



*The Superintendent's
Seventh Annual Report on
School Performance
and Improvement
in Hawaii*

1996

The Seventh Annual Superintendent's Report on School Performance and Improvement in Hawaii

FOREWORD

The Superintendent's Seventh Annual Report on School Performance and Improvement in Hawaii is one of two keystones of Hawaii's evolving system of school accountability. This report contains collective data on our schools with which we can judge our school system's performance. Presentations of these data show trends over time and, where appropriate, in comparison to data from other states.

The other system keystone, the *School Status and Improvement Report*, is prepared annually for each school. These reports contain school data for the most recent three-year period and summaries of the schools' improvement priorities and activities. They are available at the individual schools, district offices, and district libraries.

The Department's Comprehensive Assessment and Accountability System, of which these two reports are part, is a major initiative to hold everyone in the Department, including myself, responsible for student learning and for the wise use of resources that support public education in Hawaii. It is intended to take us from piecemeal assessments and fragmented accountability to a comprehensive system that delivers meaningful, usable, and understandable information about public education in general, and student learning in particular. These reports and the rest of our efforts thus far lay a foundation for the system, but they are only a start. In the future we should expect our efforts to become more focused and more helpful in charting our direction for change.

Herman M. Aizawa, Ph.D.
Superintendent

ACKNOWLEDGMENTS

Preparation of *The Superintendent's Annual Report on School Performance and Improvement in Hawaii* requires the cooperative effort of a number of people. The report is prepared by the Evaluation Section of the Department of Education's Office of Accountability and School Instructional Support. The report is prepared under the supervision of Michael W. Heim, Director of the Planning and Evaluation Group, and Dr. Glenn T. Hirata, Administrator of the Evaluation Section. The principal writer is Dr. Thomas Gans of the Evaluation Section, with assistance and critical reviews from Dr. Hirata, Dr. Mary E. Brandt, Patricia K. F. Ho, and Jerald D. Plett.

The Superintendent's Annual Report on School Performance and Improvement in Hawaii requires accurate and consistent data, and a number of people in the Department of Education have contributed to the report by providing the needed data. The assistance provided by Richard Asato and the staff of the Information Systems Services Branch and by Karl Yoshida and Dr. Thomas Saka of the Information Resource Management Branch is gratefully acknowledged.

Report Highlights

- **SCOPE.** The report covers public education in kindergarten through 12th grade, including data from 243 public schools from seven school districts in 1995-96.
- **ENROLLMENT.** Enrollment growth has exceeded 1.5% in each of the last five years, adding over 3,000 students to the schools each year. The enrollment of students with special needs is increasing more rapidly than enrollment at large. (Pages 4-7)
- **SPECIAL NEEDS.** The numbers of students in need of special services are increasing much more rapidly than is the population of students at large. These students are those from poor economic circumstances, those with limited English proficiency, and those who need special education services. The growth in the numbers and proportions of students with these special needs means that the task facing the public schools is steadily becoming more difficult and potentially more costly. (Pages 6-9)
- **STAFFING.** In 1987-88, Hawaii ranked 48th among the states in pupil to teacher ratio. Through concerted effort, by 1992-93 Hawaii had raised its rank to tie for 35th. Fiscal constraints that began in 1994-95 have dropped Hawaii back to 41st among the states. Hawaii is well *below* the national average in the proportion of professional staff performing administrative functions. (Pages 12-15)
- **FINANCE.** After improving during the early 1990s, Hawaii's financial commitment to public education has taken a marked downturn. Although Hawaii ranks **2nd** among the states in per capita state revenues, it ranks **last** in the percentage of state and local revenue allocated to public schools. (Pages 15-19)
- **FACILITIES.** Hawaii's school facility problems are chronic. Over half of the State's schools need additional classrooms. One hundred of the State's schools were operating with enrollment at or above their rated capacity. Schools' ancillary facilities are woefully underdeveloped. Almost half of Hawaii's schools have substandard library facilities. Hawaii's secondary and elementary schools averaged **largest** and **third largest** in the nation respectively. (Pages 19-23)
- **SCBM.** Since School/Community-Based Management was initiated in 1989, over 200 schools (84%) have committed to the process, and 150 schools (60%) were implementing SCBM by the end of the 1995-96 school year. (Pages 26-27)
- **SCHOOL COMPLETION.** The proportion of high school seniors completing school is over 95%, and almost 80% of public school seniors intend to continue their formal education. (Pages 28-31)
- **STUDENT DISCIPLINE.** The overall rates of disciplinary suspension increased in 1995-96 after declining in 1994-95. Most of the increase was for offenses involving illicit substances (mostly tobacco) or violations of order (disorderly conduct, insubordination). Offenses involving violence or property were stable, and attendance violations declined slightly. (Pages 31-33)

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I. Introduction

Purpose

The Superintendent's Report on School Performance and Improvement is prepared as part of the Department's initiative to develop a Comprehensive Assessment and Accountability System for the State's schools. The assessment and accountability system is being developed in accordance with State laws¹ to inform the people about the performance of **individual** schools and the schools collectively. This report has two purposes:

- (1) to report indicators of school processes and educational outcomes that reveal trends, progress, and problems of the State school system; and
- (2) to provide information on how the State compares to the nation and to states with similar characteristics on indicators of *process* and *outcomes*.

This report is about progress toward the goals of the State's public schools. Its purpose is to inform. It takes account of schooling context and identifies process indicators that warrant the attention of policymakers. Decisions on what action is required by the results reported here can be made only by those who make and affect policy for Hawaii's public schools: the Board of Education, the Legislature, and the Governor.

Data Sources

The information in this report comes primarily from Department of Education records and from the National Center for Education Statistics for comparative state data. Sources other than Department records are footnoted, and data supporting the graphs presented in this report are tabled in the appendix.

Data regarding individual schools are reported in *School Status and Improvement Reports* (SSIRs), which were created by the Board of Education as reports from the individual schools to their communities. *School Status and Improvement Reports* for all State schools are presented to the Board, the Governor, and the State Legislature annually. The 1995-96 SSIRs have been prepared concurrently with this report. Complete sets of the reports are available at selected public libraries, and individual school reports are available at school offices.

¹ This report is required by §302A-1004, Hawaii Revised Statutes. The development of an educational accountability system, already underway by the Department, was requested by Act 371, Session Laws Hawaii 1989. The present system of reports was institutionalized by Act 364, Session Laws Hawaii 1993, as amended by Act 272, Session Laws Hawaii 1994.

I. Introduction

Focus

The annual reports in this series have established a framework for analyzing and reporting in terms of *context*, *process*, and *outcome* indicators.

- *Context* indicators reflect conditions like the demographic characteristics of the students or community; these are typically conditions over which the school has no control.
- *Process* indicators reflect conditions and inputs that are under the control of the school; these include school resources, facilities, and priorities.
- *Outcome* indicators reflect the results of school endeavors; these include such measures as attendance, performance on achievement tests, and completion rates.

Some indicators that represent *context* conditions for schools are *process* when the focus of accountability is the Department or the State. For example, the number of teachers assigned to a school is fixed by formula established by law. This makes the staffing level a matter of *context* for both the individual school and the Department, since they are bound by the legal formula. However, when comparing Hawaii to other states or the nation, staffing levels are matters of *process*, since they are well within the State government's power to change. Such shifts in perspective will be noted where they are relevant in this report.

Comparisons with Other States

Where comparisons of Hawaii's circumstances with those of other states are warranted, data from Hawaii are compared to the national average and used to rank Hawaii among the fifty states. In addition, specific comparisons will be made with three states that are comparable to Hawaii in K-12 school enrollment, population, and *per capita* wealth. These states are Nevada, New Hampshire, and Rhode Island.

II. Context Indicators

School Organization

This report covers public education in kindergarten through 12th grade. The data summarized in this report came from 243 public schools located in seven school districts for School Year 1995-96. Although Hawaii's public schools can be loosely classified as elementary, intermediate, or high schools, the ranges of grades in schools vary. The patterns of grade level organization of schools during the 1995-96 school year are shown in **Table 1**.

Table 1. Organization of Hawaii's Public Schools, School Year 1995-96

GRADE LEVELS INCLUDED												
K	1	2	3	4	5	6	7	8	9	10	11	12
Linapuni School 227 pupils						15 schools median size: 821 pupils			26 schools median size: 1,755 pupils			
37 schools median size: 578 pupils							14 schools median size: 988 pupils					
125 schools, median size: 571 pupils							9 schools, median size: 1,022 pupils					
8 schools, median size: 612 pupils												
Pa`auilo Elementary & Intermediate School, 238 pupils												
Kula Kaiapuni `O Anuenue (Hawaiian Immersion), 177 pupils												
6 schools, median size: 386 pupils												

Generally, schools that have wider grade ranges (K-8, K-12, or 7-12) serve rural areas. The exception is Kula Kaiapuni `O Anuenue, the new Hawaiian Immersion School in Honolulu. The prevailing pattern of school organization in urban areas has three levels: elementary schools with grades K-5 or K-6, intermediate or middle schools with grades 6-8 or 7-8, and high schools with grades 9-12. In 1995-96, three multi-grade schools divided into smaller units. Honoka`a and Kohala Schools (both formerly K-12) divided into K-6 elementary and 7-12 secondary schools; Konawaena High & Intermediate School separated into a high school and a middle school. In addition to the "regular" schools, there are five special program centers that are not organized by grades. Student

II. Context Indicators

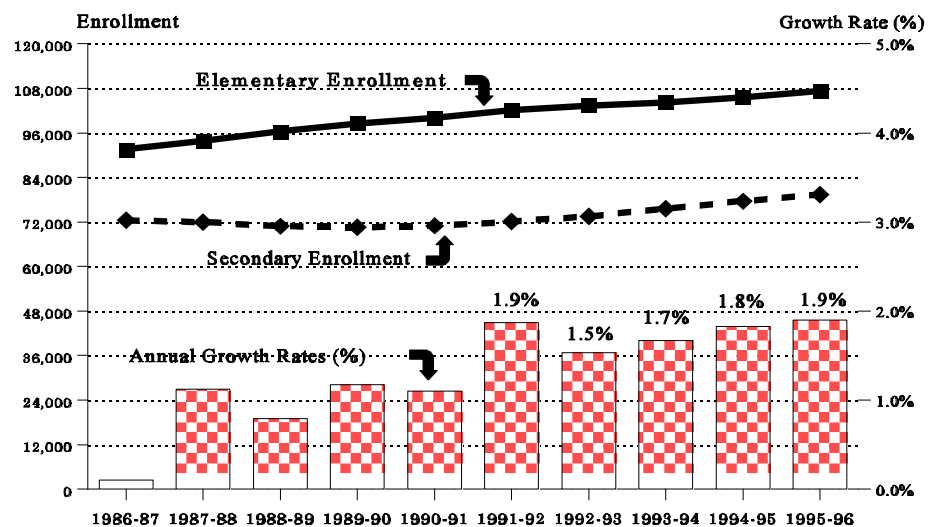
information for the special centers is included in the data reported below; but some data, such as test scores, are not appropriate for these units and are not included in this report.²

Students

Enrollment

The pattern of enrollment in Hawaii's public schools, by level, from 1986-87 through 1995-96 is shown in **Figure 1**. Enrollment in elementary grades has been increasing throughout the last nine years. While secondary school enrollments were decreasing in the late 1980s, they apparently "bottomed out" in 1990 and should grow steadily for the remainder of the decade.

Figure 1. Public School Enrollment by Level and Total Enrollment Growth 1986-87 to 1995-96



Grade-by-grade enrollment data indicate that the current peak enrollment is in kindergarten and that kindergarten enrollment has been increasing since 1990-91. The data on the total number of births in Hawaii (Appendix, Table 7) corroborate this

² The five special program centers are:

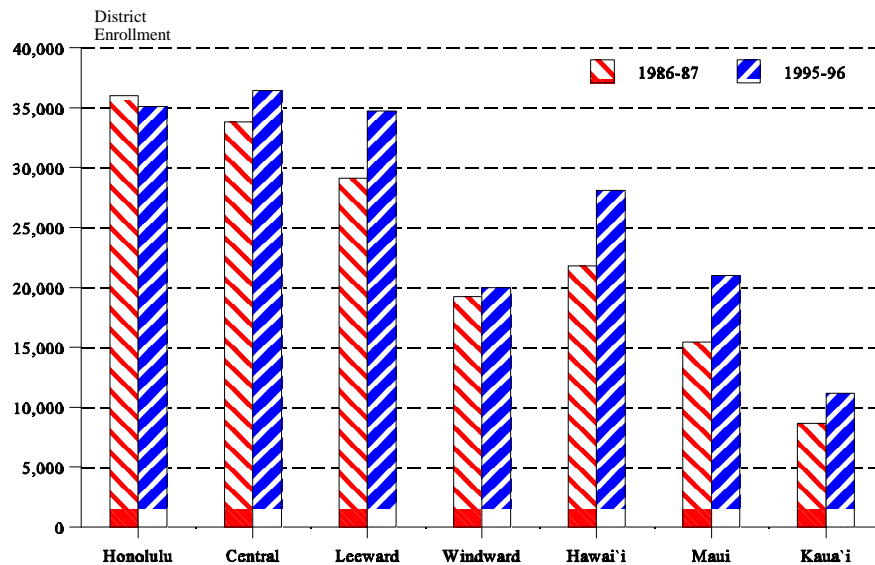
- Hawaii State Hospital
- Jefferson Orthopedic Unit, located at Jefferson Elementary School
- Olomana School, which serves the State juvenile detention center
- Pohukaina School, a special education unit at Kaimuki Intermediate School
- The Hawaii Center for the Deaf and the Blind

II. Context Indicators

expectation of continued enrollment growth for the next decade. The number of births showed steady increases until 1991 and then began to decline gradually. This should foreshadow a temporary end to increases in the size of new cohorts beginning with the Kindergarten class of fall, 1996. It will, however, take several years for overall enrollment to level off.

