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

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Office of Accountability and School Instructional Support /Planning and Evaluation Group
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FOREWORD

The Superintendent's Eighth Annual Report on School Performance and Improvement in Hawaii is one of two foundations of Hawaii's system of school accountability. This report contains collective data on our schools, showing trends over time and, where appropriate, comparisons with data from other states. The other accountability keystone, the ***School Status and Improvement Report***, is prepared annually for each school. These reports contain school data and summaries of the schools' improvement priorities and activities. They are available at public libraries, and online at ***http://arch.k12.hi.us*** on the world wide web.

These two reports are the most visible parts of the Department's Comprehensive Assessment and Accountability System, the purpose of which is 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. These reports and the rest of our efforts thus far lay a foundation for the system, but they are only a start. We are currently refocusing the Department's efforts on fully implementing the Hawaii Content and Performance Standards. The standards serve as our common expectations for what students should know, be able to do, and care about. The standards should guide and serve as a central organizer for all that we do--so that our efforts have cumulative impact in helping all students attain them.

In the immediate future, we will be revising the statewide student assessment system. Sound, standards-based student assessment is needed to inform instruction and to shape the Department's supports for classrooms and schools, program planning, and policymaking, as well as promote public confidence in the education system by providing a good-faith public accounting of its performance. We will also be working to more fully operationalize good accountability throughout the Department. Sound accountability should stimulate improved performance. It requires clear roles and responsibilities linked to authority and resources; uses fair and adequate assessment against agreed upon goals; invokes consequences related to performance; and must be supported by leadership and resources. Fortunately, the designers of the Comprehensive Assessment and Accountability System wisely provided a good foundation for our use today while simultaneously providing a flexible design that can evolve over time.

Paul G. LeMahieu, Ph.D.
Superintendent of Education

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 report is written by Dr. Thomas Gans of the Evaluation Section, with critical reviews by Dr. Hirata 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 the staff 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 246 public schools from seven school districts in 1996-97.

- **ENROLLMENT**. Enrollment growth, which had exceeded 1.5% for five years, declined sharply to 1% in 1996-97. (Pages 3-4)

- **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 5-7)

- **STAFFING**. In 1987-88, Hawaii ranked 48th among the states in pupil to teacher ratio. Through concerted effort, by 1992-93 Hawaii had lowered its pupil to teacher ratio enough to tie for 35th. Fiscal constraints that began in 1994-95 have halted Hawaii's progress on this indicator. Hawaii is well ***below*** the national average in the proportion of its professional staff performing administrative functions. (Pages 10-11)

- **FINANCE**. After improving during the early 1990s, Hawaii's financial commitment to public education has taken a marked downturn. Although Hawaii ranks **1st** among the states in tax collections per capita, it ranks **last** in the percentage of state and local revenue allocated to public schools. (Page 12)

- **FACILITIES**. Hawaii's school facility problems are chronic. Over half of the State's schools need additional classrooms. Ninety-eight of the State's schools were operating with enrollment at or above their rated capacity. Schools' ancillary facilities are woefully underdeveloped. Over half of Hawaii's schools have substandard library facilities. Hawaii's secondary and elementary schools averaged **second largest** and **third largest** in the nation respectively. (Pages 14-18)

- **SCBM**. Since School/Community-Based Management was initiated in 1989, over 200 schools (86%) have committed to the process, and over 160 schools (71%) were implementing SCBM by the end of the 1996-97 school year. (Pages 20-21)

- **DROPOUTS AND SCHOOL COMPLETION**. Dropout rates for students in grades 9-12 average over 5% per year. The proportion of high school seniors completing school remains over 90%, but an increasing percentage do not receive diplomas. Almost 80% of public school seniors intend to continue their formal education. (Pages 25-26)

- **STUDENT DISCIPLINE**. The overall rates of disciplinary suspension increased in 1996-97, but the number of citations per 1,000 students has declined. There were more suspensions, but fewer students involved. The data reflect a pattern of "tightening up" student discipline. (Pages 27-29)

CONTENTS

Purpose

The *Superintendent's Report on School Performance and Improvement* is part of the Department's accountability system for the State's schools.[1] This system is designed to inform the people about the performance of individual schools and the schools collectively. This specific report has two purposes:

(1) to report what we know about trends, progress, and problems of the State school system; and

(2) to compare Hawaii's public schools with those of the nation and other states with similar characteristics.

This report's 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 primnarily from Department of Education records and from the National Center for Education Statistics. Sources other than Department records are footnoted, and supporting data for graphs 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. Complete sets of the SSIRs are available at all public libraries and at ***http://arch.k12.hi.us*** on the world wide web.

Focus

Data in this report are presented as *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 connote conditions and inputs that are under the control of the school; these include school resources, facilities, and priorities.

- *Outcome* indicators denote the results of school endeavors; these include such measures as performance on achievement tests, school dropout rates, and disciplinary incident 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

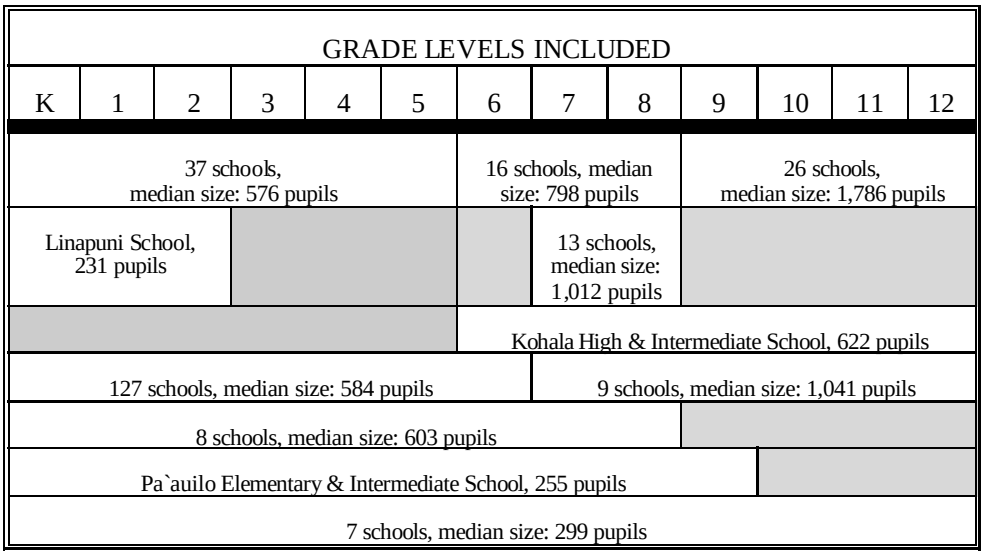
Where comparisons of Hawaii's circumstances with those of other states are warranted, data from Hawaii are compared to the national average and used to rank Hawaii among the 50 states. In addition, specific comparisons will be made with three states that are comparable to Hawaii in K-12 school enrollment, population, and *per capita* wealth. These states are Nevada, New Hampshire, and Rhode Island.

School Organization

This report covers public education in kindergarten through 12th grade. Its data came from 246 public schools in seven school districts and cover School Year 1996-97. Although Hawaii's public schools can be loosely classified as elementary, intermediate, or high schools, the ranges of grades in schools vary considerably. The school patterns of grade level organization during the 1996-97 school year are shown in **Figure 1**.

Figure 1. Grade Level Organization of Hawaii's Public Schools, 1996-97

Urban areas are served by elementary, middle or intermediate, and high schools. Multi-level schools (K-8, 7-12, and K-12) serve rural areas or specialized populations



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 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 addition to the "regular" schools, there are three special program centers that are not organized by grades. Student 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]

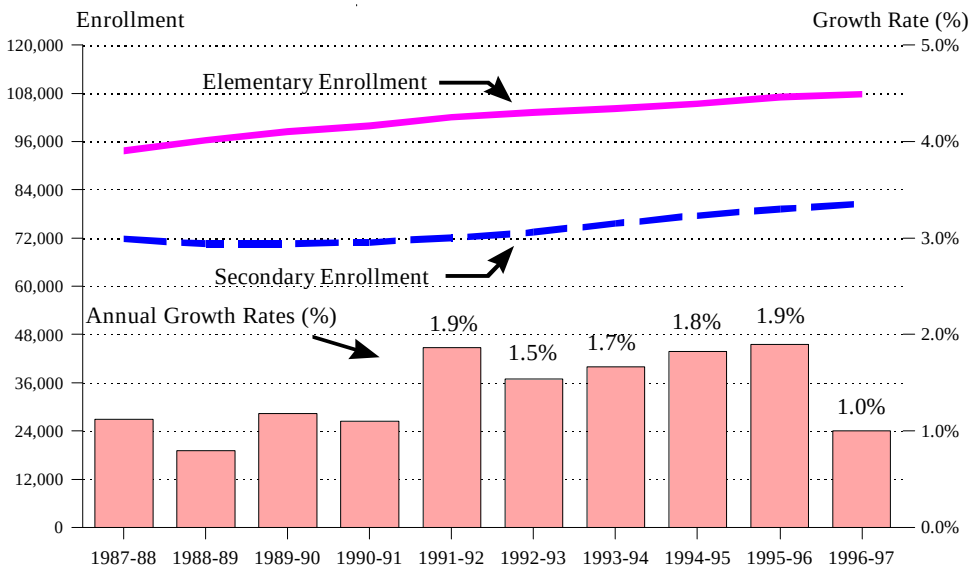
Students

Enrollment

As clearly shown in **Figure 2** (next page), Hawaii's public school enrollments are growing. Enrollment in elementary grades has been increasing throughout the last nine years. Secondary school enrollments were decreasing in the late 1980s, but they apparently "bottomed out" in 1990 and should grow steadily for the remainder of this decade.

Grade-by-grade enrollment data indicate that the current peak enrollment was in first grade in 1996-97. The number of births in Hawaii (Appendix, Table 6) increased steadily until 1991 and then began to decline. It may take several years for overall enrollment to reach its peak, but enrollment growth is slowing.

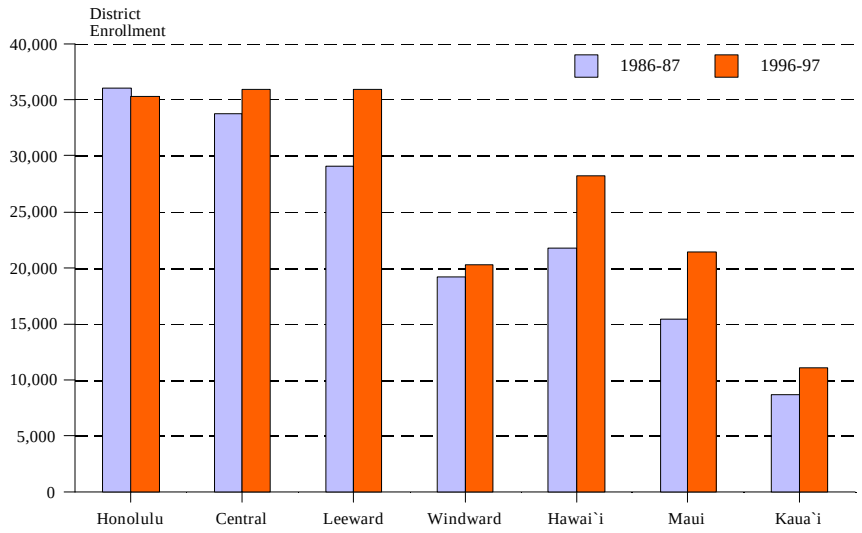
Figure 2. Public School Enrollment in Hawaii, 1987-88 to 1996-97



Hawaii's public school enrollments have been growing throughout the decade. Only the last year shows signs of growth tapering 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 3**.

Figure 3. Enrollment in 1986-87 and 1996-97, by District



Public school enrollment growth is not evenly distributed. Hawaii, Leeward, and Maui Districts have been the source of most of the recent growth.

