire educational program of three classes of students. Since each team has only three classes, instructors teach two academic subjects and cover additional class periods such as homeroom or a third subject. Unlike U.S. teachers, German teachers have training in two subject areas. Each team exercises a high level of instructional autonomy. Team members devise each year's class schedule and decide who will teach what classes.

The team and its students remain together in grades 5 through 10. When students begin the fifth grade, disabled, Turkish, slow- and fast-learning, and male and female students are distributed equally among the three teams. These groupings are maintained for the next six years. Köln-Holweide teachers believe that a close, stable relationship between teachers and students is a necessary condition for effective education.

Academic tracks do not exist in grades 5 and 6 at Köln-Holweide, but, contrary to the school's philosophy, German law requires students to be grouped into higher and lower math and English language classes in grades 7 through 10. Participation in the higher-tracked courses and above-average grades are the entry criteria for the upper school. Teams minimize the effect of grouping on students by accommodating the requirement within the small-group structure. They create and instruct a fourth, lower-track class in math and English when students reach seventh grade. These students are integrated with all other students in the remainder of their classes.

Special education students, including those with behavioral problems and physical and intellectual disabilities, are mainstreamed at Köln-Holweide. Not every team has disabled students. But one special education instructor is assigned to each team that has disabled students, two if students' disabilities are severe. Specialists work with students in the context of their regular classes. Regulations permit the reduction of class size from 30 to 22 students if there are at least three special education students assigned to a class. As a result, disabled students are concentrated in about half of the classes.

Turkish students in grades 5 through 8 receive four periods per week of instruction in their native language. In grades 9 and 10, Turkish students may take Turkish as one of several foreign language electives.

In core subject classes, students work almost entirely in table groups. These groups are heterogeneous in terms of gender, ethnicity, and ability. The students belong to the same table group in each course throughout the year. In this way, students have ample opportunity to learn how to work effectively with the others in their group and do not lose time learning how to work with a different group in each class. Group members are expected to help one another and to contribute to the group's mastery of the work. They meet once a week to tackle problems they encounter in working together; twice a year they take stock of the group's progress. Groups work independently of the teacher during much of the class; their work assignment for a two-week period is often posted in the classroom. While groups work on an assignment during the period, the teacher may work intensively with one group or move from group to group to check on their progress.

Köln-Holweide has an extended school day, 8:15 a.m. to 4:15 p.m. Students spend about the same amount of time in class each week as U.S. students; the extra time is allocated to staff meetings, lengthy lunchtime activities, and a mid-morning break. Over the year, however, students receive more hours of formal instruction than U.S. students, since the German school year is several weeks longer.

Students' schedules vary throughout the week and allow for several double instruction periods as well as periods for individualized work, tutoring, community projects, and student guidance. Teachers can offer this variety because they are not required to provide five periods of formal instruction in each subject. Students have several free learning periods each week. These are unstructured periods used to work on class assignments or individual special interests. Students who fail a test use their free learning time to work with their teacher on the material

covered by the test until they are ready to retake the test. In this way, all students are able to master the work, and none must repeat a course or grade.

Two periods per week are allocated to student guidance. Staff members treat student guidance as an integral part of the curriculum. A pair of teachers, usually one male and one female, are assigned to an advisory group; they devote one period to human relations and sex education and the other to general student concerns. In addition, a full-time school psychologist holds a weekly conference with representatives of each team to discuss problems with particular students and ways to further students' social development.

Tuesday afternoons are set aside for teacher meetings, at which time students are dismissed from school. Teams use this time to meet, as do teachers in the same subject area, although less frequently. A teacher in each subject area is elected to organize departmental meetings but has no broader role in school governance. Subject area teachers at each grade level convene to develop tests and to discuss students' performance on them. The teachers explore reasons why certain teams or classes may have performed differently and decide how to improve the work of the lower-performing groups.

WILLIAM PENN HIGH SCHOOL

William Penn employs a vertical small-unit plan: each unit contains students from all grade levels. The units have different curricular themes and provide instruction in core and theme subjects only, leaving electives to be organized on a schoolwide basis. One such unit, the House of Masterminds, was designed to serve a student population in which one-half of ninth-graders had previously failed to be promoted. House staff members raised standards, adopted African American culture as a curricular theme, and individualized instruction.

The House of Masterminds has a lower level (grades 9-10), along with an upper level (grades 11-12) that is not yet fully formed. The House serves approximately 250 students at the lower level. A staff of 11 teachers, including two teams of four teachers each, a Chapter 1 reading specialist, a special education instructor, and a coordinator, works with these students.