In addition to overall enrollment growth, there has been a marked shifting in the geographical distribution of Hawaii's student population. How enrollment has changed in the seven districts over the last decade is shown in **Figure 2**. While Honolulu District

Figure 2. Enrollment 1986-87 and 1995-96, by District



enrollment declined by just under 1,000 students over the last ten years,³ Hawai'i District increased by nearly 6,300 students, and Maui and Leeward Districts increased by over 5,500 each. This means that the need for facilities will be greater than is indicated by overall enrollment alone. We cannot accommodate the new students enrolling for school on Maui with the excess classrooms available in East Honolulu. If we fail to plan for population shifts that we know will take place and that may even be *intended* (e.g., Kapolei), we shall experience local overcrowding of facilities and inequities of

³ While Honolulu District enrollment declined between 1986-87 and 1991-92, it has since begun to grow again; its enrollment increased by 3.3% between 1991-92 and 1995-96 .

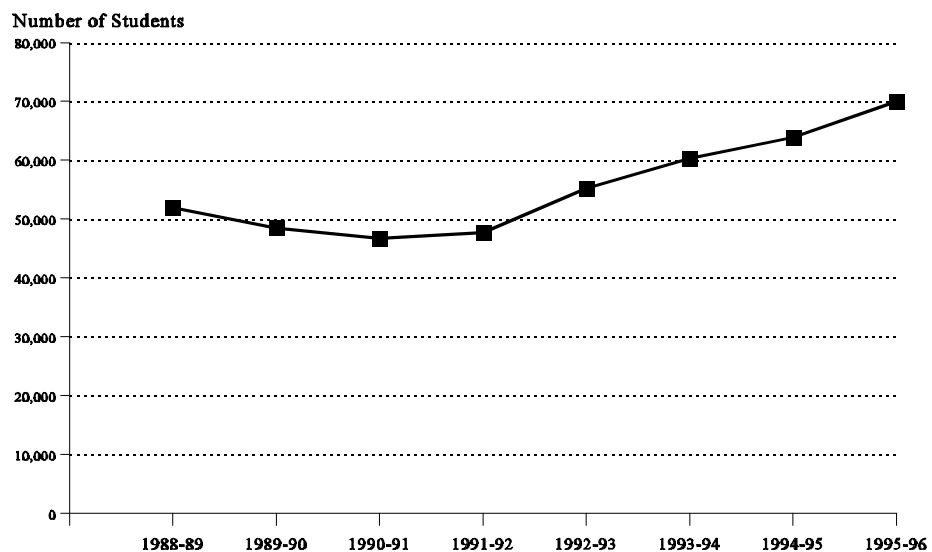
II. Context Indicators

opportunity that favor students in stable or declining areas over those in regions experiencing rapid growth.

Special Needs

There are three student subpopulations that are of special concern. These are students from poor economic circumstances (those who receive school lunch subsidies), students with limited English proficiency, and students who need special education services. The growth in the numbers of Hawaii's students receiving lunch subsidies over the last eight years is presented in **Figure 3**. The numbers of students needing special education

Figure 3. Students Receiving Lunch Subsidies, 1988-89 to 1995-96



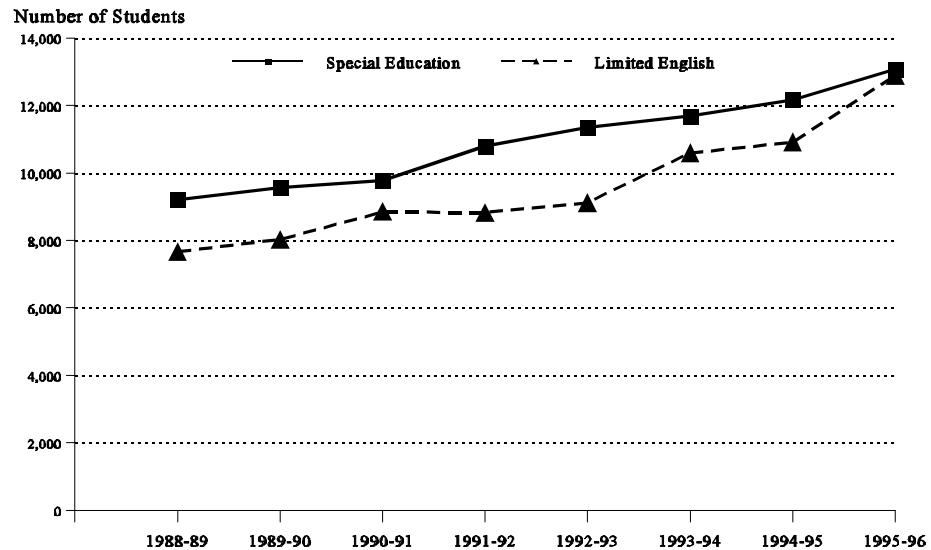
services and the numbers of students with limited English proficiency are shown in **Figure 4**. It is readily apparent that all three groups are growing. The extent of that growth has major implications for public education. Over the last seven years, while overall enrollment was increasing by 11.6 percent:

- The number of students who receive lunch subsidies has increased by nearly 35 percent;
- The number of students needing special education services has increased by over 42 percent; and

II. Context Indicators

- The number of Hawaii's students who have limited English proficiency has increased by over 68 percent.

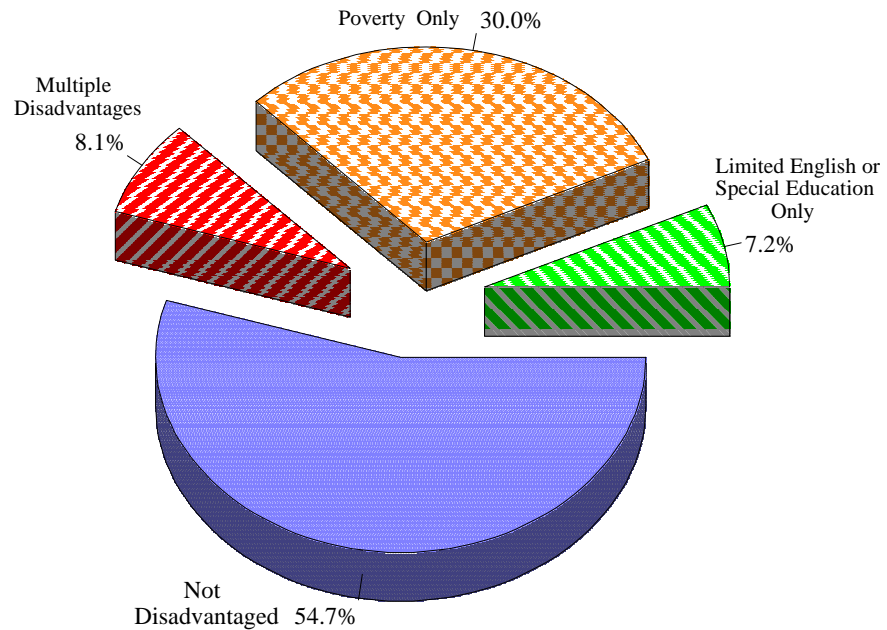
Figure 4. Special Education and Limited English Proficiency Students
1988-89 to 1995-96



Put simply, the numbers of students most in need of special services are increasing much more rapidly than is the population of students at large. This means that the task facing the public schools is steadily becoming more difficult and potentially more costly. Students in each of these categories of special need represent an educational task and responsibility that is more demanding than that of educating a typical English speaking, middle class child of average intellect and ambition. Children from impoverished families tend to start school already behind their peers in academic development. The seriousness of the increasing prevalence of disadvantage among Hawaii's public school students is shown in **Figure 5**.

II. Context Indicators

Figure 5. Disadvantages Affecting Hawaii's Public School Students, 1995-96

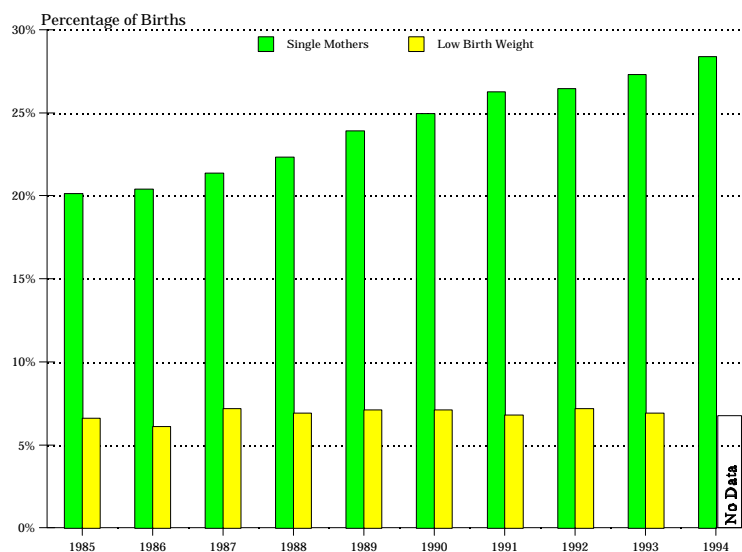


A bare majority of Hawaii's public school students do not bring with them at least one of these three types of educational disadvantage. The growth in the numbers of disadvantaged students in Hawaii's school population presents a particular challenge to the State's schools in view of the rising expectations that the public has for what schools can achieve and the State's continuing fiscal problems. Disadvantaged students require services that are more costly than the norm, and in many cases these students are "entitled" to whatever services are required to meet their specific needs. It will be challenging indeed to meet the needs of Hawaii's students, both advantaged and disadvantaged, with the increasingly restricted funding that the State has and is willing to devote to public education.

II. Context Indicators

Two birth statistics that are likely predictors of special needs among school-aged children are the incidence of low birth weight—under 2,500 grams (5.5 lb.)—and births to single mothers. The incidence of low birth weight is associated with a number of health and developmental problems in young children. Births to single mothers reflect weak family structure and especially the likelihood that the children will grow up poor. Data on these two indicators are given in **Figure 6**. The data (Appendix, Table 7) indicate a fairly stable

Figure 6. Incidence of Low Birth Weight and Births to Single Mothers



proportion of children with low birth weight but steadily growing numbers and proportions of children born to single mothers. The 1994 rate of births to single mothers in Hawaii (28.4%) was almost three times what it was in 1970 (9.6%).⁴

Student Transiency

There is a common perception that Hawaii's students are unusually mobile. We cannot verify this because we do not have comparison data from other states, but we do have estimates of the proportion of Hawaii's students who were enrolled in the same school for the entire year.⁵ These proportions for the last five school years are shown in **Figure 7**.

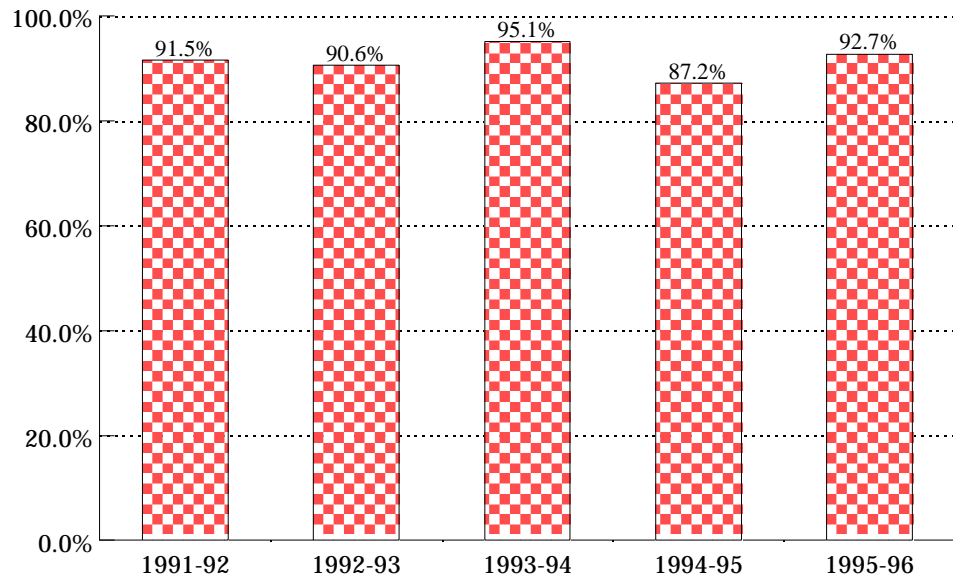
⁴ Hawaii Department of Business, Economic Development and Tourism, *The State of Hawaii Data Book 1995: A Statistical Abstract*. Honolulu, 1967-, annual, Table 2.01, p. 58; Table 2.05, p. 61.

⁵ These estimates are calculated from counts of students who were enrolled in the same school in both September and June.

II. Context Indicators

In 1995-96, individual schools had from 71% to 100% of their students for the full school year. There were few differences among types of schools in the proportions of year-round students; statewide averages for elementary, intermediate, multi-grade and high schools

Figure 7. Students Enrolled in the Same School All Year



were all between 92% and 94%. The most significant factor influencing students' transiency is the demanding lifestyle of military parents; 10 of the 14 schools with less than 85% year-round students were schools serving military housing areas.⁶ The exceptions were Olomana School, at which students are expected to be transient, and three small schools (Ni`ihau, Ke`anae, and the Hawaii Center for the Deaf and the Blind) where a few transient students are a substantial percentage of the total. In any case, the data indicate that on average 92.7% of Hawaii's students were enrolled in the same school all year.