While Honolulu District's enrollment has nearly regained its 1986-87 level, Leeward District's enrollment has increased by over 6,800 students, Hawaii District's by almost 6,500, and Maui District's by over 6,000. This means that the need for facilities is greater than indicated by overall enrollment alone. We cannot accommodate the new students enrolling for school in Leeward Oahu 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 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 4.**

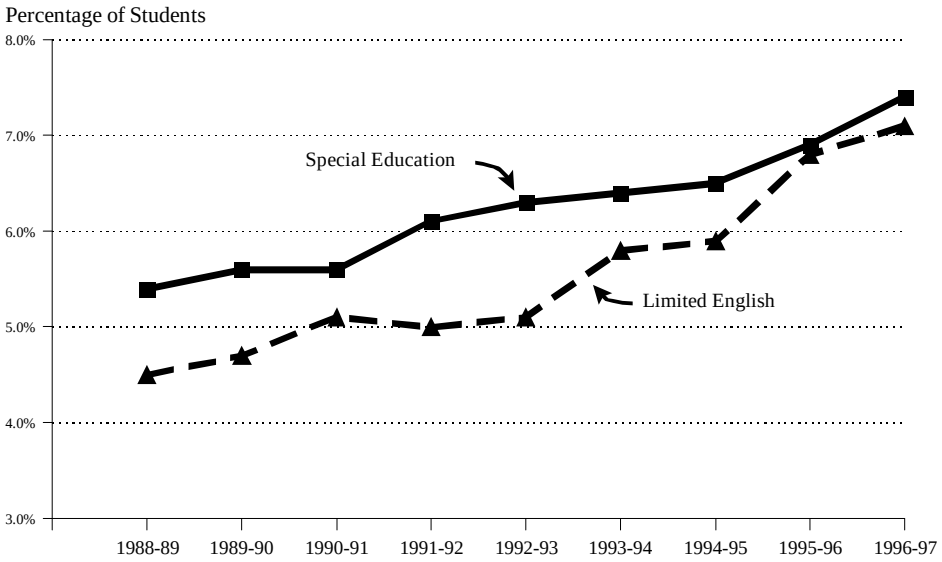
The percentage of students receiving lunch subsidies dropped unaccountably by 3% in 1996-97 after 4 successive years of increases.

Figure 4. Students Receiving Lunch Subsidies, 1988-89 to 1996-97

The numbers of students needing special education services and the numbers of students with limited English proficiency are shown in **Figure 5**.

Figure 5. Special Education and Limited English Students

The percentages of special education and limited English students have been increasing throughout the last decade.

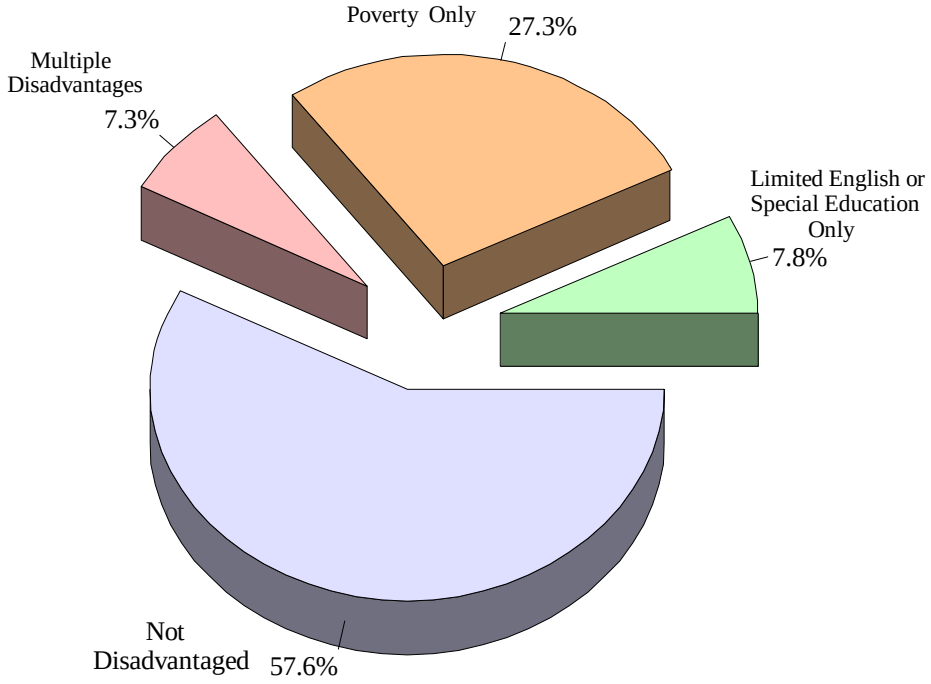


It is readily apparent from **Figures 4 and 5** that all three groups of children with special needs are growing. The extent of that growth has major implications for public education. Since the 1988-89 school year, overall enrollment increased by 11.4 percent while:

- The number of students who receive lunch subsidies has increased by nearly 25 percent;
- The number of students needing special education services has increased by over 50 percent; and
- The number of students who have limited English proficiency has increased by almost 75 percent.

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 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 clear from **Figure 6**.

Figure 6. Disadvantages Affecting Hawaii's Public School Students



Children who come to public school without some element of disadvantage now barely constitute a majority of the student population. Students with educational disadvantages are now over 40% of our students.

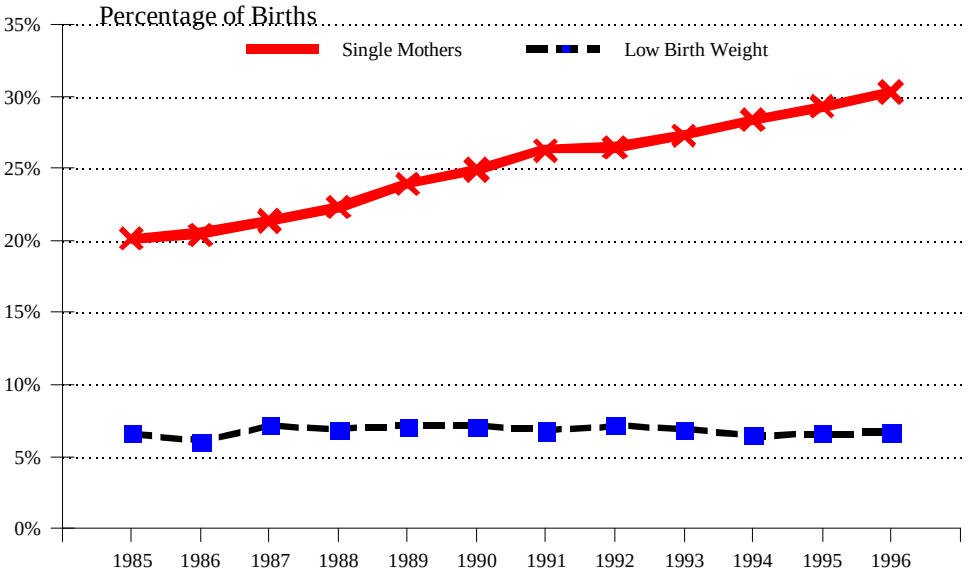
A bare majority of Hawaii's public school students do not bring with them at least one of these three types of educational disadvantage. The growth in the numbers of disadvantaged students in Hawaii's school population presents a particular chal-

lenge 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.

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 7**. The data (Appendix, Table 6) indicate a fairly stable proportion of children with low birth weight but steadily growing numbers and proportions of children born to single mothers. The 1996 rate of births to single mothers in Hawaii (30.3%) was over three times what it was in 1970 (9.6%).[3]

Figure 7. Incidence of Low Birth Weight and Births to Single Mothers

Births to single mothers have increased over the last three decades to account for nearly one-third of all births in Hawaii.

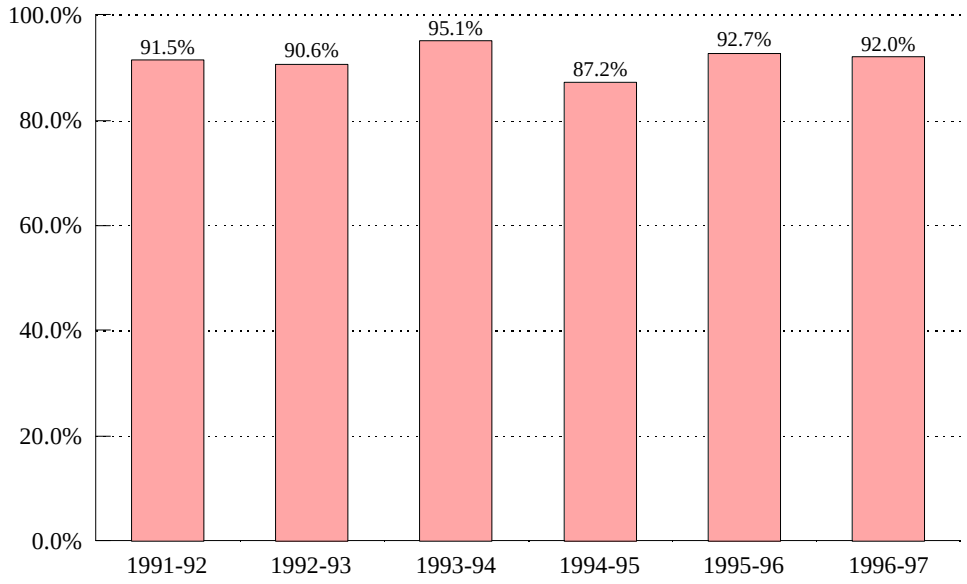


Student Transiency

Hawaii's students are not exceptionally mobile. Although we do not have comparison data from other states, we do have estimates of the proportion of Hawaii's students who were enrolled in the same school for the entire year.[4] These proportions for the last six school years are shown in **Figure 8**. In 1996-97, individual schools had from 65% to over 99% of their students for the full school year. There was little variation among types of schools in the proportions of year-round students; statewide averages for elementary, intermediate, multi-grade and high schools were all between 91% and 94%. The most significant factor influencing students' transiency is the demanding lifestyle of military parents; 8 of the 10

schools with less than 80% of their students enrolled year-round were schools serving military housing areas.[5] The exceptions were Olomana School, at which students are expected to be transient, and Ni'ihau School which had fewer than 30 students enrolled. Altogether, 92.9% of Hawaii's students were enrolled in the same school all year.

Figure 8. Students Enrolled in the Same School All Year



Most schools have over 90% of their students enrolled for the entire school year. Almost all the schools with less than 80% of their students enrolled for the entire year serve military housing areas.

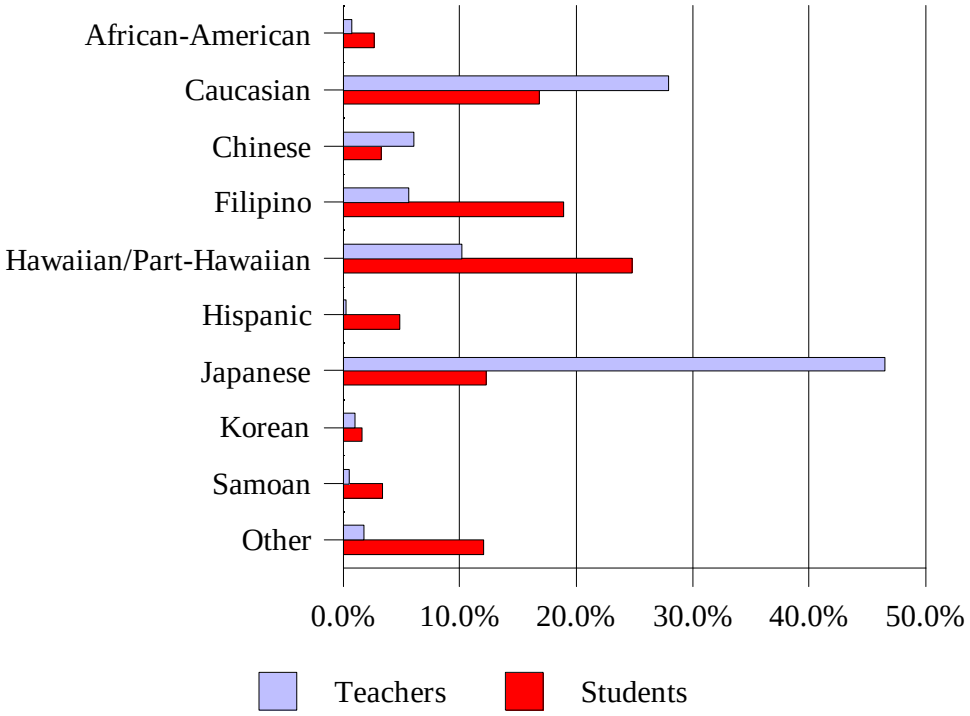
Student and Teacher Ethnicity

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 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 9**.

