This paper describes U.S. Department of Defense Schools, an education system with significant outcomes that may be pertinent to raising academic achievement among minority students. A research group examined the high achievement of African American and Hispanic students in Department of Defense Education Activity (DoDEA) schools. Results find that the DoDEA instructional program provides a comprehensive K-12 curriculum. Students of color account for 40 percent of DoDEA enrollment, similar to the proportion in New York state public schools. Roughly 50 percent of DoDEA students qualify for free and reduced-price lunch. Military assignments cause frequent family moves, resulting in a 35 percent mobility rate in DoDEA schools, comparable to the rate in inner city schools. According to the National Assessment of Educational Progress (NAEP), the average academic performance of all students in DoDEA schools is high, and the performance of African American and Hispanic students is among the highest in the nation. The military context in which DoD schools operate supports achievement in particular ways, but other factors are decisive. The success of DoD schools rests on many in- and out-of-school efforts: DoD commitment and expectations; establishment of goals; effective resource deployment; a culture of high expectations; small school size; flexibility of organization; data-driven decision making; teacher quality and professional development; pre-school and after school programs; community involvement; alignment between central direction and local decisions; and focus on, and expectations of, high achievement. (SM)
RAISING MINORITY ACADEMIC ACHIEVEMENT:  
THE DEPARTMENT OF DEFENSE MODEL

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Edmund W. Gordon

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Teachers College  
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Raising Minority Academic Achievement:  
The Department of Defense Model

In continuing our examination of existing programs that enable students of color to succeed academically, we focus here on the U.S. Department of Defense Schools, an education system with significant outcomes worth considering. This system is not one usually referenced in the various approaches and dialogues concerning the intellective and social competence of students.

Background

The U.S. Department of Defense (DoD) maintains two separate but parallel education systems: the Department of Defense Dependents Schools (DoDDS) for the children of its personnel stationed in Europe and the Pacific, and the Department of Defense Domestic Dependent Elementary and Secondary Schools (DDESS) for children living on bases in the U.S. The Department of Defense Education Activity (DoDEA), a civilian agency of the DoD, operates both systems, with its director overseeing all agency functions from its headquarters in Arlington, Virginia. DoDEA currently operates 224 public schools in 21 districts located in 14 foreign countries, seven states, Guam, and Puerto Rico. Over 8,800 teachers teach DoDEA's 106,000 students. The children of enlisted military personnel represent 80 percent of the total DoDEA school enrollment.

According to the National Assessment of Educational Progress (NAEP) 1998-2000, the average academic performance of all students in DoDEA schools is high, and the performance of African American and Hispanic students is among the highest in the nation. African American and Hispanic students enrolled in DoDEA schools outperformed their peers in all states except Maine and Connecticut on eighth-grade reading and writing tests. Moreover, the achievement gap between minority students and their white and Asian counterparts was significantly smaller in DoDEA schools than in most states.

Based on this evidence of success, and the fact that DoDEA schools share characteristics with many of the nation's public schools, the National Education Goals Panel commissioned a research group from Vanderbilt University to examine the high achievement of African American and Hispanic students in DoDEA schools. The group's goal was to identify policies and practices which may contribute to the success of the schools. The findings of the resulting study, *March Toward Excellence* (Smrekar, Guthrie, Owens, & Sims, 2001), along with some supporting research cited in the study, are summarized below.

Assessment Results

The DoDEA instructional program provides a comprehensive pre-kindergarten through twelfth grade curriculum that is competitive with the curriculum of any school system in the U.S. DoDEA monitors student progress through the use of standardized tests. Students take the Terra Nova Achievement Test, a norm-referenced test for grades 3 through 11. As Table 1 demonstrates, the average differences in performance between majority and minority students on the 1998 NAEP writing assessment are significantly below the national average. Table 2, which presents reading scores, shows similar results.

Student Demographics

According to the DoD, students of color account for 40 percent of DoDEA enrollment. This percentage is similar to the proportion in New York State public schools. Roughly 50 percent of all DoDEA students are eligible for free or reduced-price lunch, reflecting the typically low pay scales in the military, especially for personnel in the junior enlisted ranks. Because housing on military bases is based on rank, and school attendance areas are geographically determined (as are public school districts), the concentration of low-income students can vary significantly from school to school. For example, a DoDEA elementary school where 36 percent of the students qualified for free or reduced-price lunch is near another DoDEA elementary school where 82 percent of the students qualified.