Ethnicity

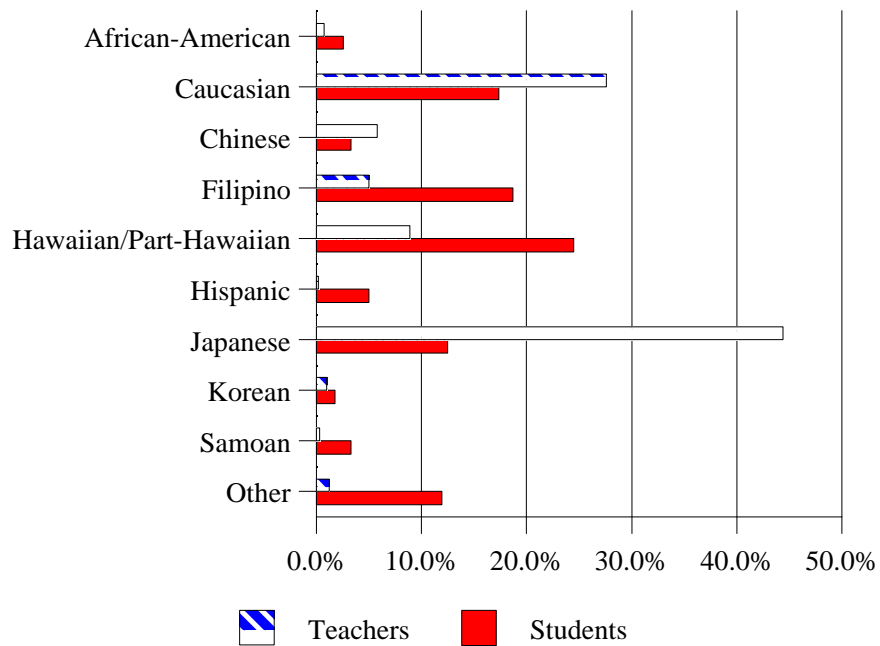
Hawaii's public schools have a very diverse population of students. Like the State's population as a whole, students come from a much wider set of ethnic backgrounds than

⁶ These schools were: Barbers Point, Hale Kula, Mililani-waena, Mokulele, Mokapu, Nimitz, Pearl Harbor Kai, Shafter, and Solomon Elementary Schools and Leilehua High School.

II. Context Indicators

is commonly encountered in the mainland United States. While Hawaii's teachers are also more ethnically diverse than their mainland counterparts, as a group they are both less diverse and ethnically different than their students. The proportions of students and teachers from different ethnic groups are shown in **Figure 8**.

Figure 8. Ethnicity of Hawaii's Students and Teachers, 1995-96



The main point to be considered from these data is that Hawaii's student population reflects the current educational challenge and the demography of the future, while the State's teaching population represents the demography and educational opportunities of the past. A very substantial part of the challenge facing Hawaii's public schools and teachers is to reach across differences of background and culture to make educational and economic opportunity real for those who will be Hawaii's citizens of the 21st Century.

III. Process Indicators

Staff

Teachers

In January 1996, there were 10,600 teachers in Hawaii's public schools. Of these teachers:

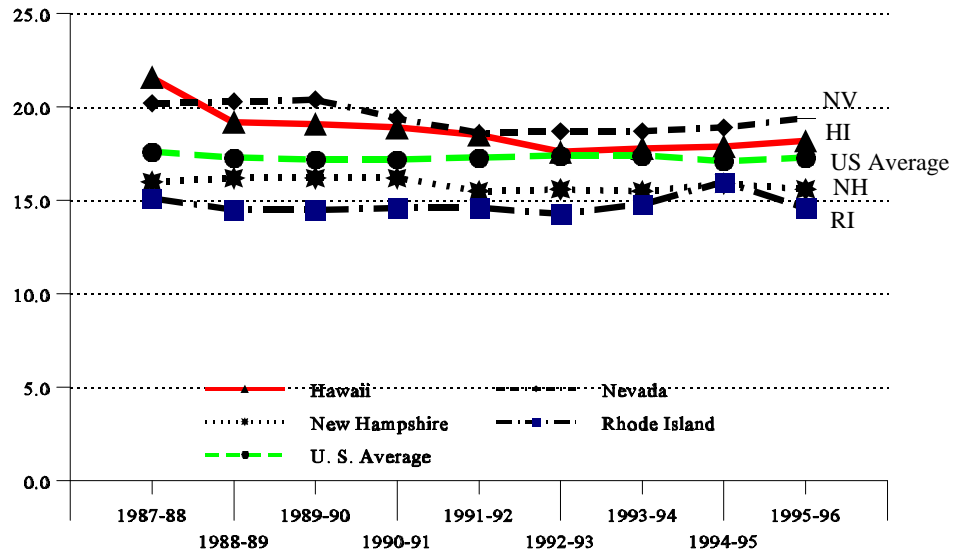
- the average length of service was 11½ years;
- 61% had been teaching in their current schools for at least five years;
- 71% were teaching subjects in the regular instructional program;
- 16.7% taught in the supplementary program (remedial instruction, etc.);
- 12.4% were teaching in special education; and
- about 2% were assigned to school complexes to serve students in more than one school.

A widely used indicator of school or school system *process* is the ratio of pupils to teachers.⁷ The ratio for the system as a whole, as reported to the U.S. Department of Education, is shown and compared with those of comparable states and the United States average in **Figure 9**. In the first half of this decade, Hawaii had improved its pupil to teacher ratio and its standing on this indicator relative to other states. Those gains now appear to be slipping away.

⁷ Pupil/teacher ratios are *not* measures of class size. Class sizes can be considerably larger than the overall pupil/teacher ratio for two reasons. In Hawaii's secondary schools, teachers usually teach six periods of a seven period day (leaving one period for preparation). Also, for a given overall pupil/teacher ratio, mandated small classes in some areas, e.g., special education, necessitate larger classes in others.

III. Process Indicators

Figure 9. Pupil to Teacher Ratios in Hawaii and Comparable States



In 1987-88, Hawaii ranked 48th among the 50 states in pupil to teacher ratio. By 1992-93, it had improved its rank to 35th, having lowered its pupil to teacher ratio from 21.6 to 17.6. That improvement was the result of both deliberate policy and major effort, but the relative gain was also partly the result of increasing enrollments and financial difficulties in other states. Those two factors are now affecting Hawaii as well. In 1994-95, Hawaii's pupil to teacher ratio began to rise again, and by 1995-96 the ratio had risen to 18.2, lowering Hawaii's rank among the states to 41st.

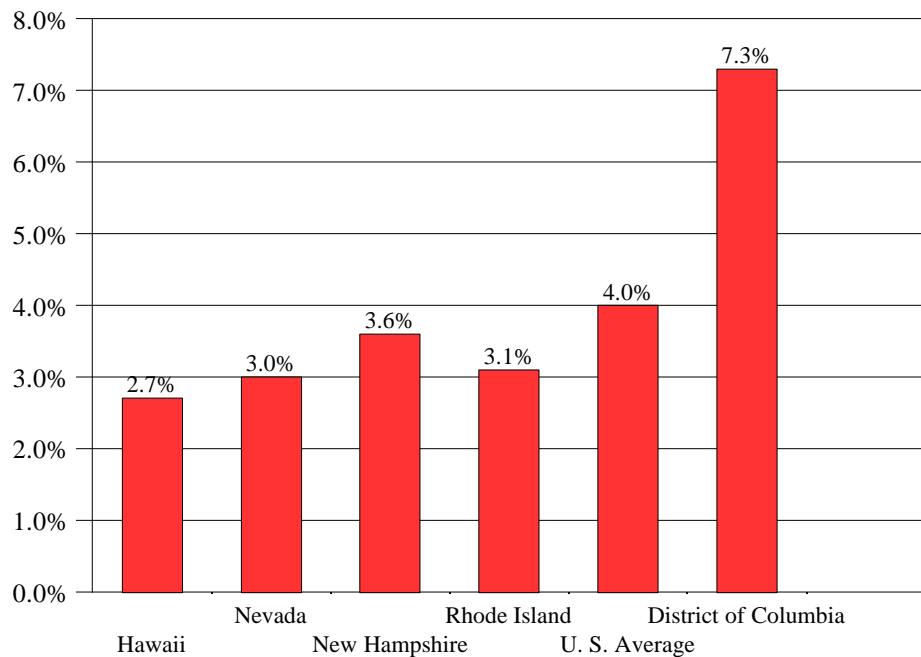
Administrators

In 1995-96, there were 638 full-time equivalent school level administrative positions in Hawaii's public schools, of which 505 were for principals or vice-principals. The remainder were for athletic directors, registrars, or student activity coordinators. If administrative responsibilities were evenly divided, this would mean that on average each principal or vice-principal in Hawaii was responsible for overseeing the education of just under 370 pupils and supervising 21 teachers—about 20 pupils and 1 teacher lower than the levels of the previous four years. This may be a result of decisions on position allocations that are now made at the school level under the provisions of "lump sum" school budgeting.

III. Process Indicators

There is a common belief that public education in Hawaii is saddled with a huge bureaucracy, but the facts do not bear this out. The number of administrators as a percentage of the professional staff in Hawaii's school system is actually smaller than in most school systems of similar size to Hawaii's. Figure 10 shows the 1994-95 percentage of professional staff performing district administrative functions in Hawaii and comparable states. Hawaii's percentage (2.7%) is the lowest of the group and is well

Figure 10. Proportions of Professional Staff Performing District Administrative Functions, 1994-95



below the U.S. average of 4.0%. This is despite the fact that in Hawaii, alone among the states, the percentage includes *both* district and state administrators. The only other jurisdiction in which all levels of administration are included in the data, the District of Columbia, has 7.3% of its professional staff performing district administrative functions.⁸

The stability of school level administration is an important indicator of school continuity and curricular direction, and there has been substantial improvement on this measure. In the past six years, the percentage of schools with three or more principals in five years has

⁸ U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics, 1996*, NCES 96--133, Washington, DC: 1996, Table 82, p. 90.

III. Process Indicators

declined. In 1989-90 it was 38%; it is now 15%. This represents marked progress toward providing schools with stable leadership, and it has been achieved despite the State's early retirement program, which encouraged senior education officers to retire.

Hawaii's Fiscal Priorities and Public Education

It is a truism that the priorities of individuals and organizations are revealed in their budgets. Reviewing the amounts budgeted for public education in Hawaii over the years suggests quite strongly that public education does not hold a high place in the priorities of the State's political leaders, neither over the long term nor in comparison with other states.

In the economic resources that it has, the State of Hawaii must be counted among the wealthy few. In 1995 it ranked tenth among the states in personal income *per capita*, and in 1994 it ranked second in state general revenue *per capita*.⁹ In comparison to its wealth, the economic effort that Hawaii has historically exerted on behalf of the children in its public schools is less than mediocre. The contrast between the State's wealth and its expenditures for public education is starkly evident in **Table 2**.¹⁰

Table 2. Per Capita Revenue and Expenditures for Hawaii and the U.S., School Year 1991-92

Item	U.S. Average	Hawaii	Hawaii's Rank	Ratio to U.S. Average
Revenue				
Total	\$4,641.05	\$5,622.41	5	121.1%
General	\$3,113.24	\$4,075.15	4	130.9%
Expenditures				
General	\$3,825.70	\$5,212.34	5	136.2%
Capital Outlay	\$458.31	\$1,334.06	1	291.1%
Higher Education	\$330.60	\$440.93	10	133.4%
K-12 Education	\$896.57	\$702.20	47	78.3%

In 1991-92, the latest year for which complete data are available, the State of Hawaii ranked fourth or fifth in *per capita* revenues and expenditures and first in *per capita*

⁹ U. S. Bureau of the Census, *Statistical Abstract of the United States: 1996* (116th edition) Washington, D.C., 1996, Table 699, p. 453 (income), Table 485, p. 306 (revenue).

¹⁰ U.S. Bureau of the Census, *Government Finances: 1991-92*, Series GF/92-5, U.S. Government Printing Office, Washington, D.C., 1996, Table 32, p. 105; Table 33, p. 107.

III. Process Indicators

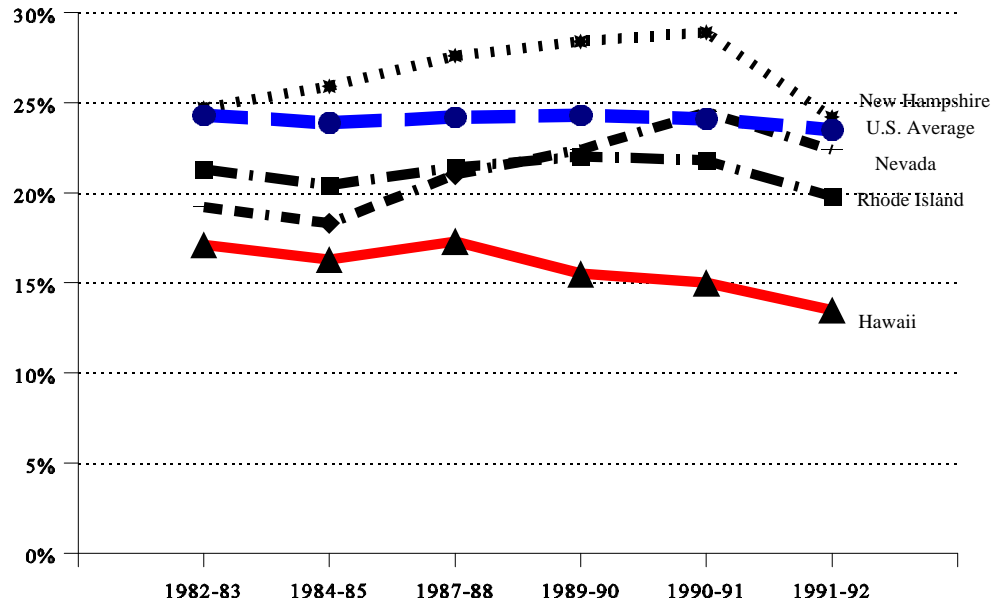
capital outlays by state and local government. It ranked 47th in *per capita* expenditures for public elementary and secondary education. While Hawaii spends almost three times the national average *per capita* on capital outlay (construction), it spends less than 80% of the national average on public education. This disparity between the State's wealth and its expenditures for public education is of long standing. In 1920, the then U.S. Bureau of Education reported that while Honolulu was much above the average city in taxable wealth, it was "far below the average in the amount expended for school purposes."¹¹

Another indicator of the priority that state policy makers give to public education is the proportion of total state and local revenues that are allocated to the operation of public elementary and secondary schools. As with spending in relation to wealth, on this measure Hawaii shows a decidedly low priority for public education. The proportions of state and local revenues allocated to public education by Hawaii and comparable states from 1982-83 to 1991-92 are presented in **Figure 11**. On this measure of support for public education, Hawaii has consistently ranked *last* among the states. Moreover, the index of education's priority in Hawaii has obviously declined substantially over the last decade. It is clear that Hawaii could afford to commit greater resources to support and improve its public schools. Its leaders have chosen not to do so.