Teams remain with the same group of students for two years. Each team of four core subject-area teachers shares four classes of students. In order to limit the number of classes taught by each teacher to four, instead of the usual five, the team members teach an additional course to their students. Each team member teaches each class his or her specialty - English, math, history, or science - for 20 periods per week and, in addition, African American studies for five periods. In this way, teachers not only instruct fewer students than normal but also have more instructional time with them. Students take an additional, elective course outside the House.

African American studies is taught as two half-credit humanities courses in both 9th and 10th grades. English and social studies teachers jointly developed a curriculum that extends their regular English and social studies instruction to include African American literature and history. They teach in a coordinated fashion so that students learn periods of African American history in the context of literature written by African Americans during corresponding eras. Math and science teachers help students develop social and psychological skills that foster self-esteem and positive ethnic identity.

Staff members do not organize students by ability. A remedial math class that many ninth-graders used to take was eliminated in the House and replaced with algebra. Similarly, Chapter 1-eligible students are not programmed separately for reading remediation classes. Instead, the Chapter 1 reading specialist collaborates with the interdisciplinary teams in developing strategies to improve students' reading skills in the context of core subject areas and directly assists students in the classroom.

Special education students are mainstreamed within the House of Masterminds; a maximum of three such students are assigned to any one class. The special education instructor assigned to the House works with students in the classes in which they require the most help. Staff members identify special education students who would be appropriate for the House, primarily students with mild to moderate disabilities, at the end of eighth grade. In this way, the students move directly into regular classes at the beginning of their ninth-grade year without first being placed in the special education program for assessment.

House staff members use adaptive instruction, an individualized approach to instruction that goes hand in hand with mainstreaming special needs students in regular classes.¹³ The strategy assumes that all students have unique strengths and weaknesses that respond better to individualized and group instruction than to exclusive reliance on whole-class instruction. Students work in groups at learning centers designed to help master different kinds of

skills. One math center may contain mathematical exercises to complete; another, a group game that requires finding solutions to mathematical problems.

Teachers use a combination of tests and portfolio methods to assess student progress. At the end of each eight-week marking period, students who have not mastered the material covered receive a grade of incomplete until they have completed it successfully. Students have until the beginning of the 11th grade to complete curriculum for grades 9 and 10 without receiving a failing mark.

Four days a week, students have a three-period block of time each morning for math/science or English/social studies instruction. The block of time includes a double period of instruction in one subject that varies each day. In the afternoon, when students' attention may begin to wane, they have just two periods of instruction in the two areas not covered in the morning.

One full day is devoted to seminars. Since students receive five periods of instruction in each of their core subjects in the space of four days, they are free to pursue a topic of their choice in the beginning of seminar day and either remedial or enrichment work in the afternoon. In the morning, some teachers offer a hands-on type of activity that allows students to delve more deeply into one of their subjects. For example, the English teachers sponsor creative writing and newspaper projects, and the social studies teachers explore topics in African American history with students. Some teachers work on social problem-solving skills with students or lead community service projects. In the afternoon, students who have not successfully completed past coursework work on packets of materials designed to guide them through blocks of the standardized curriculum.

House teachers meet with their advisory class one day a week. A 30-minute period was created for this purpose by putting an existing 20-minute advisory period back-to-back with a double period of instruction with the same class. The 10 minutes that students ordinarily use to move between classes are added to the Monday advisory to give teachers time to conduct individual student conferences.

Teachers do not have additional team planning time built into their schedules. Each team does, however, share back-to-back lunch and class preparation periods. They use these periods to work together.

The House coordinator is relieved of two classes to manage House activities. The coordinator takes chief responsibility for curriculum and staff development and is a member of the principal's cabinet. She also takes part in all major decisions that affect the creation of the school's master schedule, since it must accommodate the House schedule. Formerly these decisions were made by the program chair, in consultation with the heads of the academic departments, and reflected the preeminence of the department structure. As charter schools have taken hold, however, the House coordinator's role has evolved in accordance with the fact that the success of charters depends on their having at least equal standing with departments.

OVERCOMING BARRIERS TO REFORM

Köln-Holweide and William Penn have succeeded in organizing teaching and learning in ways that depart sharply from traditional methods. Staff members of these schools have restructured school management, teachers' working relations, existing programs, and the school day, among other institutionalized features of schools. Not surprisingly, their work has involved unpleasant clashes with those who hold a stake in the practices they have sought to replace. Köln-Holweide (itself now an institutionalized feature of German secondary schools) and William Penn (now engaged in the task of implementing reforms schoolwide) continue to encounter resistance. Yet educators in these schools clearly have been more effective than many in resolving conflicts with prevailing practices and philosophies. A wide variety of factors has contributed to their success.