Military assignments cause frequent family moves, resulting in a mobility rate for DoDEA schools of 35 percent, comparable to the rate in inner-city schools. Parents in the military often have only a modest education: 94 percent of the children of enlisted personnel, who comprise about 80 percent of the DoDEA school population, have parents with no more than a high school education. Finally, single-parent households account for 6.2 percent of all military families, compared with a national rate of 27 percent.
Table 1
Average 1998 NAEP Scaled Scores for Eighth-Grade Writing by Race/Ethnicity

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Percent of Total Population</th>
<th>Average Scaled Score</th>
<th>Difference Between Whites and Blacks</th>
<th>Difference Between Whites and Hispanics</th>
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<tr>
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<td>17</td>
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<tr>
<td>Nation</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
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<td></td>
<td></td>
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<tr>
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<tr>
<td>Hispanic</td>
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</tbody>
</table>

Factors Promoting Student Achievement

March Toward Excellence found that the military context in which DoDEA schools operate is supportive of students' achievement in particular ways, but other factors—which nonmilitary schools can incorporate—were found to be decisive. The impressive success of DoDEA schools rests on a combination of in-school and out-of-school (supplementary education) efforts. While a case study like this one cannot establish a causal relationship between the identified factors and student achievement levels, the research suggests that the following factors may contribute to high student achievement.

Department of Defense Commitment and Expectations

The culture of order, discipline, education, and training in the military community creates ideal conditions for schools with high expectations. Further, DoD demonstrates a corporate commitment to public education that is not only symbolic and substantive but also visible and responsive to parents within the school community. The military expects and holds parents responsible for active involvement in their children's education. A parent's place of duty is at his or her child's parent-teacher conference, for instance. Parents are also responsible for volunteering one day a month at their child's school.

Establishment of Goals

DoDEA uses a Community Strategic Planning Process for determining specific educational, administrative, and financial goals. Stakeholders—including parents, faculty, administrators, support personnel, community leaders, and military personnel—provide input that greatly influences the process. The 1995-2000 Community Strategic Plan (CSP) was jointly generated from the eight National Education Goals and DoDEA goals regarding governance and organizational infrastructure. Local schools would subsequently develop their own School Improvement Plan and actively plan how they would achieve the CSP's objectives. District superintendents are especially attentive to performance measures and long-term goals geared to stimulating academic and social competencies.

Effective Resource Deployment

DoDEA schools spend approximately $8,900 per pupil—$1,600 (22 percent) more than the national average. This figure is, however, considerably less than the average per pupil expenditures in large U.S. school systems which have comparable proportions of minority students (National Center for Education Statistics, 2000, as cited in Smrekar et al., 2001). Smrekar et al. also found that DoDEA teacher salaries are somewhat higher than their U.S. public school peers. Compensation, including salary and housing benefits for overseas DoDEA teachers and high-end salaries for domestic DoDEA teachers, is also comparable to the income of their public school peers. In addition, materials and instructional supplies are usually available and physical facilities more than adequate.

A Culture of High Expectations

High academic standards, teachers' view of themselves as personally accountable, and a minimal reliance on

Table 2
Average 1998 NAEP Scaled Scores for Eighth-Grade Reading by Race/Ethnicity

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Percent of Total Population</th>
<th>Average Scaled Score</th>
<th>Difference Between Whites and Blacks</th>
<th>Difference Between Whites and Hispanics</th>
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</thead>
<tbody>
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<td>Department of Defense Domestic Dependent Elementary and Secondary Schools</td>
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<td>White</td>
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<td>Nation</td>
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<tr>
<td>White</td>
<td>66</td>
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<td></td>
<td></td>
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<tr>
<td>Black</td>
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<td>241</td>
<td>29</td>
<td>27</td>
</tr>
<tr>
<td>Hispanic</td>
<td>14</td>
<td>243</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Score difference is not statistically significant.
tracking all shape a culture of high expectations in DoDEA. According to the 1998 NAEP reading test, 81 percent of students in DDESS indicated that teacher expectations were “very positive” compared to 58 percent in the national sample. Minority students’ responses suggested that 85 percent of African American students and 93 percent of Hispanic students thought that teacher expectations were “very positive,” compared to 52 percent and 53 percent, respectively, in the national sample. In addition, discipline plans devised at the district and school level are promptly implemented when behavioral incidents occur. Parents are also aware that their child’s school may contact their military commanding officer(s) regarding their child’s behavior.

Small School Size

As is well known by now, teacher expectations implicitly and explicitly influence student academic and personal development. The research on school reform suggests that small schools (defined as fewer than 350 elementary students, 600 middle school students, and 900 high school students) enable increased academic achievement and positive teacher/student interaction. Small schools also seem to benefit low socioeconomic status and minority students most (Lee & Smith, 1997, as cited in Smrekar et al., 2001). It should be noted, however, that the small school size reported by DoDEA may be a function of the small student enrollment relative to most states.

Flexibility of Organization

As indicated earlier, DoDEA assures continuity within the system by determining curriculum standards for each subject area and grade. At the local level, schools can modify their class schedules and teaching approaches. For instance, the curricula in most middle schools are designed and aligned across subjects by teacher teams. These teams also determine differential approaches for helping students who struggle academically. For example, teacher teams stimulate academic achievement in all children through heterogenous groupings comprised of students at all achievement levels, including those who would be placed in special education in other schools.