¹¹ U.S. Bureau of Education, *A Survey of Education in Hawaii*, U.S. Government Printing Office, Washington, D.C., 1920, p. 105, cited in George Cooper and Gavin Daws, *Land and Power in Hawaii*, Honolulu, University of Hawaii Press, 1985, p. 37.

III. Process Indicators

Figure 11. Percentage of State and Local Revenue Allocated to Public K-12 Education



Current Expenditures per Pupil

The standard index of funding for public education (without regard to the state's ability to pay) is the operating expenditures per pupil, reported in either dollars per average daily member (ADM) or dollars per average daily attendance (ADA).¹² Between 1980-81 and 1992-93, Hawaii's operating expenditures per pupil grew in parallel with the State's economy and somewhat in excess of tax revenues. During that period, Hawaii's economic base (measured as Gross State Product/ADM) expanded by 124%, State tax revenues increased by 92%, and operating expenditures per pupil increased by 123%. Since 1992-93, expenditures per ADM have declined, and they are now at a level 110%

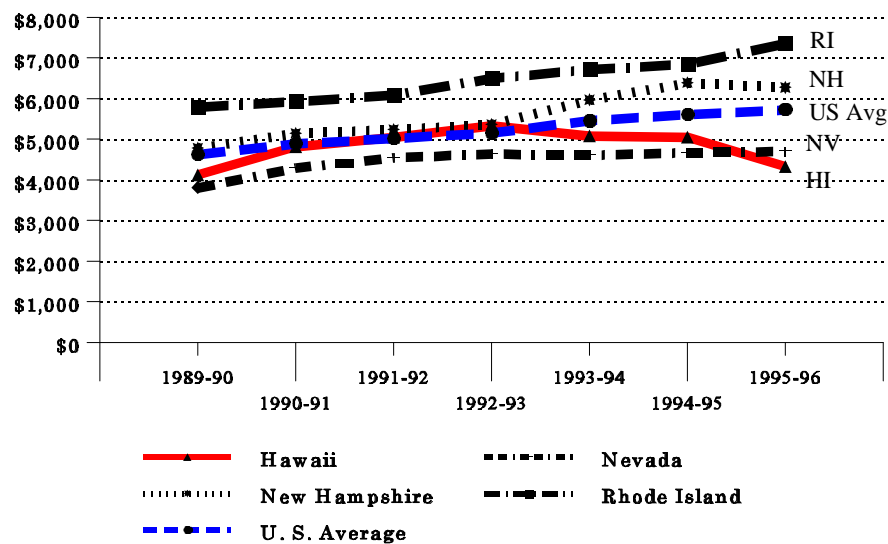
¹² Dollars per ADM results in a slightly lower value for per pupil expenditures than does dollars per ADA because average daily membership (enrollment) is always larger than average daily attendance.

III. Process Indicators

over what they were in 1980-81. Current data on the Gross State Product and State tax revenues are not yet available.¹³

As one might expect from the foregoing discussion of Hawaii's fiscal priorities, the State has never spent discernibly more per pupil than the national average on public education. Hawaii's per pupil spending has increased over the last four decades, as has educational spending throughout the nation. However, Hawaii's spending relative to the national average declined markedly between 1979-80 and 1989-90 and only gained relative to the national average between 1990 and 1993. Data documenting the State's per pupil expenditures over the three decades from 1959-60 to 1989-90 are given in the Appendix (Table 12). The trend since 1989-90—shown in **Figure 12**—had been positive before Hawaii's recent fiscal difficulties. From 1989-90 through 1992-93, Hawaii's per pupil

Figure 12. Expenditures per Pupil, Recent Trend



expenditures gained against the national average, rising from 31st among the states to

¹³ Hawaii Department of Business, Economic Development and Tourism, *The State of Hawaii Data Book 1995: A Statistical Abstract*. Honolulu, 1967–, annual, Table 13.02, p. 346 (GSP), Table 9.01, p. 253 (revenues), and Table 3.16, p. 100 (school expenditures). National Center for Education Statistics, *State Comparisons of Education Statistics: 1969-70 to 1993-94*, U.S. Department of Education, Office of Educational Research and Improvement, NCES 95-122, June 1995, Table 36, pp. 86-88. National Center for Education Statistics, *Public Elementary and Secondary Education Statistics*, annual: NCES 96-238 (1996), Tables 6&7, pp. 8-9.

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19th. Since then, the State's per pupil expenditures have actually declined by about \$1,000 per pupil, plummeting Hawaii to 44th among the states, 24.6% below the national average, in 1995-96. Hawaii's rise to the median level among the states in its funding of public education was short-lived, and the recent political promise to provide the State's children with public schools "second to none" echoes with a distinctly hollow sound.

The dismal portrait of Hawaii's fiscal priorities presented above is corroborated by the work of policy analysts elsewhere. In a just-released review of the education systems in all 50 states commissioned by the Pew Charitable Trusts, the editors of Education Week gave Hawaii's school funding a grade of D- for adequacy, noting, as we have here, that the State ranks consistently last in the percentage of state and local funding allocated to public schools. By implication, they conclude that Hawaii provides the poorest support for public schools of any state in the nation. They went on to note that Hawaii's fiscal policy-makers lack incentive to do better by public school children because the children of the affluent and powerful are well served by the State's highly regarded private schools.

Facilities

School facilities, like other elements of infrastructure, are easily taken for granted but need sustained attention in the State's priorities. This is demonstrated quite poignantly by the condition and adequacy of school facilities. Foresight and commitment are needed to plan and build schools so that they will be ready **where** and **when** they are needed. It is equally important to maintain schools to be both useable and up-to-date for succeeding generations. In this domain, the low priority historically given to providing for Hawaii's public schools is evident. Hawaii's schools have some serious deficiencies.

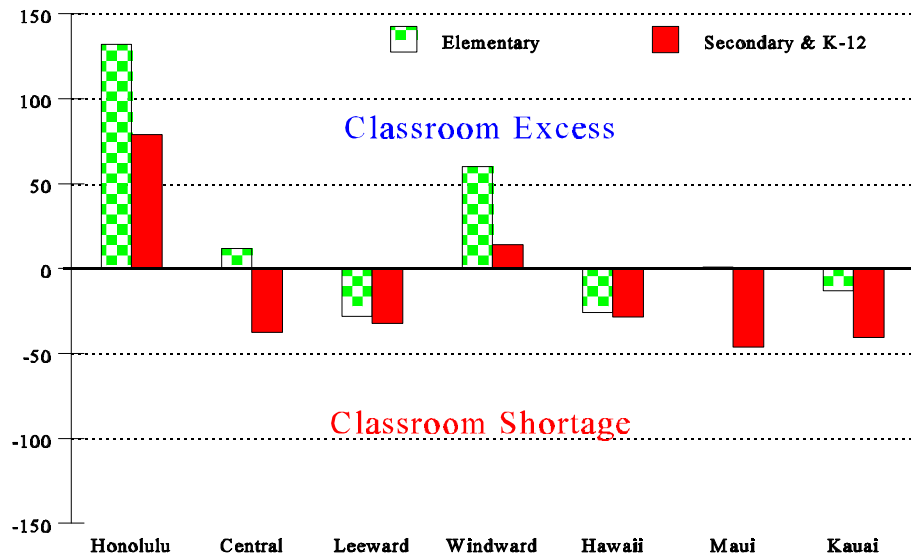
Classrooms

Over one-third (85) of the State's 244 schools have fewer classrooms than they need. The number of classrooms needed by a school is calculated from the number and types of teachers assigned to the school, and the formula allows for sharing rooms. The net excess or shortage of classrooms, by level, for the seven school districts is shown in **Figure 13**. Over 1,250 "portable" classrooms are included in the inventory of available classrooms. Even with the portables, there is a substantial net shortage of classrooms. The most serious shortages appear, not surprisingly, in locations where there has been appreciable

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recent growth in the population of school-aged children. The State's building program simply has not been able to keep up with the need.

Figure 13. Net Classroom Excess or Shortage by District



Another measure of the adequacy of school facilities is the ratio of the school's enrollment to its rated capacity. Capacity is calculated by multiplying the number of classrooms by the State's standard for class size.¹⁴ This calculation, which allows for smaller classes for lower grades and special education, estimates an upper limit for a school's desirable enrollment. It is noteworthy that in 1995-96, 100 schools were operating at or above their rated capacity, 53 of which were operating at more than 10% over capacity. The shortage of classrooms in Hawaii is real.

Other Facilities

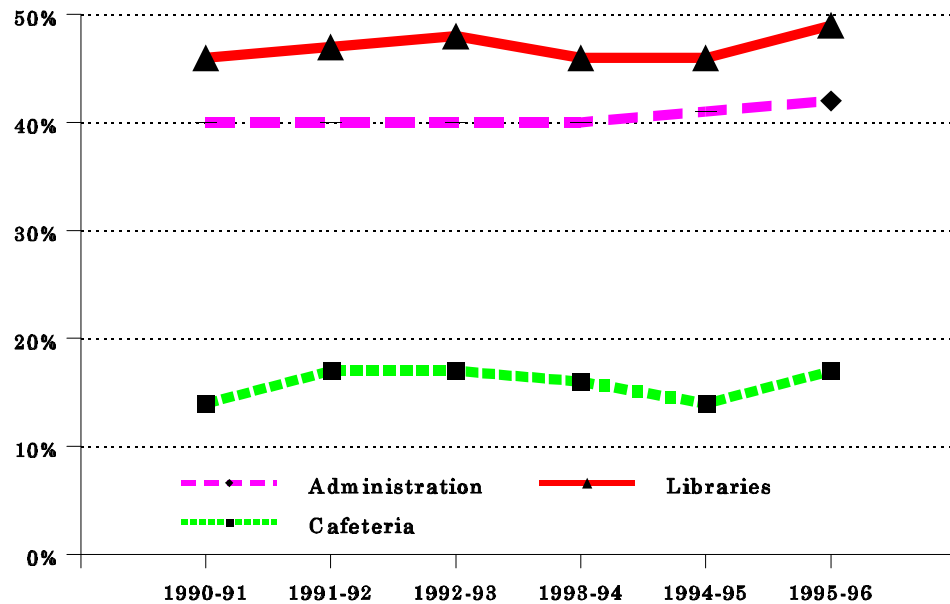
Our schools' ancillary facilities remain underdeveloped, despite media attention and school and department efforts. Many schools have undersized or temporary libraries or are without adequate office space. The proportions of schools with library, cafeteria, or administrative facilities that are less than 70% of the State standard for schools of their size over the period from 1990-91 to the present are displayed in **Figure 14**. The

¹⁴ The current policy is target class sizes of 20 in grades K through 2 and 26 in higher grades. The target class size for special education is 12.

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proportions have actually worsened in the last year, although some of the more egregious instances have been addressed. Despite years of attention to the issue of school facilities, over 40% of all schools still lack adequate libraries or administrative space.

Figure 14. Percentages of Schools with Substandard Facilities, 1990-91 to 1995-96

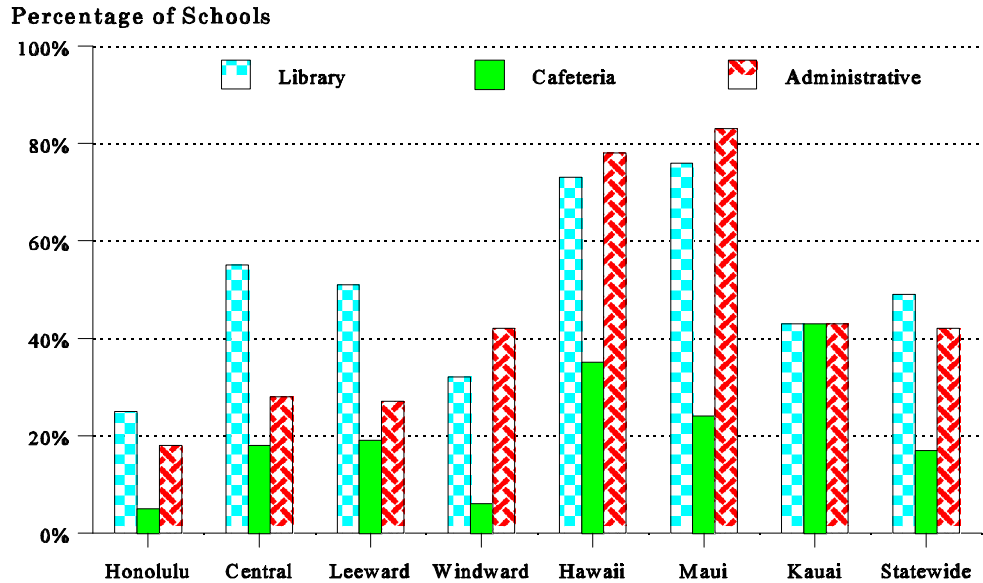


This problem is not equitably distributed. It affects elementary schools more than high schools and some districts more than others. Eighty-three of 161 elementary schools, 11 of 25 multi-grade schools, and 15 of 52 secondary schools have less than 70% of the library space required by State standards.