The ethnic differences reflected in **Figure 9** are simply the product of Hawaii's changing demography. The State's teaching population represents the demography and educational opportunities of a generation or more earlier than the one currently enrolled in the State's public schools. 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.

Figure 9. Ethnicity of Hawaii's Students and Teachers

The ethnic differences between Hawaii's student population and that of its teachers reflect Hawaii's changing demography. The student population is becoming increasingly diverse



Staff

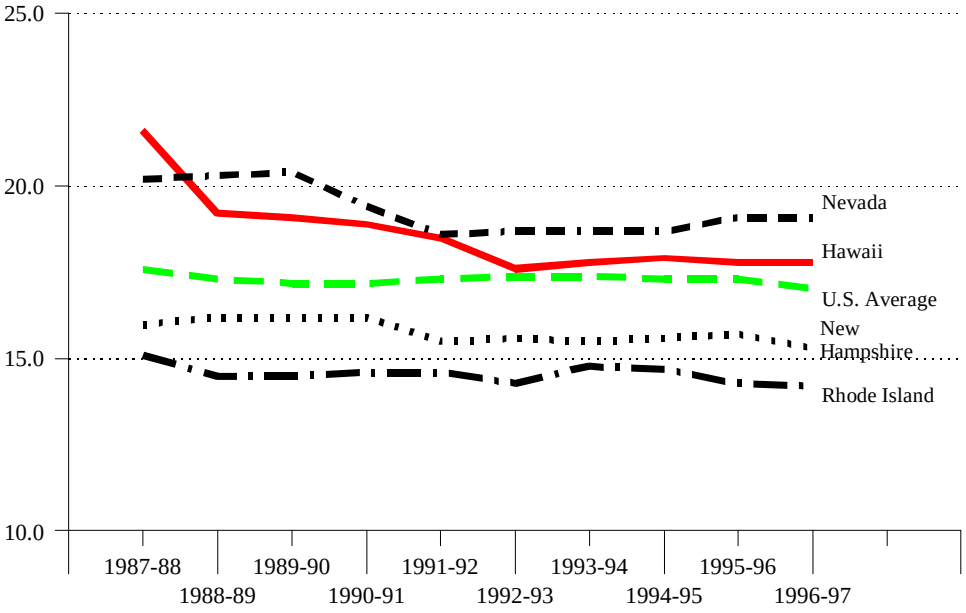
Teachers

In 1996-97, there were 11,188 teachers in Hawaii's public schools. Of these teachers:

- The average length of service was 12.3 years;
- 61.7% had been teaching in their current schools for at least five years;
- 71.5% were teaching subjects in the regular instructional program;
- 15.5% taught in the supplementary program (remedial instruction, etc.);
- 13.0% were teaching in special education; and
- About 2% were assigned to school complexes or district offices 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.[6] 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 10**. Hawaii does not fare well on this indicator. Hawaii had improved its pupil to teacher ratio and its rank on this indicator in the early 1990s, but during the last four years Hawaii's earlier gains have been slipping away.

Figure 10. Pupil to Teacher Ratios in Hawaii and Comparable States, 1987-88 to 1996-97



Hawaii's pupil to teacher ratio has declined over the last decade, but it is still well above the United States average and is not improving.

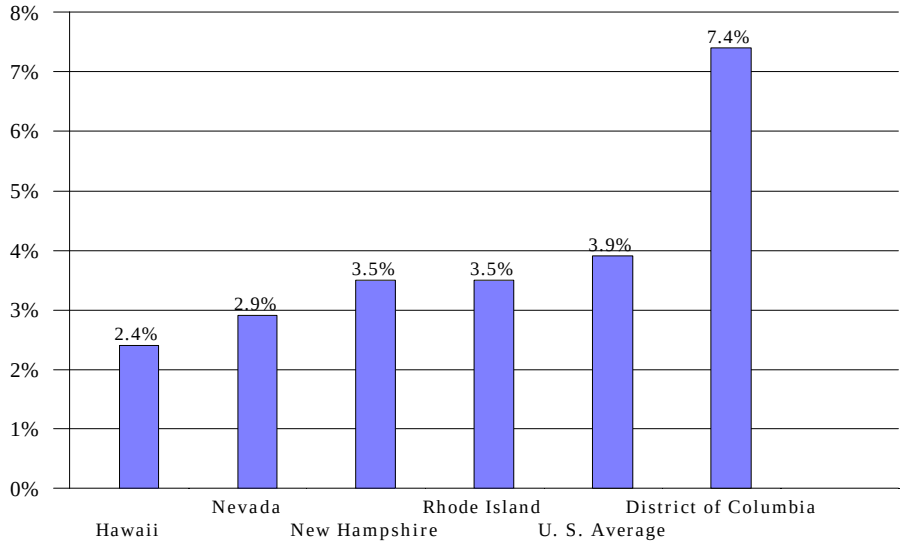
In 1987-88, Hawaii ranked 48th among the 50 states in pupil to teacher ratio. By 1992-93, it had improved its rank to 35th, having lowered its pupil to teacher ratio from 21.6 to 17.6. That improvement was the result of both deliberate policy and major effort, but the relative gain was also partly the result of increasing enrollments and financial difficulties in other states. While mainland states have recovered from the recession of the early 1990s, Hawaii has not. Mostly as a consequence of financial strains, Hawaii's pupil to teacher ratio has begun to rise; in 1996-97 it was 17.9, and Hawaii's rank among the states was 39th.

Administrators

In 1996-97, there were 643.5 full-time equivalent school level administrative positions in Hawaii's public schools, of which 469 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 over 400 pupils and supervising 22.5 teachers—about 40 pupils and 2 teachers more than in 1995-96. This represents an increase in administrators' load, erasing the gains that had been made over the previous four years. There is little doubt that this, too, is a result of the pressures on the state budget.

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. **Figure 11** shows the 1995-96 percentages of professional staff performing district administrative functions in Hawaii and comparable jurisdictions. Hawaii's percentage (2.4%) is the lowest of the group and is just over half the U.S. average. 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 7.4% of its professional staff performing district administrative functions.[7] This information was corroborated recently by a report, cited in the *Honolulu Advertiser*, noting that Hawaii spends less per student for administration than 46 other states and the District of Columbia. The article noted that in 1994-95, Hawaii spent only about $45 per pupil on administration out of a total per pupil expenditure of $5,597 (0.8%). The national averages for that year were $126 out of $5,497—or about 2.3%.[8]

Figure 11. Proportions of Professional Staff Performing District Administrative Functions, Hawaii and Comparable States



Hawaii's administrative staff percentage is the lowest of the comparable states at just over half the U.S. average. Only Hawaii includes state administrators in its percentage.

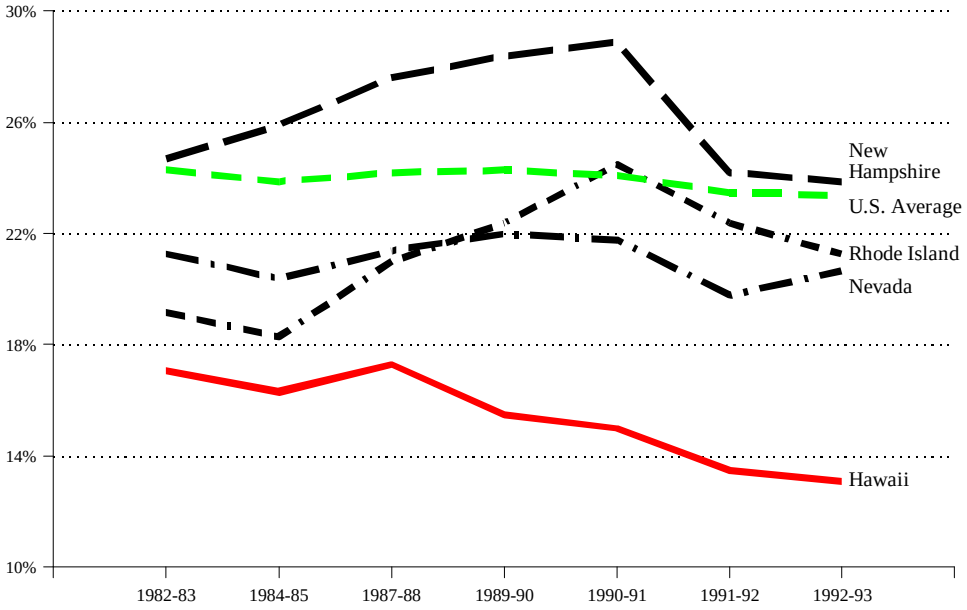
The stability of school level administration is an important indicator of school continuity and curricular direction, and there has been substantial improvement on this measure. In the past six years, the percentage of schools with three or more principals in five years has declined. In 1989-90 it was 38%; in 1996-97 it was only 10.6%. This represents notable progress toward providing schools with stable leadership.

General Revenues and Expenditures for Public Education

In 1996 Hawaii ranked 11th among the states in personal income *per capita*, a decline of one rank from the previous year, probably reflecting the continuing stagnation of the state's economy. However, Hawaii still ranked **first** in total state tax collections *per capita*.[9] Despite the state's economic woes, Hawaii remains a comparatively wealthy state. By contrast to its wealth, the economic effort that Hawaii has historically exerted on behalf of the children in its public schools has been less than mediocre.

An indicator of support for public education is the proportion of total state and local revenues that are allocated to the operation of public elementary and secondary schools. This indicator shows the priority that state policy makers give to public education by directly comparing school expenditures to total expenditures rather than showing school expenditures in isolation. This measure shows that Hawaii puts a decidedly low priority on funding its public education system. The proportions of state and local revenues allocated to public education by Hawaii and comparable states from 1982-83 to 1992-93 are presented in **Figure 12**. 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.

Figure 12. Percentage of State and Local Revenue Allocated to Public K-12 Education, Hawaii and Comparable States



Hawaii devotes the lowest percentage of its total state and local revenues to public K-12 education of any state in the U.S. Its allocation is barely over half the U.S. average.

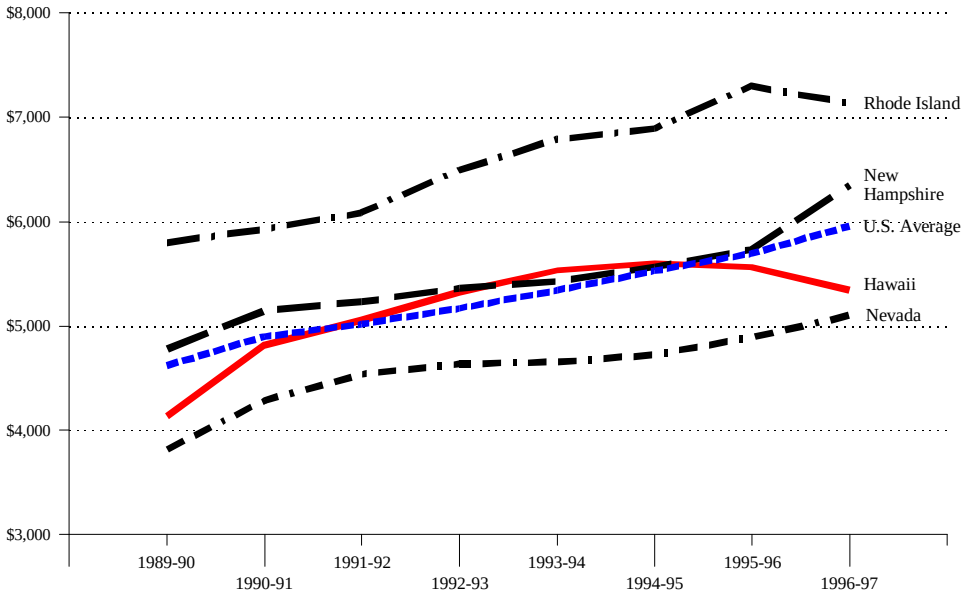
Current Expenditures per Pupil

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).[10] Between 1980-81 and 1994-95, 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 125%, State tax revenues increased by 97%, and operating expenditures per pupil increased by 134%. Expenditures per ADM reached a peak in 1994-95 and have since leveled off, currently (1996-97) at $5,348, 123% over what they were in 1980-81. Current data on the Gross State Product and State tax revenues are not yet available.[11]

Despite its wealth, Hawaii 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 11). The trend since 1989-90—shown in **Figure 13**—was positive until 1994-95 and has retreated since.