The original impetus for the development of German comprehensive schools like Köln-Holweide was economic, but political factors play a role in maintaining them. Germany found in the 1960s, as the United States did in the 1980s, that its traditional form of schooling did not produce enough well-educated individuals to drive its economy. Under the traditional German system of schooling, fourth-grade students are channeled into three different types of secondary schools on the basis of their academic performance; only one of these schools, the gymnasium, prepares students for college. Comprehensive secondary schools were created with the mission of helping all elementary students reach high levels of academic mastery.

The comprehensive schools constitute only about 15% of all public schools in Germany. More comprehensive schools have been established in states controlled by liberal governments, and they often receive more support in these states. One state supports the operation of comprehensive schools with a teacher training program that attempts to prepare teachers philosophically and technically for positions in the comprehensive schools.

At Köln-Holweide, new and transfer teachers receive no additional training before they begin teaching. However, the teacher teams provide a powerful means of introducing new members to their methods. The stable, cohesive nature of these teams, along with regular team planning meetings, provides a high level of inservice support for new teachers. Team support is also a factor in the successful mainstreaming of special education students. Special education instructors much prefer being included in the instructional teams to teaching special classes in isolation.

Finally, the teacher professionalism and democratic style of school governance found at Köln-Holweide cultivate support for comprehensive school methods. Teachers enjoy a high level of autonomy and flexibility and have ready access to their unit leader, who, in turn, exercises a good deal of authority. The school governance council provides an effective method for addressing needs and conflicts.

In keeping with the more localized governance of U.S. schools, the factors that have increased support for reforms at William Penn have been exclusively local. The district-wide high school restructuring initiative is fueled by a large multi-year grant from a local private foundation. Project funds are used to support the formation of charter schools and the shift to site-based management. In order to receive \$21,000 and two-fifths of a teacher position for a charter school coordinator, charters must meet district criteria. One of these criteria is that charters serve heterogeneous student groups. Much of the funding is used for development and training of charter school teams. Charter teams have numerous opportunities to attend academic-year and summer staff development sessions focusing on cooperative learning, interdisciplinary curriculum development, and so on.

While the district project has created conditions that are conducive to increasing access to high-quality education, another factor has played a more direct role in changing minds and practices at William Penn. The Temple University Center for Research in Human Development and Education has provided assistance to William Penn over an extended period. An instructional specialist offers staff development on a weekly basis and during the summer in support of the goals of individualizing instruction and teaming regular and special needs instructors. An organizational specialist participates in school-level planning designed to support these practices. Center staff members spend extensive time at the school and have learned to respond to the needs that teachers have identified and to rethink their own agendas while continuing to pursue their essential objectives.

QUALITY AND EQUITY

William Penn High School and Köln-Holweide Comprehensive School illustrate ways of implementing small-unit structures that increase all students' access to high-quality education. William Penn staff members have succeeded in designing a charter school that addresses the particular needs of students from impoverished inner-city neighborhoods, students with long histories of underachievement and a severe lack of family and community support. They altered their methods of teaching instead of their expectations for those who do not adapt to traditional schools. William Penn demonstrates what can be achieved with district leadership and resources and university collaboration. Köln-Holweide highlights the role that federal and state politics can play in promoting quality and equity in education as well as the kind of school culture that supports these goals.

The strengths of small-unit organization can be realized only if educators design units in which students of varying backgrounds and educational histories have an equal chance to succeed. Units must not intentionally screen out particular students or inadvertently attract only certain groups of students. Teachers need to reorganize existing academic tracks and special needs programs and to adopt instructional methods that allow them to meet diverse student needs in a common context. The alternative is to replicate inadequately structured programs, to continue practices that deny students equal access to high-quality education, and to perpetuate limited educational attainment for certain groups. This alternative cannot be tolerated either ethically or economically.

To avoid such shortcomings, educators need ready access to comprehensive information about promising reforms at both the school and classroom levels. District leaders must provide expertise, incentives, and staff development funds to pursue the restructuring of special needs programs in conjunction with the organization of schools into small units. State departments of education must resolve the question of what all children need to know before they leave school.

In the final analysis, what is needed is a renewed commitment to the goals of a public system of education. State and federal government leaders could signal such a commitment by tackling the problems (ineffective regulation of categorical programs, funding inequities between districts, and so on) that stand in the way of reaching these unmet goals.

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