The distribution of facility shortfalls by district is shown in **Figure 15**. In Honolulu District, with a nominal excess of classrooms and stable enrollments, one elementary school in five has inadequate library space. In Maui District, the ratio is seven in ten. As with libraries, Hawaii and Maui Districts show the most severe shortages of administrative space (offices, workrooms, storage, etc.), but the problem affects elementary schools in all districts.

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Figure 15. Percentages of Schools with Substandard Facilities by District
School Year 1995-96



The percentage of schools with inadequate cafeteria space (less than 70% of State standard) is lower than with libraries and administrative space—41 schools remain without adequate eating facilities. However, this shortfall also differentially affects schools in Hawaii, Maui, and Kauai Districts, and recent enrollment increases have begun again to strain the capacity of existing facilities.

School Size

There is a recurring belief among fiscal policy makers that schools ought to be like factories in organization, management, and size. At the core of this thinking is the belief that education, like manufacturing, is subject to “economies of scale,” i.e., that larger schools can achieve the same educational results as smaller ones at lower cost per pupil. Research on cost economies is inconclusive, but studies of school size have shown clearly that smaller schools have better student attendance, satisfaction, and extracurricular participation than larger schools—and in elementary schools, better achievement as well. Definitive research has shown also that small classes (13 to 17) have substantial and

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lasting benefits for children in early grades, and that they have greater benefits for disadvantaged children—about double—than for those from advantaged backgrounds.¹⁵

Previous reports have noted that Hawaii has uncommonly large schools. Between 1988-89 and 1995-96 that condition has worsened considerably. Hawaii's secondary schools have by far the *largest* average size in the nation—more than 20% larger on average than those in second ranked Florida and over 90% larger than the national average. The State's elementary schools, averaging 621 pupils, ranked third largest in the nation behind only those of Florida and Georgia, and are more than 30% larger than the national average.¹⁶

Instructional Time

Schooling requires time: time for exposure to ideas, time for thought and work, and time devoted to acquiring the skills and attitudes required for life in modern society. Here we have focused on two aspects of instructional time, the time allotted by the State system for schooling (i.e., the school year) and the proportion of that time of which students make use (i.e., the amount of time they attend school). If the time that Hawaii allows students to attend school is less than that of other states, our children are at a disadvantage. But likewise, if children do not make use of the school time they have by not attending, they make their own disadvantage. In the data that we have, there is considerable room for improvement on both counts.

Length of School Year

The amount of instructional time in Hawaii's school year lags well behind the rest of the states. According to the latest data available, that for 1990-91, Hawaii ranked *last* in the nation on this indicator of school *process*. Since that time, Hawaii has increased its school year by one day to 176 days, and the recent contract settlement with teachers will add an additional seven days. Altogether, these actions should raise Hawaii to what the national average was in 1990-91.

¹⁵ W. J. Fowler and H. J. Walberg, "School Size, Characteristics, and Outcomes," *Educational Evaluation and Policy Analysis*, **13**, 2, (Summer, 1991): 189-202. See also W. J. Fowler, "What Do We Know about School Size? What Should We Know?" paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA, April 22, 1992. For the effects of small class size on children in early grades, see F. Mosteller, "The Tennessee Study of Class Size in the Early School Grades," *The Future of Children*, **5**, 2, (Summer/Fall, 1995): 113-127.

¹⁶ U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics, 1996*, NCES 96--133, Washington, DC: 1996, Tables 96 & 97, pp. 106-107.

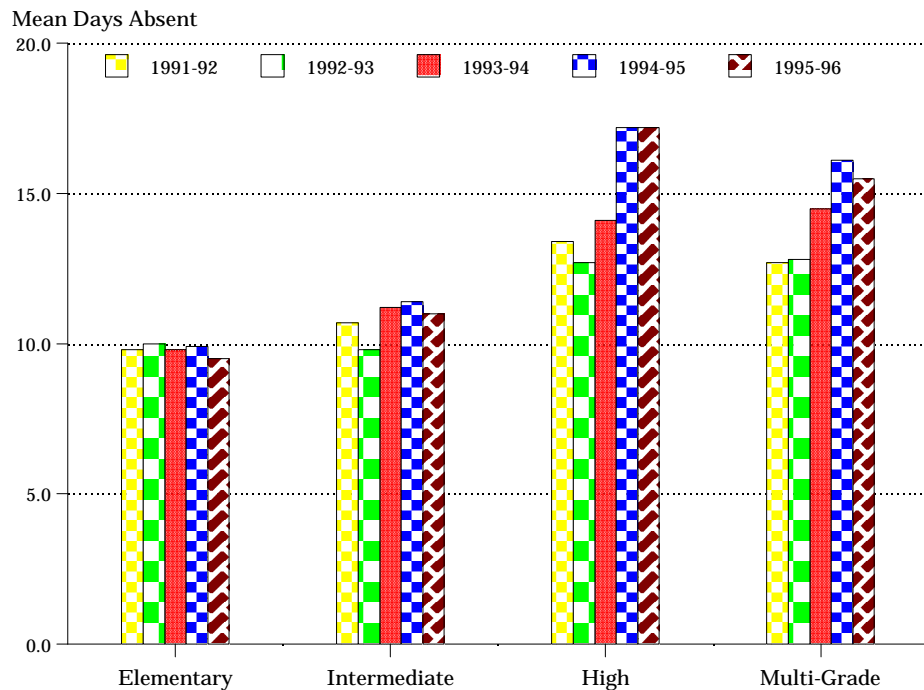
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Attendance

While Hawaii can be faulted for having a relatively short school year, there is also a problem with the use that students make of the time they have. While attendance rates for schools average over 90%, this still means that Hawaii's average student misses **over 10 days** of school per year, more than the difference between Hawaii's school year and the national average. As might be expected, the rates of absence vary with the level of the school.

The average number of days absent from school by school type for the last four years is shown in **Figure 16**. It is disturbing that students in high schools and multi-grade schools (K-8, K-12, or 7-12) miss, on average, over three weeks (15 days) of school per year. Worse, in 1995-96 there were 11 schools whose average rates of absence exceeded 20 days per year and three whose average rates exceeded 30!

Figure 16. Mean Number of Days Absent by School Type



There was a sharp increase in reported absence rates at multi-grade and high schools in 1994-95. This increase probably resulted from changes in attendance accounting rather

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than changes in underlying attendance rates. Attendance procedures have been quite varied and subject to error. The jump in reported absences in 1994-95 most likely resulted from schools' adoption of new school management software that necessitated changes in attendance counting. That notwithstanding, two things definitely need improvement here. We need to improve school attendance substantially, and we need to establish clear definitions and consistent procedures for our attendance taking as well.

School Improvement Priorities

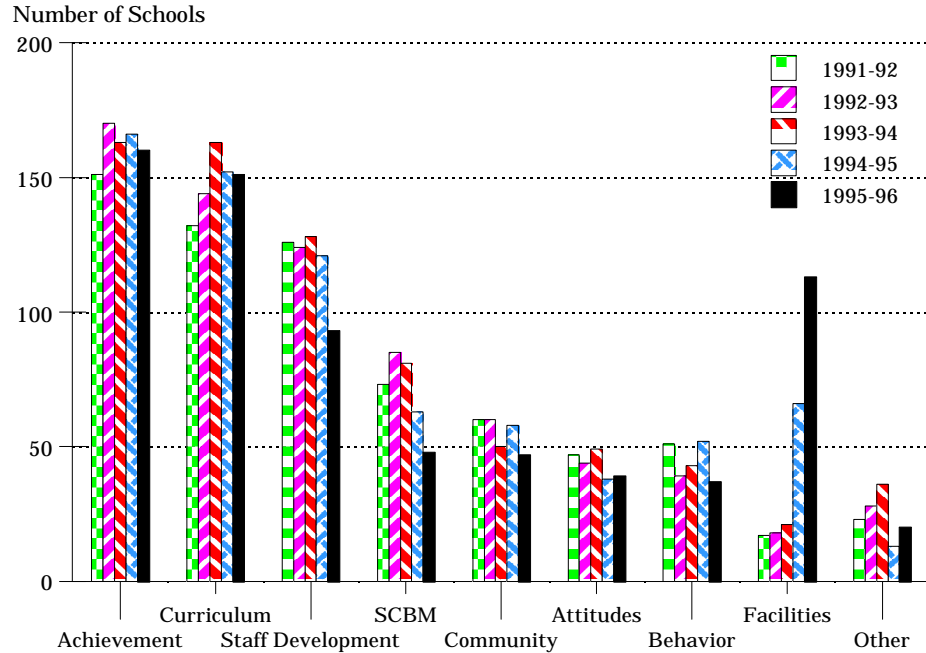
Among the more important elements of school process are the priorities that school staff and leaders use to guide their efforts over the year. In the *School Status and Improvement Reports*, school leaders identify and describe their school improvement priorities and efforts. The categories of concerns expressed in these short-term improvement priorities for 1991-92 through 1995-96 are tabulated in **Figure 17**. During most of this period, student achievement, curriculum, and staff development have dominated the list, along with the combination of School/Community-Based Management (SCBM) and community relations.

The various school improvement priorities shown in **Figure 17** are frequently both complementary and overlapping. In addition, they vary greatly in time scope. Student achievement is obviously a perennial issue in school improvement considerations, but it is not independent of the other concerns shown, such as school curriculum, student attitudes, or even facilities. The recent growth of concern about facilities in school improvement priorities reflects mainly the pressing need to bring schools up-to-date technologically, specifically with computer and telecommunication networks. This need is clearly related to both curriculum and student achievement in its focus on student's access to 21st century information technology, but it is also limited in duration. Once a school is brought on-line, concern with the facilities aspect is likely to fade and be supplanted by the continuing concerns of curriculum content made available by the new facilities and the student achievement resulting from their exposure to the wider array of resources

All of the components identified here are elements of schooling that school leaders believe need their attention and are within their power to change. The specific descriptions given on the *School Status and Improvement Reports* of school improvement priorities and activities are highly individual and particular to school situations and needs.

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Figure 17. Improvement Priorities of Hawaii's Public Schools, 1991-92 to 1995-96



SCBM

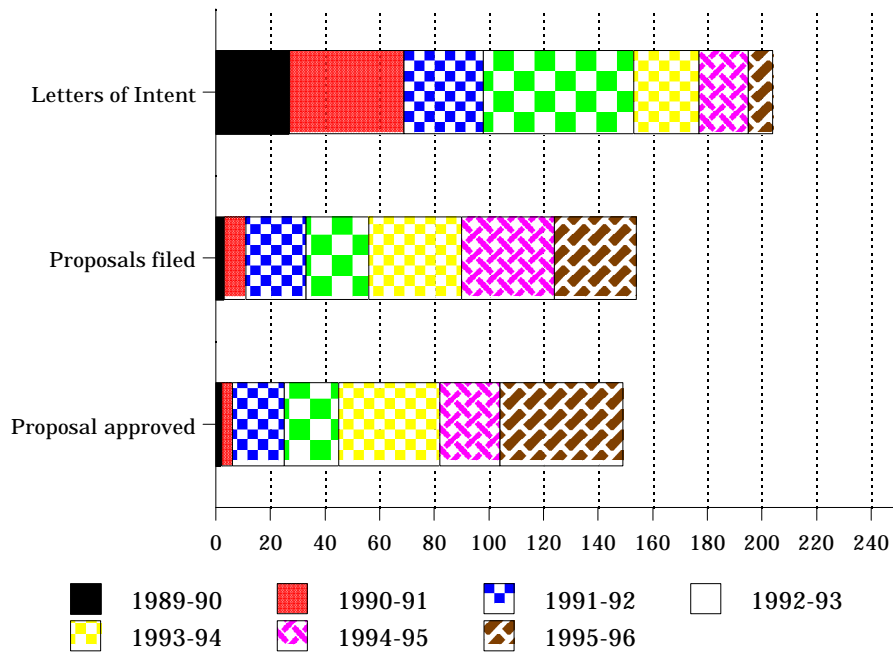
Probably the most important effort at school reform in Hawaii over the last 10 years has been the movement to School/Community-Based Management (SCBM). SCBM represents a major shift in the form of school governance intended to decentralize decision making and involve the entire school community. It was initiated by Board action and legislation in 1989, not merely to change governance, but also to focus entire school communities on school improvement. The process of becoming an SCBM school involves organizing the constituent groups, submitting a letter of intent to become an SCBM school, developing and submitting a proposal to implement SCBM (frequently including requests for waivers of Department regulations or exceptions to provisions of State labor contracts), and approval by the Board of Education.

The progress made toward statewide implementation of SCBM is illustrated in **Figure 18**. In view of the degree of change that SCBM represents from centralized State control and the amount of organization required for participation, it is impressive that in seven years 84% of public schools have initiated participation in SCBM and over 60% are now

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implementing the reform. This represents remarkable speed for the adoption of a major innovation in the operation of organizations as inherently conservative as public schools.

Figure 18. SCBM Implementation



Implementing SCBM is not a simple or easy process. Of the 46 schools that have filed letters of intent to participate in SCBM but have not proceeded to the stage of submitting an implementation plan, 40 had filed their letters of intent more than two years ago. This suggests the magnitude of change represented by SCBM for a school system that had been from its very inception hierarchic and rule oriented. The changes that implementing SCBM requires include making decisions by consensus among role groups rather than by bureaucratic authority and planning collaboratively instead of centrally by direction and delegation. These changes involve more than technical implementation, they require major philosophical change. Change of that type and magnitude can be slow and difficult.