Figure 13. Expenditures per Pupil, Hawaii and Comparable States

After rising to slightly above the national average in 1993-94, Hawaii's per pupil expenditures on K-12 education have receded under the two-pronged onslaught of rising enrollment and a weak state economy .



From 1989-90 through 1993-94, Hawaii's per pupil expenditures gained against the national average, rising from 31st among the states to 19th. Since then, the State's per pupil expenditures have declined by about $500 per pupil, dropping Hawaii to 33rd among the states, 10.2% below the national average, in 1996-97.

Hawaii's rise to the median level among the states in its funding of public education was not long-lived. The difference between its ranking on tax revenues per capita (1st) and its ranking on expenditures per pupil (33rd) is striking.

The low state of Hawaii's fiscal priority for public education presented above is corroborated by the work of policy analysts elsewhere. A review of the education systems in all 50 states commissioned by the Pew Charitable Trusts 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. 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.[12] The follow-up to that report mentioned very favorably the equity of Hawaii's school funding, but reiterated the low rating of Hawaii's financial support of its public schools. The new report went on to address specifically the problems of Hawaii's urban schools stemming from years of inadequate funding for repair and maintenance of school facilities.[13]

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.

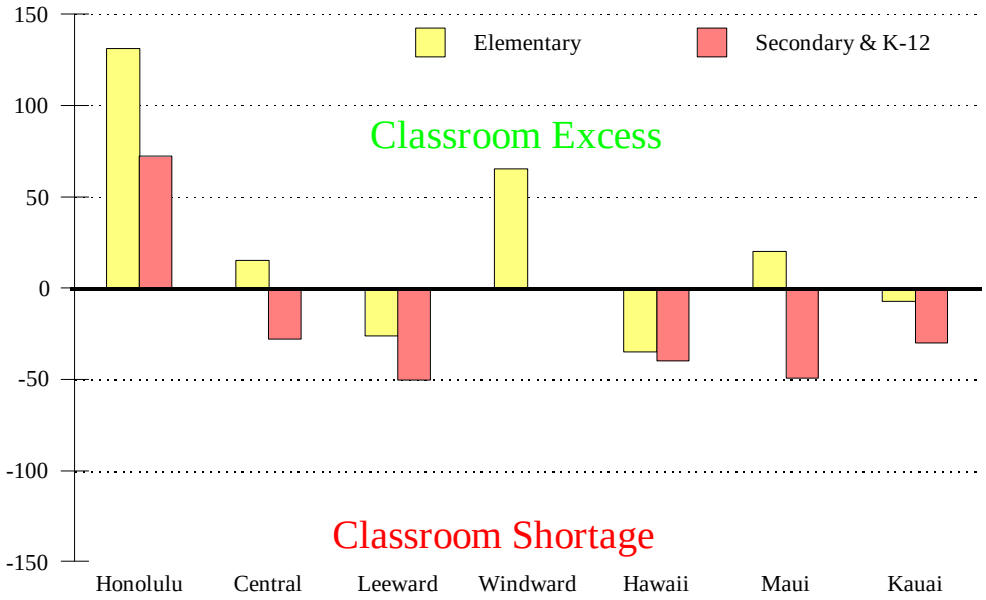
Classrooms

Well over one-third (92) of the 246 regular schools operating in 1996-97 had fewer classrooms than they need.[14] 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 14**. Almost 1,300 "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 recent growth in the population of school-aged children. The State's school building program simply has not been able to keep up with the need.

A second measure of the adequacy of school classrooms 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.[15] 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 1996-97, 98 schools were operating at or above their rated capacity, 49 of which were operating at more than 10% over capacity. This represents a modest improvement over 1995-96, but the shortage of classrooms in Hawaii is real and it continues.

Figure 14. Net Classroom Shortage or Excess, by District

Hawaii's classroom shortages are unevenly distributed. There are excess classrooms in Honolulu, but there are shortages in each of the districts with growing populations.

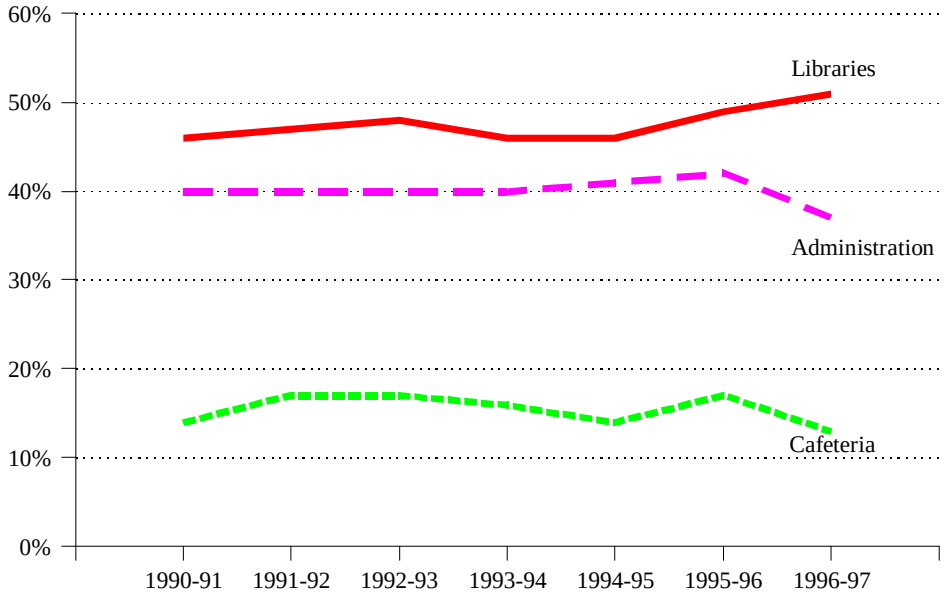


Other Facilities

Our schools' ancillary facilities remain underdeveloped. In 1996-97, media attention to this problem and the efforts of schools, the department, and the leadership of state government have begun to produce results. The proportions of schools with inadequate space for cafeterias or administrative facilities declined. However, the percentage of schools with inadequate library space continued to increase; over 50% of all schools still lack adequate libraries. 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 15**.

Figure 15. Percentages of Substandard Facilities, 1990-91 to 1996-97

The proportions of schools with less than adequate administrative and cafeteria facilities declined in 1996-97. However, over half our schools still lack adequate space for libraries.

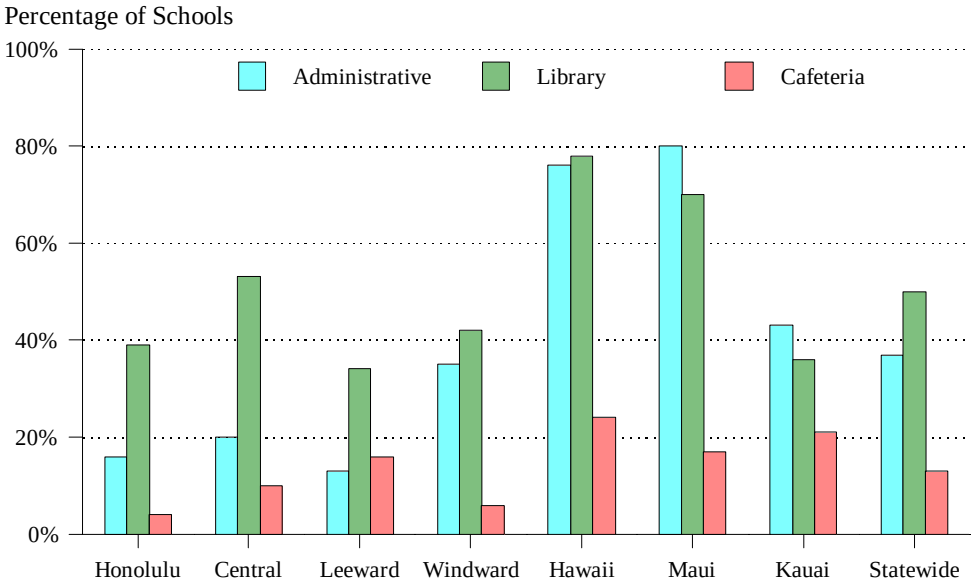


It should be noted that this problem is widespread and of long standing. A recent U.S. General Accounting Office document reported that similar problems affect all states.[16] In Hawaii as elsewhere, the problem resulted from years of under investment in school facilities. It will take a long time and much effort to correct. In 1992, the Office of Business Services estimated that it would take more than two billion dollars spent over ten years to bring all of Hawaii's public schools up to the state's standards. The investment thus far proposed and appropriated has been far short of that.

Hawaii's problem with school facilities affects all levels of schools. Roughly half of all schools, 86 of 165 elementary schools, 15 of 26 multi-grade schools, and 24 of 55 secondary schools have less than 70% of the library space required by State standards. However, the distribution of facility shortfalls is not evenly distributed geographically; the shortfalls affect some districts much more than others.

The distribution of facility shortfalls by district is shown in **Figure 16**. In Honolulu District, with a nominal excess of classrooms and stable enrollments, 39% of schools have inadequate library space. In Hawaii District, the ratio is 78%. As with libraries, Hawaii and Maui Districts show the most severe shortages of administrative space (offices, workrooms, storage, etc.).

Figure 16. Percentages of Schools with Substandard Facilities, by District



The shortages of ancillary facilities are also unevenly distributed. The shortage of library and administrative space is most acute for the schools in Hawaii and Maui Districts.

The percentage of schools with inadequate cafeteria space (less than 70% of State standard) is lower than with libraries and administrative space–"only" 31 schools remain without adequate eating facilities. Substantial progress has been made in recent years to reduce the shortfall in this area.

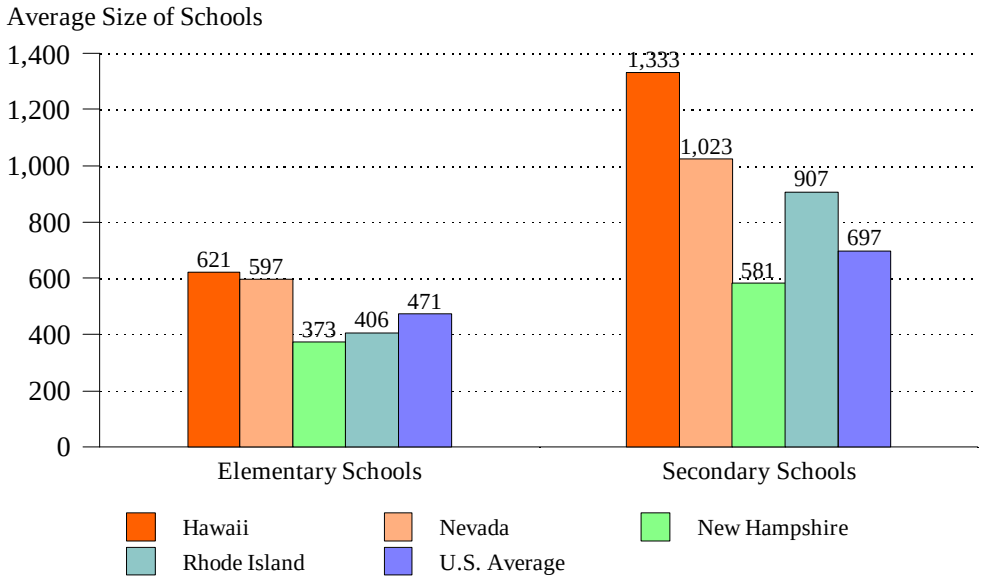
School Size

There is a perennial belief among some fiscal policy makers that schools ought to be like factories in organization, management, and size. At the core of this belief is the notion that education 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. Definitive research has shown also that small classes (13 to 17) have substantial and lasting benefits for children in early grades, and that they have greater benefits for disadvantaged children–about double–than for those from advantaged backgrounds.[17]

In previous reports, we have noted that Hawaii has uncommonly large schools. Hawaii's regular secondary schools have the second largest average size in the nation–smaller on average only than those in Florida, but still almost 90% larger than the national average. The State's regular elementary schools, averaging 630 pupils, ranked third largest in the nation behind those of Florida and Georgia, and are more than 30% larger than the national average.[18] The average sizes of elementary and secondary schools in Hawaii and comparable states are shown in **Figure 17**.