Data-Driven Decision Making

Also as noted, DoDEA students are regularly assessed with standardized exams. Districts and schools are subsequently provided with a detailed analysis of student performance, disaggregated by grade level, gender, and race. These data enable teachers and staff to determine goals that are relevant to specific student needs, devise further assessments, and evaluate changes in student performance. On another level, student assessment results affect the coordination of curriculum and professional development.

Teacher Quality and Professional Development

DoDEA recruits and retains qualified teachers with competitive compensation and continuous professional development. Teachers have considerable leverage in shaping school and classroom behaviors and activities to achieve curricular goals and performance objectives. DoDEA teachers also belong to domestic and overseas unions which, in a uniquely collaborative style, work in tandem with relevant stakeholders to enable school-, district-, and system-wide decision making. As indicated earlier, teacher professional development activities (primarily centered on stimulating student academic achievement and personal growth) are well resourced, implemented, and aligned with student needs that are not only identified by teachers and staff but also by the data generated from student assessments. DoDEA teachers are also assessed with respect to their effectiveness in teaching and learning.

Preschool and After-School Programs

Considered a model with regard to staff training, educational programming, and physical facilities, DoDEA’s preschool and after-school programs meet the guidelines of the National Association for the Education of Young Children (NAEYC), the National Association of Family Child Care (NAFCC), and the National School-Age Care Association (NSACA). These early and out-of-school activities, behaviors, and experiences all contribute to students’ academic and social development. This model is an example of Gordon’s concept of supplementary education (1999), which recognizes the health, human, polity, cultural, and social capital that is required for schools to increase the academic achievement of their students.

Community Involvement

DoDEA schools are situated within military base communities that privilege principles of accountability, commitment, and discipline. This culture, buoyed further by families’ sense of community membership, and by the drive to move up in the ranks, enables a shared responsibility for children’s safety and well-being. This sense of shared responsibility is also reflected in the common values and outcomes that families and teachers hold and expect. DoDEA schools share aspects of “communally organized” schools, which Bryk, Lee, & Holland (1993, as cited in Smrekar et al., 2001) suggest are also reflected in Catholic schools and some magnet schools. Communally organized schools are structured so that communication occurs among teachers, staff, and students; social membership is enabled; and commitment to common goals becomes the norm.

Alignment Between Central Direction and Local Decisions

DoDEA’s emphasis is on centrally determined goals and objectives and encouragement of local (parent, teacher, and staff) adaptability. This approach is effective on several lev-
Inquiry and Praxis

els. On the local level, the strategy enables the building of local and professional capacity. On a macro level, an actual partnership between DoDEA headquarters and teachers, staff, and parents occurs, to the eventual benefit of students. This concept is operationalized to include policy that reflects socially relevant needs grounded in common curricular goals, pedagogy, teacher supports, accountability systems, and performance-assessment results—all of which influence how well students achieve academically. The bi-directional flow of data also enables formative and summative decision making. Supporting this approach is the DoDEA’s provision of competent staff, adequate facilities, and instructional materials aligned with particular goals/targets for student academic achievement.

Focus on, and Expectations of, High Academic Achievement

The emphasis on academic development in DoDEA schools is supported by these strategies: (1) a common planning time to cooperatively develop curriculum; (2) a reduced number of specialized programs, replaced by an integrated plan to serve students in regular classrooms (i.e., heterogeneous grouping); (3) targeted student groupings designed to meet individual needs and enable personal relationships; (4) modified school schedules to permit more varied and longer blocks of instructional time; and (5) creatively redesigned roles and work hours for staff to help meet goals (Miles & Darling-Hammond, 1997, as cited in Smrekar et al., 2001).

Conclusion

It may not be possible in non-Defense Department schools to achieve many of the characteristics of the DoDEA schools. However, there are lessons to be learned from these schools, including the following:

1. The value of high expectations of all students and of clear goals and objectives by which those goals are to be achieved. High expectations and standards are important, but they must be coupled with explicit indicators for determining whether they have been met.

2. The utility of data-driven decisions. Context, treatment, and outcomes data are necessary, but it is essential that they be disaggregated, subjected to relational analyses, and used to inform decisions concerning management, policy, and practice.

3. The importance of adequate and effective human and material resource deployment. Quality of staff, staff compensation, instructional materials, physical facilities, and ratio of staff to students must be sufficient for the achievement of the desired goals.

4. The utility of centralized direction and adaptable decentralized implementation. Flexibility is crucial to the adaptation of teaching and learning to the special requirements of specific situations without threat to the integrity of the universal standards.

5. The importance of a sense of shared responsibility for common values and outcomes across sponsors, schools, communities, families, and students. DoDEA schools are situated in communities that privilege principles of accountability, commitment, and discipline—values that appear to facilitate effective education.

6. The importance of the involvement of parents with the school and their active support of the academic development of students. The military expects, and holds parents responsible for, active involvement in their children’s education and includes this principle in the military person’s “place of duty.”

7. The active use of supplementary education, including preschool and after-school experiences. These experiences promote students’ academic and social development beyond the traditional school day.

—Beatrice L. Bridglall and Edmund W. Gordon

References


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