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Stanford Achievement Test

The Stanford Achievement Test (SAT) is a commercially prepared test administered annually to students in grades 3, 6, 8, and 10. (This test should not be confused with the College Board *Scholastic Assessment Test*, also abbreviated SAT, that is taken voluntarily by high school juniors and seniors to support their applications for admission to college.) The Stanford Achievement Test mathematics and reading scores serve as the State's primary statewide indicators of student academic performance. The SAT norms purport to represent the achievement of students in a nationally representative sample of school districts.¹⁷

The performance of Hawaii's students in grades 3, 6, 8, and 10 on the SAT reading and mathematics tests is shown in **Figures 19** and **20**, respectively. The graphs depict data for 1993-94 through 1995-96 and show the percentages of students' SAT scores that fall into the categories of *average* (light gray) or *above average* (white). In the SAT's national norming sample **77%** of the scores are in these two categories. The SAT norms are indicated by the dashed lines on the graphs.

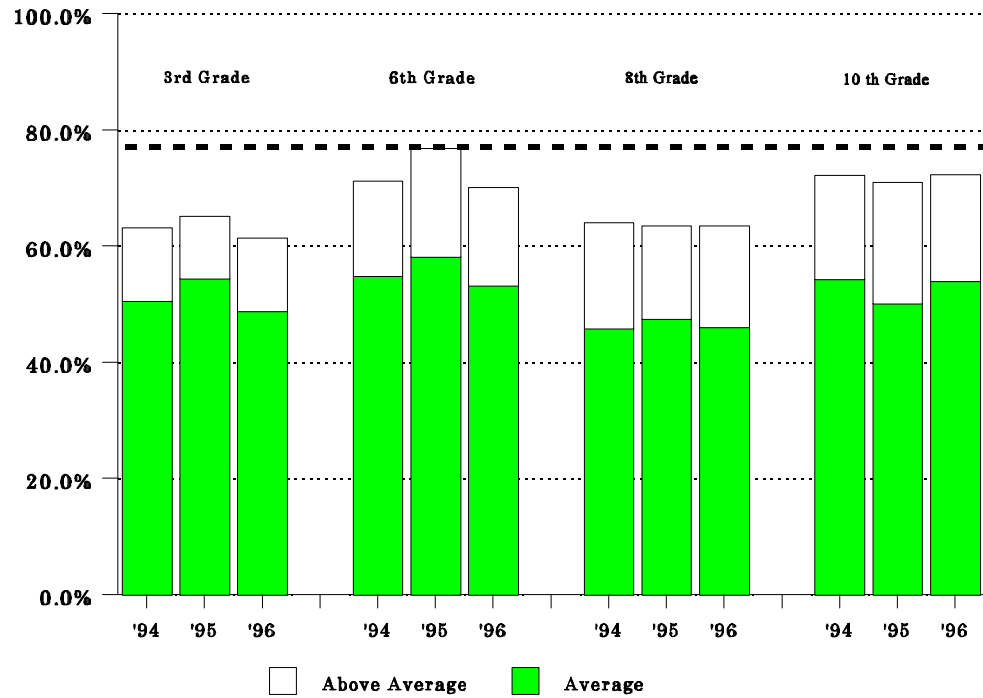
Reading

At all four grades tested, the performance of Hawaii's students on the SAT reading subtest is lower than that of the test's norming group. The "deficit" (lower proportions of average and above average scores than in the SAT norming sample) is more pronounced for third grade students than for older ones. Apparently, the children in Hawaii's public schools start with a deficit in reading and make gradual progress against the national norms as they progress through school. What is puzzling about the data is the seeming regression of our eighth grade students on the reading test. Their performance looks very similar, relative to the norms, to that of third graders. By tenth grade, however, students' performance is nearly back to the relative levels achieved by sixth graders.

¹⁷ If there is a bias in the norms of the SAT it is toward under-representing large, urban school districts with substantial numbers of minority students or students with non-English speaking background. Such a bias would adversely represent the achievement of Hawaii's public school students relative to a "national average."

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Figure 19. Stanford Achievement Test–Reading, 1994-96

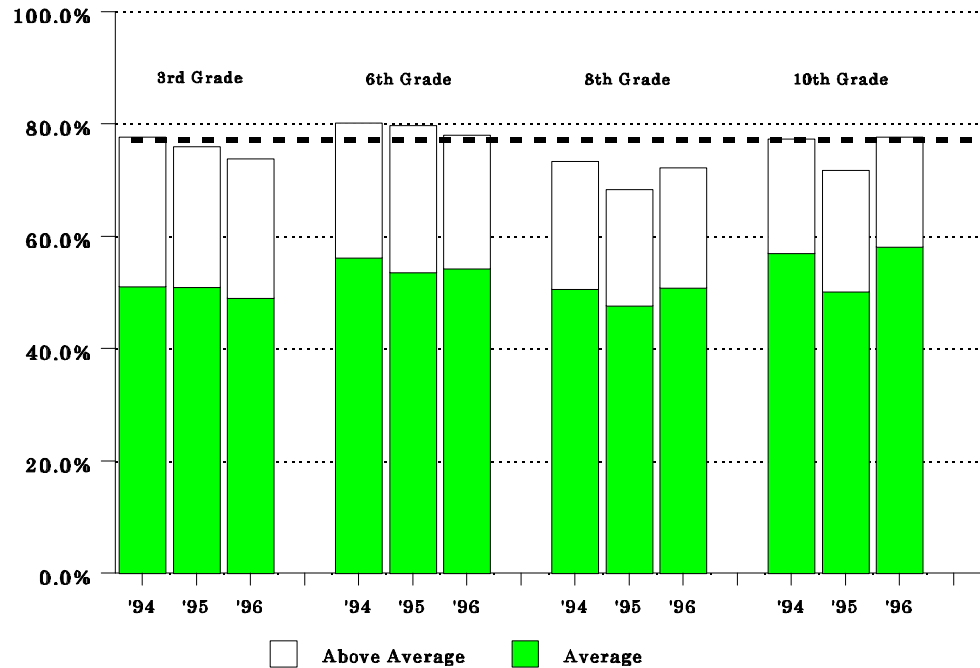


Mathematics

By contrast with the reading subtest, Hawaii's third and tenth grade students perform just about at the national norms for the Stanford mathematics subtest; and sixth graders' performance is a little above the norm. As on the reading subtest, the performance of Hawaii's eighth graders is anomalous; it is well below the levels shown by both sixth and tenth graders.

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Figure 20. Stanford Achievement Test—Mathematics, 1994-96

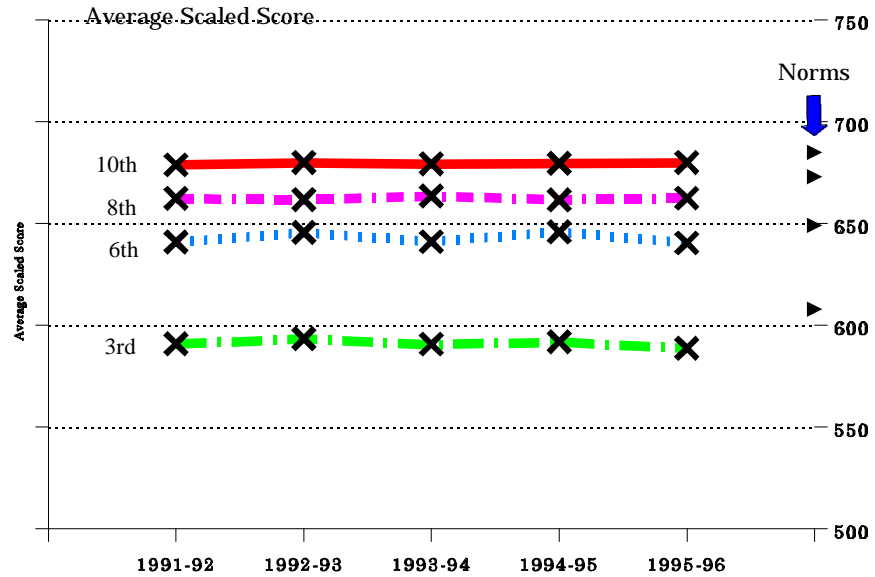


Statewide Average Scores

Figures 19 and **20** emphasize the distribution of reading and mathematics scores, specifically the percentages of scores in the *average* or *above average* categories. Fluctuations in these percentages from year to year may give the appearance of more change in overall student performance than is really the case. A different perspective is presented in **Figures 21** and **22**. These graphs show the statewide *average* SAT scores over the entire period that the State has used the SAT 8th Edition, i.e., from 1991-92 to the present. From this presentation, it is readily apparent that there has been little change in average student scores at any grade level over that five year period.

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Figure 21. Statewide Averages—SAT Reading, 1992-96

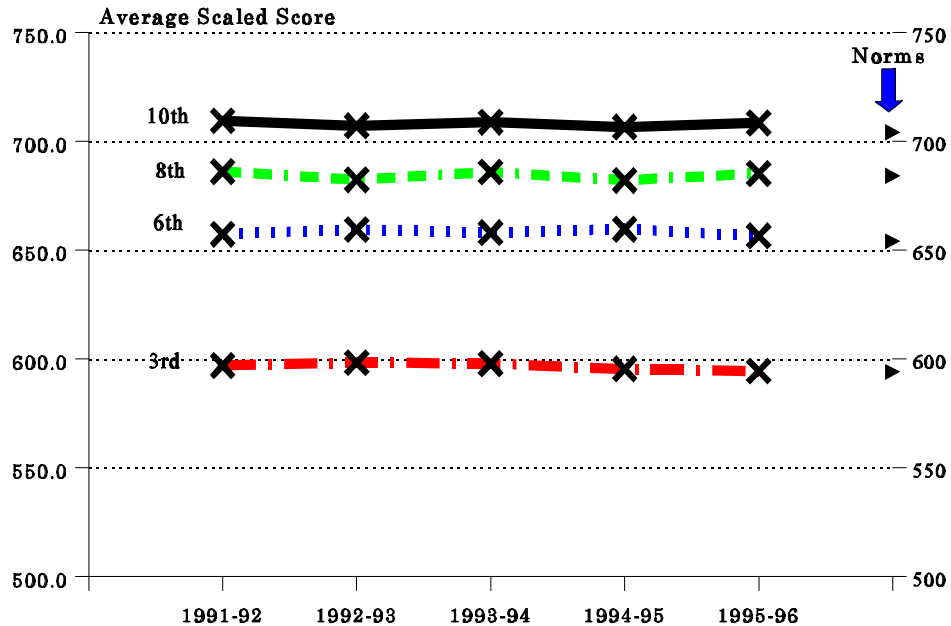


As noted earlier, it is also clear that Hawaii's students start out below the national norms in reading and gradually catch up as they progress through school, with sixth and tenth grade averages close to the national norms. In mathematics Hawaii's students score at about the national norm in third grade and eighth grade, while sixth and tenth graders score somewhat above the national norms.

The standardized achievement test scores shown above are fairly narrow indicators of school performance, and most of their utility comes from tracking their trends over time. Both reading and mathematics tests show minor year-to-year fluctuations but no clear upward or downward trends in the scores.

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Figure 22. Statewide Averages—SAT Mathematics, 1992-96



High School Completion

A primary indicator of school outcome is the rate of high school completion. To graduate from a public high school in Hawaii, students must accumulate 20 high school credits¹⁸, including the following specific subject requirements:

English	4 credits	social studies	4 credits
mathematics	2 credits	science	2 credits

Students must also pass all required courses and demonstrate mastery of 15 Essential Competencies.¹⁹ The school completion rates for 1990-91 through 1995-96 are shown

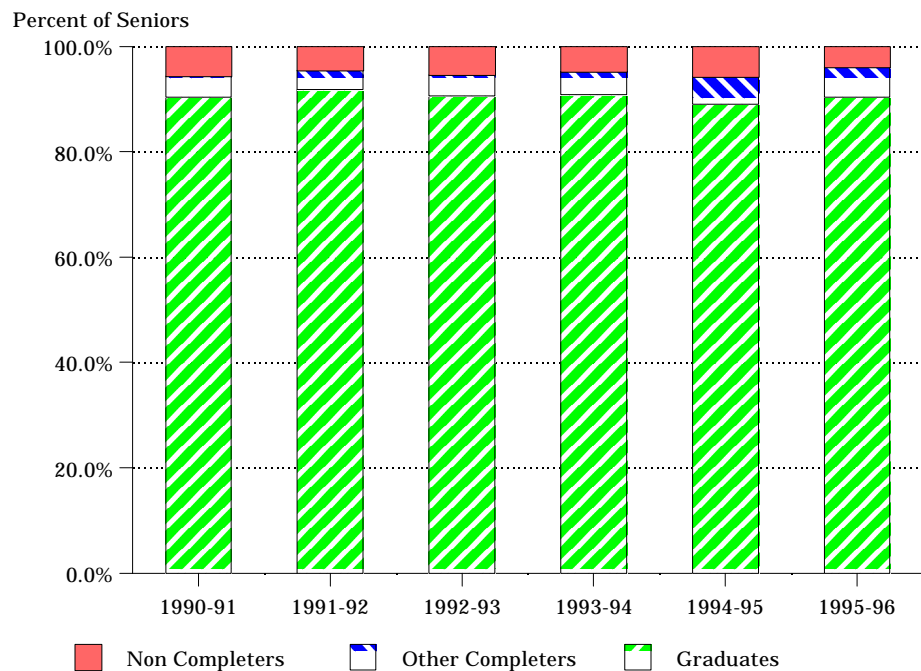
¹⁸ Beginning with the Class of 1997, the number of credits required for graduation will increase to 22, including 3 credits each in mathematics and science.