Hawaii's regular secondary schools are the second largest, on average, in the nation-- almost 90% larger than the U.S. average. Its elementary schools are 30% larger than the U.S. average.

Figure 17. Average Size of Schools, Hawaii and Comparable States



Recognizing this, the Board of Education in 1997 adopted a policy setting standards for school size. This policy set desired enrollment limits of 550 students for elementary schools, 600 students for middle or intermediate schools, and 1,000 students for high schools.[19] The Board's recognition of the desirability of smaller schools is only a small first step toward improving this aspect of Hawaii's public school system. In 1996-97, 74 of 165 elementary schools (45%) , 12 of 39 middle or intermediate schools (31%), and 7 of 36 high or intermediate/high schools (19%) met those standards. To bring Hawaii's **average** school size into compliance with the new policy would require 17 new elementary schools, 13 middle schools, and 20 high

schools. Even if these were created from existing school facilities (through organizing "schools within schools"), the staffing demands and organizational effort required would be formidable. The problem of excessively large schools was created over decades by Territorial and State policy. It will take sustained attention over many years to correct it.

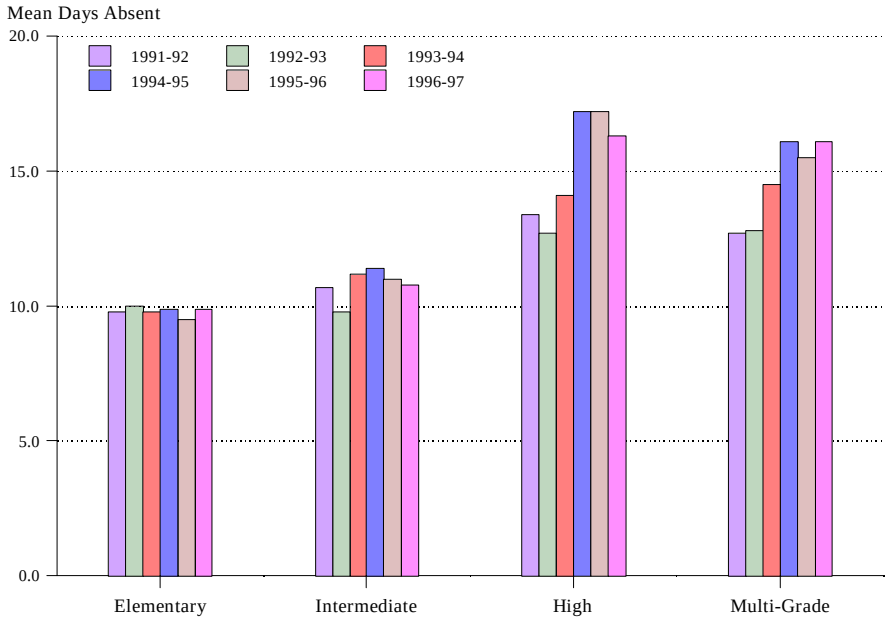
Attendance

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. In past reports we focused on two aspects of instructional time, the State mandated school year and students' attendance. The last available comparative data, that for 1990-91 indicated that Hawaii lagged considerably behind other states in the length of its school year. Since then, however, Hawaii has moved to lengthen its school year, and in 1998-99 will add seven days to the school calendar.

While Hawaii has been faulted for having a short school year, Hawaii's students add to their disadvantage by the use they make of the time they have. Attendance rates for all schools average over 90%, but this still means that Hawaii's average student misses ***over 12 days*** of school per year. 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 18**. 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 (16 days) of school per year. In 1996-97 there were 16 schools whose average rates of absence exceeded 20 days per year.

Figure 18. Mean Number of Days Absent by School Type



Students in Hawaii's high schools and multi-grade schools miss, on average, over three weeks of school each year.

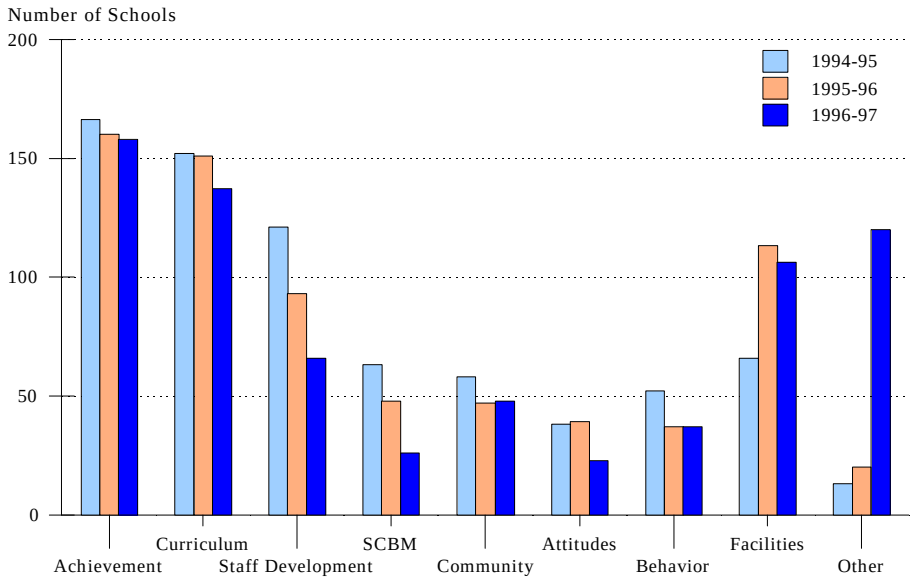
There have been sharp increases in reported absence rates in high schools and multi-grade schools since1994-95. These have probably resulted from changes in attendance accounting rather than changes in underlying attendance rates. Prior to 1994-95, attendance procedures had been quite varied, with many smaller schools reporting only the results of once daily manual counts. Since then, the adoption of new school management software has made possible standardization of attendance counting. Standard procedures for attendance, based on computer counting, are being implemented in the 1998-99 school year. These changes in procedure will result in declines in reported attendance rates that we should not misinterpret as signs of deterioration. That said, we need to improve students' attendance substantially; and to do so, we shall need to find out what causes our students to miss so much school.

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 1994-95 through 1996-97 are presented in **Figure 19**. Since 1991-92, student achievement and curriculum have dominated the list. 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 electrical service, computers, 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 school facilities are brought up-to-date, concern with facilities is likely to fade and be supplanted by the continuing concerns of curriculum content made available by the new facilities and the achievement resulting from students' exposure to the new resources.

Figure 19. Improvement Priorities of Hawaii's Public Schools

Student achievement and curriculum are the top priorities for school improvement. Facilities have come into focus recently with the national and state emphasis on getting schools "on line."



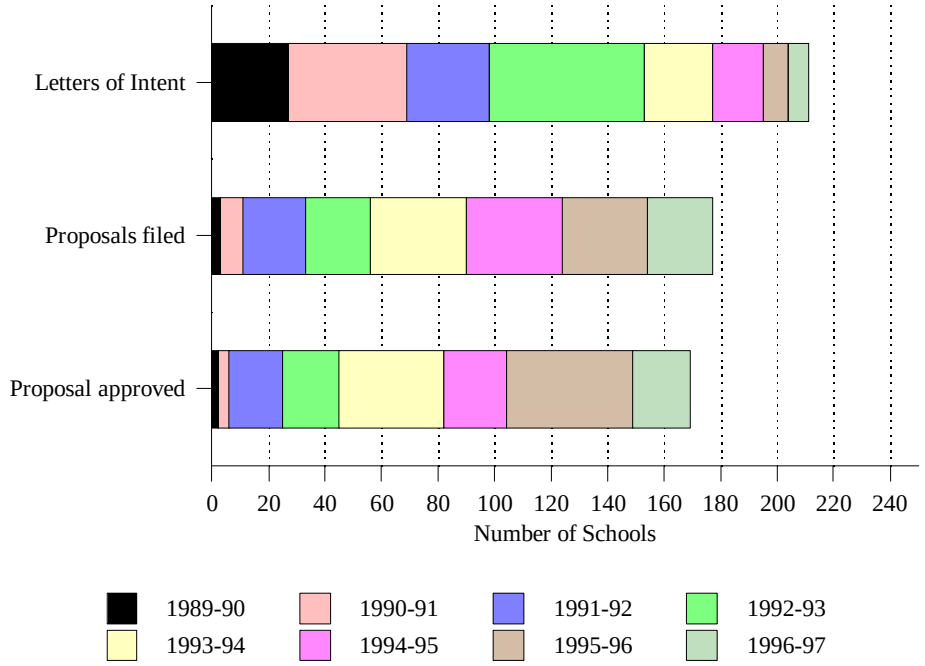
All of the components identified here are elements of schooling that leaders at the school level believe need their attention and are within their power to change. The specific descriptions given on the ***School Status and Improvement Reports*** of school improvement priorities and activities are highly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

SCBM

Probably the most important effort at school reform in Hawaii over the last dozen 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, with the intent of using governance 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 20**. 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 by the end of 1996-97 86% of public schools had initiated participation in SCBM and over 71% were 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 20. School/Community-Based Management Implementation



By the end of 1996-97 86% of public schools had initiated participation in SCBM and over 71% were implementing the reform.

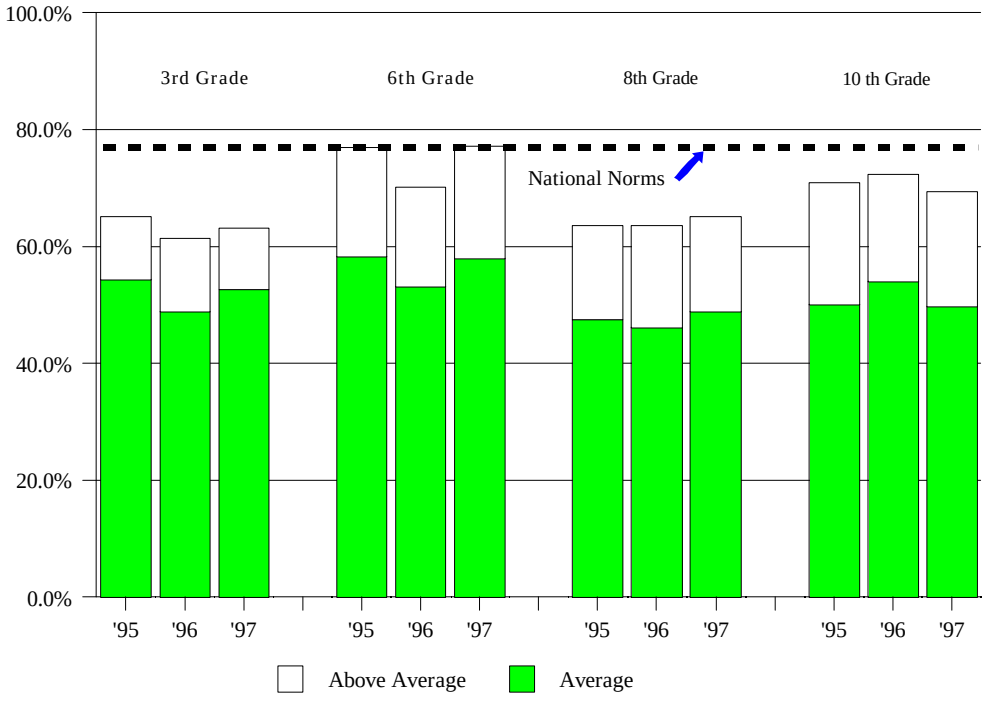
Implementing SCBM is not a simple or easy process. Most of the schools that had filed letters of intent to participate in SCBM but had not proceeded to implementation had filed their letters of intent more than two years earlier. This suggests that the changes that SCBM requires involve more than technical implementation, they require major philosophical change. Change of that type and magnitude can be slow and difficult.