¹⁹ Students do this by passing a test, the Hawaii State Test of Essential Competencies (HSTEC), which is administered annually for students in 10th, 11th, and 12th grades.

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in **Figure 23**. The 1995-96 data are for students who either were seniors at the beginning of the 1995-96 academic year or became seniors during the year.²⁰

Figure 23. High School Senior Completion Rates, 1990-91 to 1995-96



The overall rates of seniors having completed high school, including earning a Board of Education Recognition Diploma (honors), a high school diploma, a certificate of program completion (special education), or a certificate of course completion, have been over 94% over the last five years. The numbers and percentages of students not graduating over the last five years are presented in **Table 3**.²¹ The data are grouped by the reasons for non-graduation. Graduation rates are affected by changes in graduation requirements. Accordingly, we can expect to see some effect on the graduation rate for 1997 when

²⁰ These data *do not* represent the completion rate for those who entered ninth grade in 1991-92. Reliable data on the graduation rates of students who entered high school four years earlier are not available because of the difficulty of tracking the status of students who have left the jurisdiction of the public school system.

²¹ Students who do not pass HSTEC technically do not *graduate* from high school. If HSTEC is the only requirement they lack, they may receive a certificate of course completion or a certificate of program completion (special education). These are the students shown as “other completers” in **Figure 23**.

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increases in the number of credits (Carnegie units) required for graduation and the number credits required in science and mathematics take effect.

Year	Lacked courses or credits		Did not pass HSTEC		Lacked both credits and HSTEC	
1990-91	488	4.9%	405	4.0%	82	0.8%
1991-92	363	3.6%	207	2.1%	89	0.9%
1992-93	517	5.2%	480	4.9%	109	1.1%
1993-94	569	5.5%	301	2.9%	86	0.8%
1994-95	425	4.0%	344	3.3%	143	1.4%
1995-96	365	3.5%	588	5.7%	37	0.4%

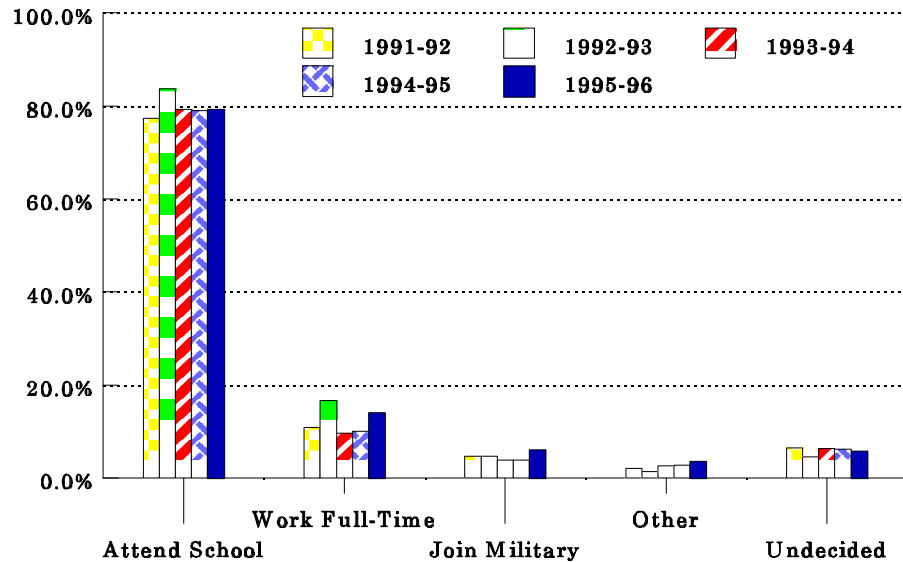
Table 3. Reasons for Non-Graduation, 1990-91 to 1995-96

Seniors' Plans

Each spring, the Department surveys high school seniors throughout the State about their immediate plans regarding employment and further education. Over the last three years, 80% to 85% of seniors have responded to the survey. The results are shown in **Figure 24**. Higher education is by far the most frequent destination of Hawaii's high school seniors. Those who did not respond probably do not have quite the same plans, but the high response rates minimize this problem. We do have a good idea of where our graduates go; most of them intend to continue their formal education.

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Figure 24. High School Seniors' Plans, 1991-92 to 1995-96



Student Suspensions

Under the provisions of Chapter 19 of the Department of Education, Hawaii Administrative Rules, students may be suspended from school for four classes of misconduct:

Class A offenses felonies such as assault or burglary;

Class B offenses misdemeanors like gambling, harassment, or trespassing;

Class C offenses violation of Department rules; and

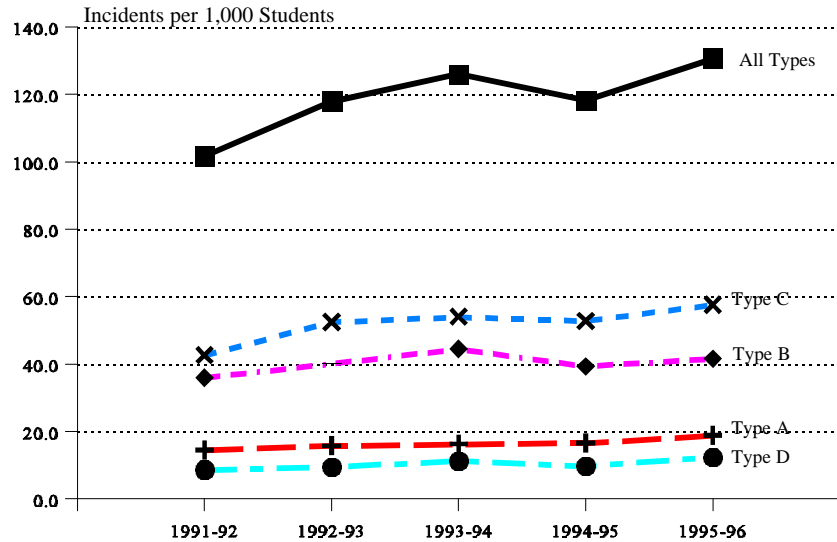
Class D offenses violation of local school rules.

When a student is suspended for Class A or B misconduct, filing a police report is required by law; but police reports are not required for Class C or D offenses.

The statewide rates of the four classes of suspensions for the 1991-92 through 1995-96 school years are presented in **Figure 25**. The rates are given in terms of incidents per 1,000 students to permit comparisons across years. Note that a student may have committed more than one offense before being suspended and that a substantial number of students have been suspended more than once in each year. A small number of students—on the order of 200 per year—has been suspended from more than one school during a given year.

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Figure 25. Suspension Rates by Type of Offense, 1991-92 to 1995-96



The incidence rates of all four types of suspensions increased between 1991-92 and 1993-94, followed by a drop in the rates for Types B, C, and D incidents in 1994-95. However, the incidence rates of all four categories rose again in 1995-96, with the largest increase that of Type C incidents (violations of Department rules). The reasons for this are not known, but the data bear watching.

Threats to Safety and Property

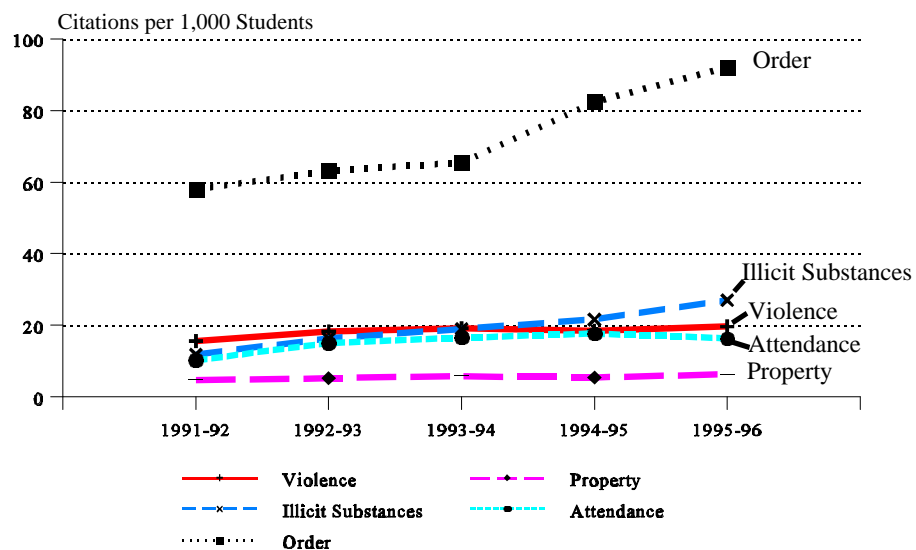
Although the Chapter 19 suspension classifications are related to the general seriousness of the behavior involved, they do not reflect the degree to which students' behavior actually threatened the safety or property of others. Therefore, the data were categorized by specific charges to reflect the degree of threat to safety or property involved. In this analysis, charges were classified by the categories listed below. The designations in parentheses are the classification codes used by DOE under Chapter 19.

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Category	Charges Included
Violence	Assault (A01), Dangerous Weapons (A15), Extortion (A07), Firearms (A16), Murder (A18), Robbery (A11), Sexual Offenses (A12), Terroristic Threatening (A13), Harassment (B04)
Property	Burglary (A14), Property Damage (A10), Theft (B09), Trespassing (B10)
Illicit Substances	Drug Paraphernalia (A23), Illicit Substances (A21), Smoking or Tobacco (C04), Contraband (D01)
Attendance	Class Cutting (C01), Leaving Campus (C03)
Order	Disorderly Conduct (B02), False Alarm (B17), Gambling (B03), Insubordination (C02), Other Prohibited Conduct (D02)

When charges against students are examined from this perspective, the rise in the incidence of suspensions appears to be the result of increases in two categories of conduct, violations of order (primarily insubordination) and use of illicit substances or tobacco (mostly tobacco). The incidence rates involving violence and property (theft, etc.) are stable, and the rate of suspensions for attendance offenses has actually declined.

Figure 26. Suspensions Categorized by Type of Incident, 1991-92 to 1995-96



Examination of the charges listed on the students' suspension reports corroborates the viewpoint outlined above. Of the over 30,000 charges associated with student suspensions in 1995-96, the three most frequently cited charges, accounting for 56.3% of the total,

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were for breaches of order: insubordination, disorderly conduct, and “other prohibited conduct.” The fourth most frequently cited charge was that for smoking or other use of tobacco (9.3%). Citations for possession or use of illicit substances represent 3.5% of the total. At present, the codes used by the Department for records of Chapter 19 offenses do not distinguish between alcohol violations and those involving illegal drugs; the two are lumped together. The distinction is important if we are to use our experience to identify and attack the problems that most affect the health, safety, and welfare of our students. We need to improve our system for classifying and recording suspension data to make the data more useful for identifying the real nature of our discipline problems.

V. Final Words

This is the seventh Superintendent's accountability report, describing the status of Hawaii's public schools. The major goal of these reports is to gain insight into what we can do to improve by analyzing relationships among the *contexts*, *processes*, and *outcomes* of our schools. We are proceeding to build a truly comprehensive assessment and accountability system, and we hope it will help us see where we must go to reach the goals we have for the children of Hawaii. What we have seen in this report is that:

- We are falling behind the rest of the nation on indices of our support for public education in Hawaii. The combination of steadily increasing public school enrollment and restricted State revenues will make it nearly impossible to catch up without a reordering of the State's fiscal priorities. In a situation where many of the children in our charge start school behind their mainland counterparts, we cannot cut education spending and increase class sizes and not have children suffer as a result.
- We must get beyond playing catch-up in providing school facilities. We need to plan and invest so that facilities are ready **when** they are needed, not after the need for them has long since become urgent.
- We need to have more time for instruction and use that time more effectively than we have. We will be lengthening the school year, but we need also to use our facilities more efficiently, perhaps with multi-track, year-round operation. We also should find ways to encourage students—and parents—to take better advantage of the time that is available. We cannot teach students who are not in school.
- Finally, we are still troubled by the mixed performance of our students on standardized tests and by the troubling incidence of student misconduct. On both these counts, there is yet substantial room to improve.

Appendix

Table 5. Enrollment in Hawaii's Public Schools, 1986-87 to 1995-96²³
(Figure 1)

	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96
Elementary	91,594	93,921	96,382	98,567	100,071	102,142	103,356	104,227	105,598	107,254
Secondary	72,470	71,989	70,845	70,626	70,985	72,107	73,567	75,649	77,566	79,327
Total	164,064	165,910	167,227	169,193	171,056	174,249	176,923	179,876	183,164	186,581
Growth		1,846	1,317	1,966	1,863	3,193	2,674	2,953	3,288	3,417
Growth Rate	0.1%	1.1%	0.8%	1.2%	1.1%	1.9%	1.5%	1.7%	1.8%	1.9%

Table 6. Enrollment by District, 1986-87 to 1995-96
(Figure 2)

Year	Honolulu	Central	Leeward	Windward	Hawaii	Maui	Kauai
1986-87	36,031	33,802	29,131	19,224	21,787	15,438	8,651
1987-88	35,093	34,673	29,510	19,099	22,180	16,116	9,009
1988-89	34,530	34,985	29,653	19,143	22,875	16,643	9,210
1989-90	34,052	35,239	30,019	19,244	23,745	17,312	9,427
1990-91	34,128	35,177	30,320	19,324	24,564	17,788	9,561
1991-92	33,978	35,593	31,066	19,494	25,472	18,379	10,109
1992-93	34,195	35,763	31,449	19,784	26,318	18,835	10,503
1993-94	34,597	35,985	32,126	19,785	29,946	19,527	10,826
1994-95	34,715	36,575	33,235	19,745	27,703	20,189	10,937
1995-96	35,098	36,436	34,721	19,994	28,083	20,992	11,176

Table 7. Students with Special Needs in Hawaii's Schools
(Figures 3, 4, & 5)

Year	Special Education	Limited English	Lunch Subsidy
1988-89	9,214 5.5%	7,674 4.6%	51,997 31.1%
1989-90	9,572 5.7%	8,035 4.7%	48,522 28.7%
1990-91	9,778 5.7%	8,861 5.2%	46,849 27.4%
1991-92	10,800 6.2%	8,834 5.1%	47,719 27.4%
1992-93	11,359 6.4%	9,124 5.2%	55,295 31.3%
1993-94	11,694 6.5%	10,603 5.9%	60,339 33.5%
1994-95	12,184 6.7%	10,927 6.0%	64,008 34.9%
1995-96	13,092 7.0%	12,902 6.9%	70,033 37.5%

²³All data on public school enrollment are from Department of Education records.

Appendix

Table 8. Incidence of Low Birth Weight and Single Mothers, 1985-1994²⁴
(Figure 6)

Year	Total Births	Births to Single Mothers	Babies with Low Birth Weight
1985	18,267	20.1%	6.6%
1986	18,253	20.4%	6.1%
1987	18,555	21.4%	7.2%
1988	18,937	22.3%	6.9%
1989	19,335	23.9%	7.1%
1990	20,438	24.9%	7.1%
1991	19,880	26.3%	6.8%
1992	19,837	26.5%	7.2%
1993	19,567	27.3%	6.9%
1994	19,438	28.4%	n/a

Table 9. Students Attending the Same School All Year
(Figure 7)

Year	Type of School			
	Elementary	Intermediate	High	Multi-Grade
1991-92	90.2%	93.5%	92.4%	93.2%
1992-93	89.7%	92.3%	91.5%	91.3%
1993-94	95.2%	96.0%	94.2%	95.2%
1994-95	89.5%	88.8%	88.8%	89.7%
1995-96	92.1%	93.8%	93.1%	93.6%

²⁴Hawaii Department of Business, Economic Development and Tourism, *The State of Hawaii Data Book 1995: A Statistical Abstract*. Honolulu, 1967–, annual, Table 2.01, p. 58, Table 2.05, p. 61.

Appendix

Table 10. Ethnicity of Students and Teachers in Hawai'i's Schools, 1995-96
(Figure 8)

Ethnicity	Students	Teachers
African-American	2.5%	0.7%
Caucasian	17.3%	27.6%
Chinese	3.2%	5.8%
Filipino	18.6%	5.0%
Hawaiian/Part-Hawaiian	24.4%	8.9%
Hispanic	4.9%	0.2%
Japanese	12.4%	44.4%
Korean	1.7%	1.0%
Samoa	3.2%	0.3%

Table 11. Pupil/Teacher Ratios in Hawaii and Comparable States²⁵
(Figure 9)

Year	Hawaii	Nevada	New Hampshire	Rhode Island	U. S. Average	Hawaii's Rank
1987-88	21.6	20.2	16.0	15.1	17.6	48
1988-89	19.2	20.3	16.2	14.5	17.3	44
1989-90	19.1	20.4	16.2	14.5	17.2	43.5
1990-91	18.9	19.4	16.2	14.6	17.2	41
1991-92	18.5	18.6	15.5	14.6	17.3	40.5
1992-93	17.6	18.7	15.6	14.3	17.4	35.5
1993-94	17.8	18.7	15.5	14.8	17.4	38.5
1994-95	17.9	18.9	15.9	16.0	17.1	41
1995-96	18.2	19.4	15.6	14.6	17.3	41

²⁵National Center for Education Statistics, *Digest of Education Statistics 1996*, U.S. Department of Education, Office of Educational Research and Improvement, NCES 96-133, November 1996, Table 65, p. 76; *Digest 1993*, Table 65, p. 76; *Digest 1992*, Table 64, p. 75. Data for 1995-96 are from National Center for Education Statistics, *Early Estimates: Public Elementary and Secondary Education Statistics: School Year 1995-96*, U.S. Department of Education, Office of Educational Research and Improvement, NCES 96-238, May 1996, Table 7, p. 9.

Appendix

Table 12. Percentage of State and Local Revenue Allocated to Public K-12 Education ²⁶
(Figure 11)

	1982-83	1984-85	1987-88	1989-90	1990-91	1991-92
Hawaii	17.1%	16.3%	17.3%	15.5%	15.0%	13.5%
Nevada	19.2%	18.3%	21.0%	22.4%	24.5%	22.4%
New Hampshire	24.7%	25.9%	27.6%	28.4%	28.9%	24.2%

Table 13. Expenditures per Pupil (ADA) for Hawaii and Comparable States, Long Term Trend²⁷

State	1959-60	1969-70	1979-80	1989-90
Hawaii	\$1,615	\$3,253	\$4,373	\$5,123
Nevada	\$2,142	\$2,978	\$3,933	\$4,741
New Hampshire	\$1,728	\$2,799	\$3,608	\$6,108
Rhode Island	\$2,057	\$3,449	\$4,899	\$7,333
U. S. Average	\$1,867	\$3,158	\$4,279	\$5,725

Table 14. Expenditures per Pupil (ADM), Hawaii and Comparable States²⁸
(Figure 12)

	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96
Hawaii	\$4,130	\$4,820	\$5,062	\$5,332	\$5,533	\$5,050	\$4,329
Nevada	\$3,816	\$4,294	\$4,546	\$4,645	\$4,661	\$4,677	\$4,707
New Hampshire	\$4,786	\$5,152	\$5,237	\$5,368	\$5,433	\$6,391	\$6,276
Rhode Island	\$5,798	\$5,934	\$6,092	\$6,501	\$6,797	\$6,846	\$7,373
U. S. Average	\$4,628	\$4,902	\$5,023	\$5,170	\$5,344	\$5,623	\$5,738
Hawaii Difference from U.S. Average	(\$498)	(\$82)	\$39	\$162	\$188	(\$573)	(\$1,409)
	-10.8%	-1.7%	0.8%	3.1%	3.5%	-10.2%	-24.6%

²⁶National Center for Education Statistics, *Digest of Education Statistics 1996*, U.S. Department of Education, Office of Educational Research and Improvement, NCES 96-133, November 1996, Table 35, p. 39.

²⁷Ibid., Table 165, pp. 164-165. Expenditures are in 1993-94 dollars per *average daily attendee* (ADA).

²⁸*Public Elementary and Secondary Education Statistics: School Year 1995-96*, op. cit., Tables 1 & 5, pp. 3, 7; *School Year 1993-94*, Tables 1 & 5, pp. 3, 7. Expenditures are in current (unadjusted) dollars per *average daily member* (ADM).

Appendix

Table 15. Net Classroom Excess or Shortage, by District
(Figure 13)

	Honolulu	Central	Leeward	Windward	Hawaii	Maui	Kauai
Elementary	132	12	-28	60	-26	1	-13
Secondary or K-12	79	-37	-32	14	-28	-46	-40
Total	211	-25	-60	74	-54	-45	-53

Table 16. Percentages of Schools with Substandard Facilities, 1990-91 to 1995-96²⁹
(Figure 14)

Year	Administration	Libraries	Cafeteria
1990-91	40%	46%	14%
1991-92	40%	47%	17%
1992-93	40%	48%	17%
1993-94	40%	46%	16%
1994-95	41%	46%	14%
1995-96	42%	49%	17%

Table 17. Percentages of Schools with Substandard Facilities by District, 1995-96
(Figure 15)

	Honolulu	Central	Leeward	Windward	Hawaii	Maui	Kauai	Statewide
Library	25%	55%	51%	32%	73%	76%	43%	49%
Cafeteria	5%	18%	19%	6%	35%	24%	43%	17%
Administrative	18%	28%	27%	42%	78%	83%	43%	42%
Number of Schools	56	40	37	31	37	29	14	244

²⁹Substandard means facilities with less than 70% of the space specified in the State standards for the type of facility: cafeteria, library, or administrative services (office, teacher workrooms, etc.).

Appendix

Table 18. Absence Rates by School Type and Year
(Figure 16)

Year	Elementary	Intermediate	High	Multi-Grade
1991-92	9.8	10.7	13.4	12.7
1992-93	10.0	9.8	12.7	12.8
1993-94	9.8	11.2	14.1	14.5
1994-95	9.9	11.4	17.2	16.1
1995-96	9.5	11.0	17.2	15.5

Table 19. Improvement Priorities of Hawaii's Schools, 1991-92 to 1995-96
(Figure 17)

Priority	Year				
	1991-92	1992-93	1993-94	1994-95	1995-96
Achievement	151	170	163	166	160
Curriculum	132	144	163	152	151
Staff Development	126	124	128	121	93
SCBM	73	85	81	63	48
Community	60	60	50	58	47
Attitudes	47	44	49	38	39
Behavior	51	39	43	52	37
Facilities	17	18	21	66	113
Other	23	28	36	13	20

Table 20. Implementation of School/Community Based Management
(Figure 18)

Year	Current Status			Cumulative Status		
	Letters of Intent	Proposals filed	Approved by BOE	Letters of Intent	Proposals filed	Approved by BOE
1989-90	27	3	2	27	3	2
1990-91	42	8	4	69	11	6
1991-92	29	22	19	98	33	25
1992-93	55	23	20	153	56	45
1993-94	24	34	37	177	90	82
1994-95	18	34	22	195	124	104
1995-96	9	30	45	204	154	150

Appendix

Table 21. Stanford Achievement Test–Reading
(Figures 19 and 21)

	Norm	1993-94	1994-95	1995-96
3rd Grade				
Below Average	23%	37.0%	34.9%	38.7%
Average	54%	50.6%	54.4%	48.8%
Above Average	23%	12.5%	10.7%	12.5%
Mean	608	590.7	591.9	588.7
6th Grade				
Below Average	23%	28.8%	23.2%	29.9%
Average	54%	54.9%	58.2%	53.2%
Above Average	23%	16.3%	18.6%	16.9%
Mean	649	641.0	645.8	640.4
8th Grade				
Below Average	23%	36.0%	36.4%	36.5%
Average	54%	45.8%	47.5%	46.1%
Above Average	23%	18.2%	16.0%	17.4%
Mean	673	663.5	661.5	662.4
10th Grade				
Below Average	23%	27.9%	29.1%	27.7%
Average	54%	54.3%	50.1%	54.0%
Above Average	23%	17.8%	20.8%	18.3%
Mean	685	679.3	679.5	679.9

Appendix

Table 22. Stanford Achievement Test–Mathematics
(Figures 20 and 22)

	Norm	1993-94	1994-95	1995-96
3rd Grade				
Below Average	23%	22.3%	24.1%	26.3%
Average	54%	51.1%	51.0%	49.1%
Above Average	23%	26.5%	24.9%	24.7%
Mean	594	597.8	595.4	594.4
6th Grade				
Below Average	23%	19.9%	20.3%	21.9%
Average	54%	56.2%	53.6%	54.3%
Above Average	23%	24.0%	26.1%	23.7%
Mean	654	658.0	659.5	656.5
8th Grade				
Below Average	23%	26.7%	31.7%	27.8%
Average	54%	50.6%	47.7%	50.9%
Above Average	23%	22.7%	20.6%	21.3%
Mean	684	685.8	681.9	685.1
10th Grade				
Below Average	23%	22.7%	28.3%	22.4%
Average	54%	57.0%	50.2%	58.2%
Above Average	23%	20.3%	21.5%	19.4%
Mean	704	708.7	706.5	708.3

Appendix

Table 23. High School Senior Completion Rates, 1986-87 to 1995-96
(Figure 23)

Year	Graduated	Certificate of Completion	Did Not Complete
1986-87	94.4%	0.0%	5.6%
1987-88	94.1%	0.0%	5.9%
1988-89	94.1%	0.0%	5.9%
1989-90	92.1%	1.4%	6.5%
1990-91	90.3%	4.0%	5.7%
1991-92	91.8%	3.7%	4.5%
1992-93	90.6%	4.0%	5.4%
1993-94	90.8%	4.4%	4.8%
1994-95	89.4%	5.2%	5.8%
1995-96	90.5%	5.7%	3.9%

Table 24. High School Seniors' Plans
(Figure 24)

Year	Attend School	Work Full-Time	Join Military	Other	Undecided
1991-92	77.4%	10.9%	4.6%	2.1%	6.5%
1992-93	83.7%	16.6%	4.6%	1.3%	4.5%
1993-94	79.3%	9.6%	3.8%	2.6%	6.3%
1994-95	79.0%	10.1%	3.9%	2.7%	6.2%
1995-96	79.3%	14.0%	6.0%	3.5%	5.7%

Appendix

Table 25. Student Suspensions by Chapter 19 Classification, 1991-92 to 1995-96
(Figure 25)

	1991-92		1992-93		1993-94		1994-95		1995-96	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Type A	2,520	14.5	2,789	15.8	2,923	16.3	3,033	16.6	3,533	18.9
Type B	6,268	36.0	7,112	40.2	8,002	44.5	7,207	39.3	7,774	41.6
Type C	7,434	42.7	9,283	52.5	9,734	54.1	9,663	52.8	10,767	57.6
Type D	1,501	8.6	1,685	9.5	2,018	11.2	1,769	9.7	2,335	12.5
All Types	17,723	101.7	20,869	118.0	22,677	126.1	21,672	118.3	24,409	130.7
Number of Students Involved	10,686	61.3	12,088	68.3	13,104	72.9	12,839	70.1	14,232	76.2

Table 26. Suspension Rates Categorized by Type of Incident, 1991-92 to 1995-96
(Figure 25)

Year	Violence	Property	Illicit		
			Substances	Attendance	Order
1991-92	15.6	4.7	11.8	10.2	58.0
1992-93	18.3	5.2	16.3	15.0	63.1
1993-94	19.2	5.8	19.0	16.4	65.5
1994-95	18.5	5.4	21.6	17.7	82.5
1995-96	19.6	6.3	27.0	16.3	92.1