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.[20]

The performance of Hawaii's students in grades 3, 6, 8, and 10 on the SAT reading and mathematics tests is shown in **Figures 21** and **22**, respectively. The graphs depict data for 1994-95 through 1996-97 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.

Figure 21. Stanford Achievement Test–Reading, 1995-97



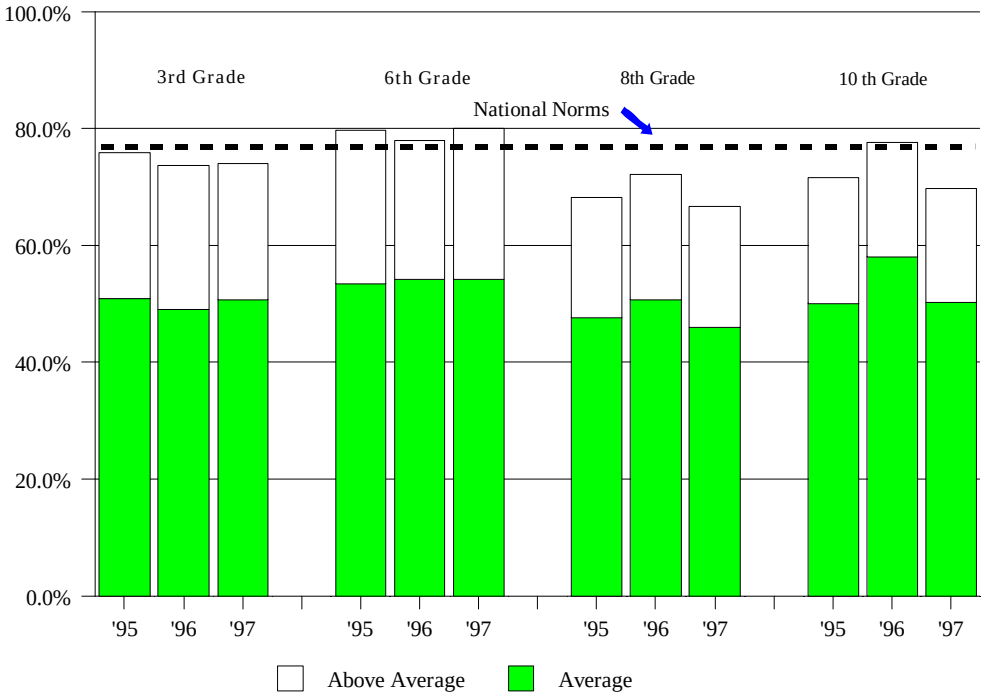
Hawaii's public school pupils show an early deficit in reading, which has mostly disappeared by 6th grade. The reasons for the regression at 8th grade and "echo" gain at 10th grade are not understood.

Reading

At three of the four grades tested, the performance of Hawaii's students on the SAT reading subtest is lower than that of the test's norming group. Hawaii's 6th grade students performed at the norm in 1995 and 1997. The "deficit" (lower proportions of average and above average scores than in the SAT norming sample) is more pronounced for 3rd grade students than for older ones. Apparently, the children in Hawaii's public schools start with a deficit in reading and make progress against the national norms between 3rd grade and 6th grade. There is a puzzling regression of our 8th grade students on the reading test. While 6th graders are on a par with the national norms, 8th graders' performance looks very similar to

that of 3rd graders in relation to the national norms. By 10th grade, however, students' performance is nearly back to the relative level achieved by 6th graders. We do not at this point understand the seeming fall off in our 8th graders' performance, but it is also reflected in the mathematics test data.

Figure 22. Stanford Achievement Test–Mathematics, 1995-97



Hawaii's public school pupils score at or near national norms in 3rd, 6th, and 10th grades. The reasons for the below norm performance at 8th grade are not understood.

Mathematics

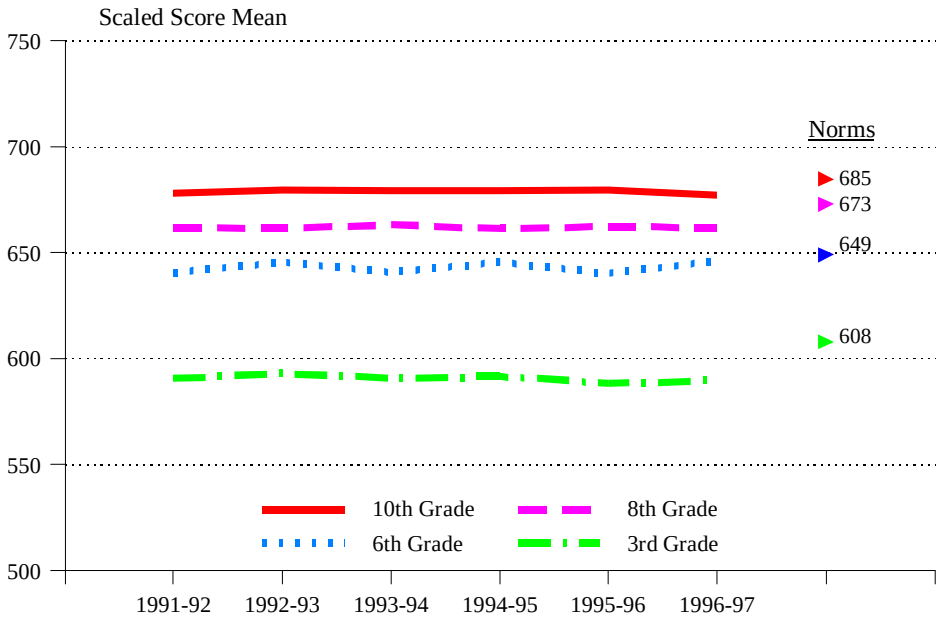
By contrast with the reading subtest, Hawaii's 3rd and 10th grade students perform just about at the national norms for the Stanford mathematics subtest; and 6th graders' performance is a little above the norm. However, as on the reading subtest, the performance of Hawaii's 8th graders is anomalous; it is well below the levels shown by both 6th and 10th graders.

Statewide Average Scores

Figures 21 and **22** 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. **Figures 23** and **24** present a different perspective. 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.

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 6th and 10th grade averages close to the national norms. In mathematics Hawaii's students score at about the national norm in 3rd grade, 8th grade, and 10th grade, while 6th graders score somewhat above the national norms.

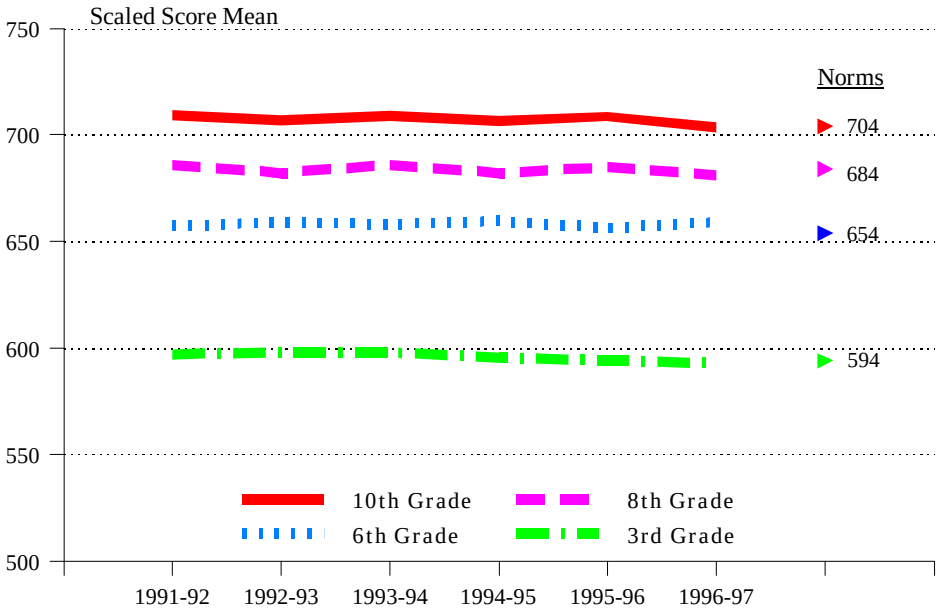
Figure 23. Statewide Averages, SAT Reading



The mean scores of Hawaii's students on the SAT reading test show little evidence of change. The up and down variation of 6th grade mean scores may be the result of flaws in the test itself.

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.

Figure 24. Statewide Averages, SAT Mathematics



The mean scores of Hawaii's students on the SAT mathematics test show little evidence of change over the 6 years that the current version (8th ed.) has been in use.

High School Completion

Dropouts

Students dropping out of school had not been considered a problem until relatively recently. Until well after World War II, leaving school without a high school diploma was a normal occurrence. That began to change in the 1960's, and by 1989 increasing the rate of high school completion to 90% had become one of eight National Education Goals. In 1988 the National Center for Education Statistics (NCES) led a national effort to develop standard definitions of dropouts and to standardize the reporting of dropout statistics. Hawaii has reported these data to NCES since 1994. **Table 1** shows these "event" dropout rates by grade for Hawaii for the years since reporting was initiated.[21] One should note that these statistics count as "dropouts" a substantial number of students whose status is simply unknown. These include students transferring to other states or countries whose enrollment in destination schools has not been confirmed. The students of unknown or unconfirmed outcome are about half of the total counted as dropouts.

Table 1. Event Dropout Rates (%) by Grade Level, Grades 9 through 12

Year	Grade 9	Grade 10	Grade 11	Grade 12	Estimated Cohort Dropout Rate
1993-94 to 1994-95	5.57%	5.72%	7.40%	3.66%	
1994-95 to 1995-96	3.71%	4.02%	5.84%	6.73%	
1995-96 to 1996-97	3.91%	4.32%	5.29%	5.59%	
1996-97 to 1997-98	4.36%	4.54%	5.33%	5.23%	Class of '97 — 18.7%

From the annual event dropout rates shown in **Table 1**, one can estimate the cumulative dropout rate for the class of 1997 by compounding the annual event rates for the cohort's four years of high school, shown in the shaded cells.[22] This computation results in an estimated cumulative dropout rate of 18.7% for the 1997 statewide graduating class. It is necessary here to add the caution that this rate represents the ***upper limit*** for the "true" dropout rate because, as noted above, many students' true status is unknown and all whose status is unknown are counted as dropouts. A minimum value for the class dropout rate can also be estimated using the rates of confirmed dropouts; that minimum value is 10.5%. Even putting the best face possible on the data, we have much work yet to do before we have met the National and Hawaii Educational Goal of ensuring that at least 90% of our students graduate from high school.

Senior Completion

To graduate with a diploma from a public high school in Hawaii, students must accumulate 22 high school credits,[23] including the following specific subject requirements:

English ..... 4 credits — social studies ..... 4 credits

mathematics .... 3 credits — science ..... 3 credits

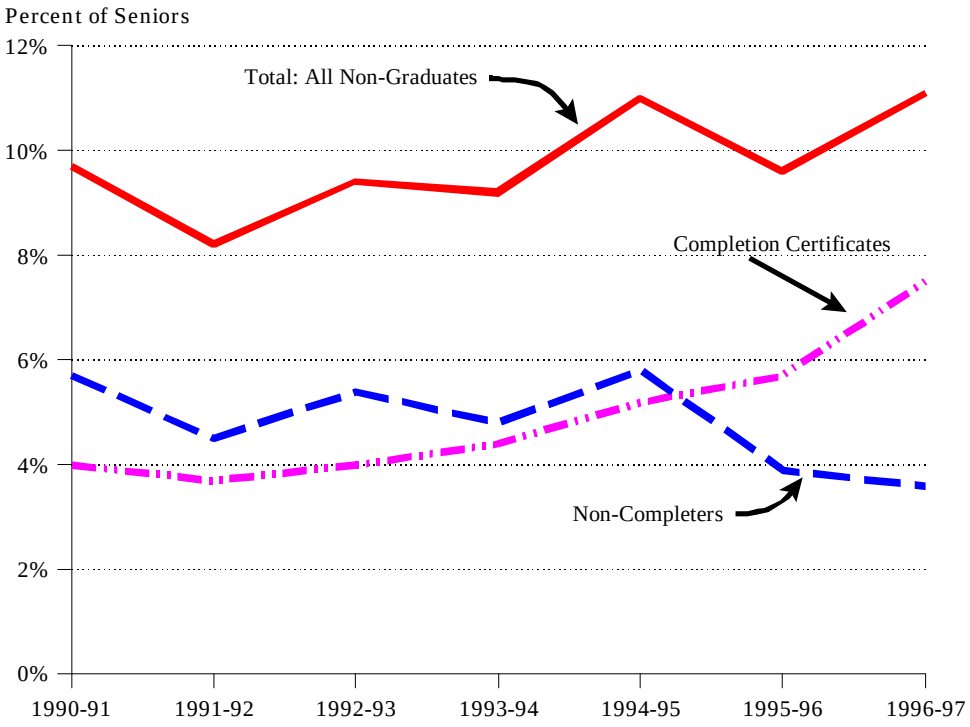
Students must also pass all of their required courses and demonstrate mastery of 16 "essential competencies" by passing a written test, the Hawaii State Test of Essential Competencies (HSTEC).[24]

There are two non-diploma completion alternatives for students who have not met all of the requirements for a diploma. A certificate of course completion may be

awarded to a student in the regular program who has completed all but the HSTEC requirement, and an individually planned program certificate may be awarded to a special education student who has completed all the elements of his or her individually planned program (IPP). Receipt of one of these certificates is not considered graduation, but they are distinguished from failing to complete school altogether.

The rates of **non-graduation** outcomes are shown in **Figure 25**. These data are for students who either were seniors at the beginning of the academic year or became seniors during that year. The graph clearly shows that while the overall rate of non-completion is declining, the rate of completion without receiving a high school diploma is increasing. There was a noticeable increase in the percentage of seniors not graduating in 1997, when graduation requirements were increased by 2 credits, 1 each in science and mathematics, and the 16th essential competency was added to HSTEC. This was an expected consequence of the increased requirements, but it will bear watching to see if students in subsequent years are able to rise to the challenge of higher standards for the diploma.

Figure 25. High School Senior Non-Graduation Outcomes, 1991-97



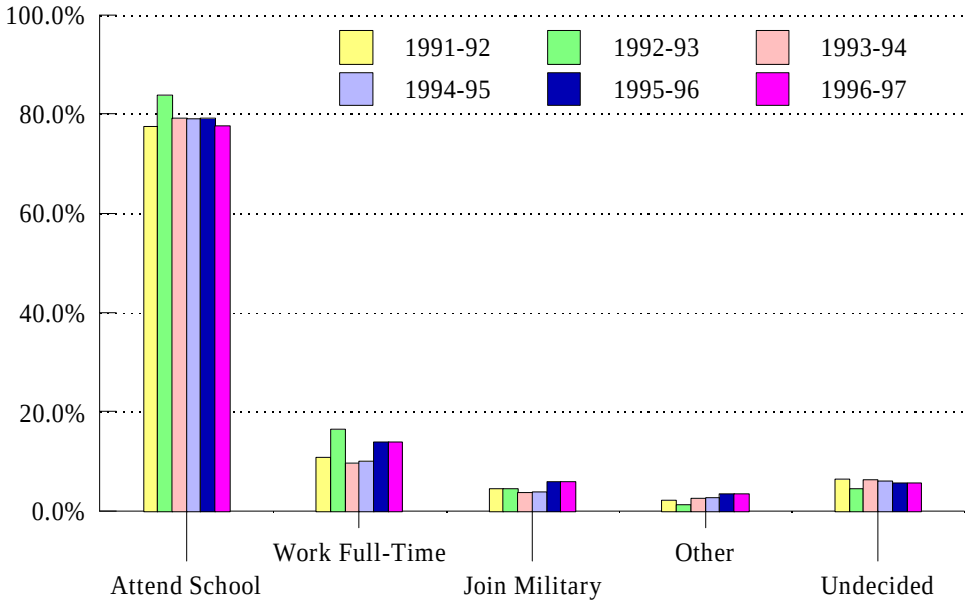
While the number of students failing to complete school has been dropping, the number of students completing high school with less than a diploma is increasing.

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 26**. 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 what our graduates intend to do; most of them intend to continue their formal education.

Figure 26. High School Seniors' Plans, 1991-92 to 1996-97



The vast majority of high school seniors who respond to the survey intend to continue their schooling. Only about 20% intend to work full-time without continuing their education.

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.

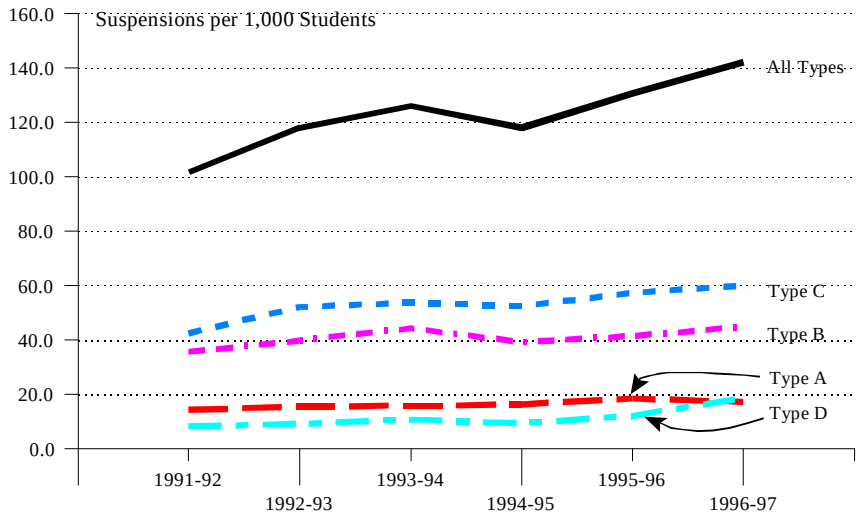
When a student is suspended for Class A or B misconduct, filing a police report is required by law; police reports are not required for Class C or D offenses.

The statewide rates of the four classes of suspensions for the 1991-92 through 1996-97 school years are presented in **Figure 27**. The rates are given in terms of incidents per 1,000 students to permit comparisons across years. A student may have committed more than one offense before being suspended, and a number of students have been suspended more than once in each year. A small number of students–about 200–are suspended from more than one school in the same year.

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 in 1994-95. However, the incidence rates of Types B, C, and D rose again between 1994-95 and 1996-97, with the largest increase that of Type D (violations of local school rules). Type C suspensions for attendance offenses (leaving campus, class cutting) declined sharply, reflecting a change in policy that has deleted those violations

from the list of Type C offenses; it is no longer considered appropriate to use suspension to discipline students for skipping school. The increased incidence of other Type C and Type D suspensions probably represents evidence of some "tightening up" on student discipline by school personnel.

Figure 27. Suspension Rates by Type of Offense, 1991-92 to 1996-97



The incidence rate for suspensions of all types has been increasing, but the incidence rate for the most serious offenses has not. More students are being suspended for less serious offenses.

Threats to Safety and Property

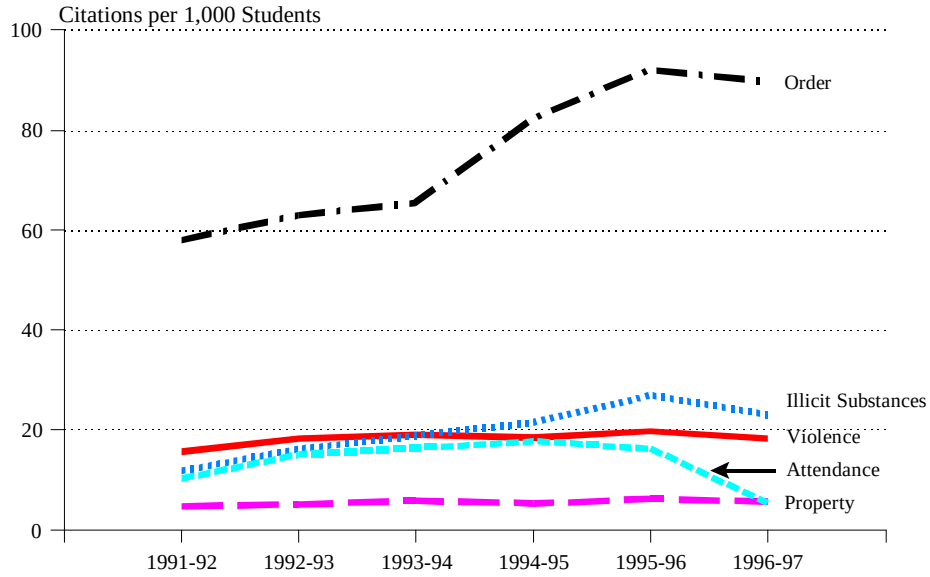
Although the Chapter 19 suspension classifications are related to the general seriousness of the behavior involved, they do not reflect the degree to which students' behavior actually threatened the safety or property of others. Therefore, the data were also categorized by specific charges to reflect the degree of threat to safety or property involved. In this analysis, charges were classified by the categories listed in **Table 2**. The designations in parentheses are the classification codes used by DOE under Chapter 19. The incidence rates of these classifications are shown in **Figure 28**.

Table 2. Classification of Ch. 19 Charges by Type of Incident

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	Alcohol use or possession (A24), Drug Paraphernalia (A23), Marijuana use or possession (A21), Other illicit substance use or possession (A27), Sale of illicit substances (A22), Smoking or Tobacco (C04), Contraband (D01)
Attendance [deleted effective 1997-98]	Class Cutting (C01), Leaving Campus (C03)
Order	Disorderly Conduct (B02), False Alarm (B17), Gambling (B03), Insubordination (C02), Other Prohibited Conduct (D02)

Charges involving violence or threats to property are not increasing. Those involving illicit substances and order are declining.

Figure 28. Charges Categorized by Type of Incident, 1991-92 to 1996-97



While there has been a rise in the number of suspensions, further examination of the data shows declines in the number of incidents per 1,000 students for all five categories of charges. Between 1995-96 and 1996-97, the total number of charges filed declined by over 3,000 and the number of students suspended declined by over 1,000. The average number of charges per suspension also declined slightly from 2.1 in 1994-95 to 2.0 in 1996-97. While there have been more suspensions, there were fewer incidents involved, and the schools are experiencing fewer threats to safety and property.

The charges listed on students' suspension reports reinforce the view that violence is neither rampant nor increasing. The most prevalent problems reflected in the charges are breaches of order. Of the 26,800 charges associated with student suspensions in 1996-97, the three most frequently cited charges, accounting for 61.7% of the total, were for insubordination, disorderly conduct, and "other prohibited conduct." The fourth most frequently cited charge was for smoking or other use of tobacco (9.3%). Citations for possession or use of illicit substances represent 4.6% of the total, an increase of 1.1% from a year earlier. In 1996-97, the codes used by the Department for records of Chapter 19 offenses did not distinguish between alcohol violations and those involving illegal drugs; the two were lumped together. That has been changed, and future data will distinguish between offenses involving alcohol and those involving illegal drugs.

This eighth Superintendent's accountability report has described 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. What we have seen in this report is that:

- We are behind the rest of the nation in our support for public education in Hawaii. The combination of steadily increasing public school enrollment and restricted State revenues will make it quite difficult to catch up without a major reordering of the State's fiscal priorities. Many of the children in our charge start school behind their mainland counterparts, especially in language development. We cannot cut education spending and increase class sizes and not have students' performance suffer as a result.

- Our school facilities are stretched and overcrowded. We need more than just investment in new schools to reduce the size of schools and increase the affiliation and involvement of students.

- 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.

- We are still troubled by the mixed performance of our students on standardized tests. Our students start school behind but gain considerably between 3rd and 6th grade. However, there is a troubling regression of students' performance in 8th grade. We need to redouble our efforts to ensure that our students do not "lose out," either from their lack of effort or ours.

- For the first time, we have data with which to assess our progress toward the objective, included in the Hawaii Educational Goals, of having at least 90% of the students who enter 9th grade graduate from high school. We are far from attaining that objective. We have a dropout rate that well exceeds 10% and a growing number of students who finish high school but leave without earning a diploma. For the future of the State and of the children of Hawaii, we have "miles to go and promises to keep."

Endnotes

Introduction

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.

Context

2. The three special program centers are: Jefferson Orthopedic Unit, located at Jefferson Elementary School; Pohukaina School, a special education unit adjacent to Kaimuki Intermediate School; and The Hawaii Center for the Deaf and the Blind.

3. Hawaii Department of Business, Economic Development and Tourism, *The State of Hawaii Data Book 1996*, Online, **http://www.hawaii.gov/dbedt/db96/index.html**, Table 2.01, Table 2.05, Accessed 2 September 1998.

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

5. These schools were: Hale Kula, Helemano, Iroquois Point, Mokapu, Pearl Harbor Kai, Shafter, Solomon, and Wheeler Elementary Schools.

Process

6. 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.

7. U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics, 1997*, NCES 98-015, Washington, DC: 1998, Online, **http://nces.ed.gov/pubs/digest97/index.html**, Table 83, Accessed 8 July 1998.

8. Karen Peterson, "Isle schools spend less for top posts," *Honolulu Advertiser*, August 14, 1998, pp. A1, A12.

9. U. S. Bureau of the Census, *Statistical Abstract of the United States: 1997* (117th edition), Washington, D.C., 1998, Online, **http://www.census.gov/prod/www/abs/cc97stab.html**, Table 706 (income), Table 495 (revenue), Accessed 8 July 1998.

10. 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.

11. Hawaii Department of Business, Economic Development and Tourism, *The State of Hawaii Data Book 1996*, Online, **http://www.hawaii.gov/dbedt/db96/index.html**, Table 13.02 (GSP), Table 9.01 (revenues), and Table 3.15 (school expenditures), Accessed 2 September 1998. 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 97-554 (1997), Tables 6&7, pp. 8-9.

12. Education Week, *Quality Counts: A Report on the Condition of Education in the 50 States*, Washington, D.C., Editorial Projects in Education, 1997, pp. 94, 96.

13. Education Week, *Quality Counts '98: The Urban Challenge*, Washington, D.C., Editorial Projects in Education, 1998, pp. 137-140.

14. Since 1996-97, five more schools have been added to the State's public school system. Kapa`a Middle School and Kealakehe High School opened in 1997-98, and Kea`au Elementary School, Mililani Middle School and Waikele Elementary School will open in 1998-99.

15. The current policy is target class sizes of 21 in grades K through 2 and 26 in higher grades. The target class size for special education is 12.

16. United States General Accounting Office, *School Facilities: America's Schools Report Differing Conditions*, GAO/HEHS 96-103, Washington, D.C., 1996.

17. W. J. Fowler and H. J. Walberg, "School Size, Characteristics, and Outcomes," *Educational Evaluation and Policy Analysis*, **13**, 2, (Summer, 1991): 189-202. F. Mosteller, "The Tennessee Study of Class Size in the Early School Grades," *The Future of Children*, **5**, 2, (Summer/Fall, 1995): 113-127.

18. U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics, 1997*, NCES 98-015, Washington, DC: 1998, Online, **http://nces.ed.gov/pubs/digest97/index.html**, Tables 97 & 98, Accessed 8 July 1998. In the 1997 *Digest*, NCES introduced the distinction between **regular** schools and **all** schools. The category of regular schools excludes vocational, special education, and alternative schools, all of which tend to be smaller than regular schools. When all schools are considered, Hawaii has the largest secondary schools in the nation.

19. Hawaii Board of Education, *School Size Standards*, Policy No. 6701, approved March 20, 1997.

Outcomes

20. The norms of the SAT under-represent large, urban school districts that have substantial numbers of minority students or students with non-English speaking background. This adversely represents the achievement of Hawaii's public school students relative to a "national average."

21. The event rate is computed by counting the number of students who leave school for various reasons within each grade cohort each year as a percentage of the original cohort size. The other two defined rates are status dropout (aged 16 to 19, not in school and without a high school diploma or the equivalent as a percentage of the age group population) and cohort dropout (percentage of entering high school freshmen who have not completed high school four years later).

22. The compounding formula is as follows: $r_c = [\ 1-(1-r_9)(1-r_{10})(1-r_{11})(1-r_{12})]$ where r_c is the estimated cohort rate and the other "**r**" values are the event rates for 9th through 12th grades. The compounding is necessary to account for the diminishing size of the original cohort.

23. The number of credits required for graduation was increased from 20 to 22, raising the credits required in mathematics and science from 2 to 3, beginning with the 1996-97 senior class.

24. Students first attempt the HSTEC in 10th grade. If they do not pass on their first attempt, they may retake the portion(s) not passed up to 4 more times, twice each in 11th and 12th grades. The 16th essential competency, knowledge of the diversity and interdependence of the world's peoples and societies, became a requirement for the 1997 graduating class.

Data Tables

Table 3. Enrollment in Hawaii's Public Schools, 1987-88 to 1996-97
(Figure 2)

	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
Elementary	93,921	96,382	98,567	100,071	102,142	103,356	104,227	105,598	107,254	107,979
Secondary	71,989	70,845	70,626	70,985	72,107	73,567	75,649	77,566	79,327	80,506
Total	165,910	167,227	169,193	171,056	174,249	176,923	179,876	183,164	186,581	188,485
Growth	1,846	1,317	1,966	1,863	3,193	2,674	2,953	3,288	3,417	1,904
Growth Rate	1.1%	0.8%	1.2%	1.1%	1.9%	1.5%	1.7%	1.8%	1.9%	1.0%

Table 4. Enrollment by District, 1986-87 to 1996-97
(Figure 3)

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
1996-97	35,365	35,985	35,982	20,297	28,257	21,463	11,065

Table 5. Students with Special Needs in Hawaii's Public Schools
(Figures 4, 5, & 6)

Year	Special Education		Limited English		Lunch Subsidy	
1988-89	9,214	5.4%	7,674	4.5%	51,997	30.7%
1989-90	9,572	5.6%	8,035	4.7%	48,522	28.4%
1990-91	9,778	5.6%	8,861	5.1%	46,849	26.9%
1991-92	10,800	6.1%	8,834	5.0%	47,719	27.0%
1992-93	11,359	6.3%	9,124	5.1%	55,295	30.7%
1993-94	11,694	6.4%	10,603	5.8%	60,339	32.9%
1994-95	12,184	6.5%	10,927	5.9%	64,008	34.3%
1995-96	13,092	6.9%	12,902	6.8%	70,033	37.2%
1996-97	13,951	7.4%	13,366	7.1%	64,964	34.3%

Table 6. Incidence of Low Birth Weight and Single Mothers, 1985-1996
(Figure 7)

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%	6.5%
1995	18,552	29.3%	6.6%
1996	18,378	30.3%	6.7%

Source: See Note 3.

Table 7. Students Attending the Same School All Year
(Figure 8)

	Type of School			
Year	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%
1996-97	91.0%	93.4%	92.9%	92.9%

Table 8. Ethnicity of Students and Teachers in Hawaii's Public Schools, 1996-97
(Figure 9)

Ethnicity	Students	Teachers
African-American	2.6%	0.7%
Caucasian	16.8%	27.9%
Chinese	3.2%	6.0%
Filipino	18.9%	5.6%
Hawaiian/Part-Hawaiian	24.7%	10.1%
Hispanic	4.8%	0.2%
Japanese	12.2%	46.4%
Korean	1.6%	1.0%
Samoan	3.3%	0.4%
Other	12.0%	1.7%

Table 9. Pupil to Teacher Ratios in Hawaii and Comparable States, 1987-88 to 1996-97 (Figure 10)

Year	Hawai`i	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	18.7	15.6	14.7	17.3	39
1995-96	17.8	19.1	15.7	14.3	17.3	40
1996-97	17.8	19.1	15.3	14.2	17.0	39

Sources: U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics, 1997*, NCES 98-015, Washington, DC: 1998, Online, ***http://nces.ed.gov/pubs/digest97/index.html***, Table 66, Accessed 8 July 1998.
U.S. Department of Education, Office of Educational Research and Improvement, *Early Estimates: Public Elementary and Secondary Education Statistics: School Year 1996-97*, Table 6,7, pp.8, 9.

Table 10. Percentage of State and Local Revenue Allocated to Public K-12 Education, Hawaii and Comparable States (Figure 12)

	1982-83	1984-85	1987-88	1989-90	1990-91	1991-92	1992-93
Hawaii	17.1%	16.3%	17.3%	15.5%	15.0%	13.5%	13.1%
Nevada	19.2%	18.3%	21.0%	22.4%	24.5%	22.4%	21.3%
New Hampshire	24.7%	25.9%	27.6%	28.4%	28.9%	24.2%	23.9%
Rhode Island	21.3%	20.4%	21.4%	22.0%	21.8%	19.8%	20.7%
U. S. Average	24.3%	23.9%	24.2%	24.3%	24.1%	23.5%	23.4%

Sources: *Digest of Education Statistics, 1997*, Table 36; *Digest* 1985-86, Table 15; *Digest* 1987, Table 25; *Digest* 1988, Table 27; *Digest* 1989, Table 32; *Digest* 1990, Table 32; *Digest* 1991, Table 34; *Digest* 1992, Table 36; *Digest* 1994, Table 36; *Digest* 1996, Table 35.

Table 11. Expenditures per Pupil (ADA) for Hawaii and Comparable States, Long Term Trend

	1959-60	1969-70	1979-80	1989-90
Hawaii	$1,403	$2,825	$3,378	$5,589
Nevada	$1,860	$2,586	$2,913	$5,173
New Hampshire	$1,501	$2,430	$2,893	$6,664
Rhode Island	$1,786	$2,996	$3,933	$7,852
U. S. Average	$1,621	$2,743	$3,345	$6,232

Sources: *Digest of Education Statistics, 1997*, Tables 168, 169. Expenditures are in 1996-97 dollars per *average daily attendee* (ADA).

Table 12. Expenditures per Pupil (ADM) for Hawaii and Comparable States
(Figure 13)

	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
Hawaii	$4,130	$4,820	$5,062	$5,332	$5,533	$5,597	$5,560	$5,348
Nevada	$3,816	$4,294	$4,546	$4,645	$4,661	$4,730	$4,892	$5,106
New Hampshire	$4,786	$5,152	$5,237	$5,368	$5,433	$5,567	$5,740	$6,347
Rhode Island	$5,798	$5,934	$6,092	$6,501	$6,797	$6,899	$7,304	$7,138
U. S. Average	$4,628	$4,902	$5,023	$5,170	$5,344	$5,536	$5,697	$5,957
HI Difference from U.S. Average	($498) -10.8%	($82) -1.7%	$39 0.8%	$162 3.1%	$188 3.5%	$62 1.1%	($137) -2.4%	($609) -10.2%

Sources: *Digest, 1997*, Table 168. *Early Estimates, 1996-97*, Tables 6,7, pp.8, 9. Expenditures are in current (unadjusted) dollars per *average daily member* (ADM).

Table 13. Net Classroom Shortage or Excess by District
(Figure 14)

	Honolulu	Central	Leeward	Windward	Hawaii	Maui	Kauai
Elementary	131	15	-26	65	-35	20	-7
Secondary or K-12	72	-28	-50	0	-40	-49	-30
Total	203	-13	-76	65	-75	-29	-37

Table 14. Percentages of Schools with Substandard Facilities
(Figure 15)

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%
1996-97	37%	51%	13%

Table 15. Percentages of Schools with Substandard Facilities by District, 1996-97
(Figure 16)

	Honolulu	Central	Leeward	Windward	Hawaii	Maui	Kauai	Statewide
Administrative	16%	20%	13%	35%	76%	80%	43%	37%
Library	39%	53%	34%	42%	78%	70%	36%	50%
Cafeteria	4%	10%	16%	6%	24%	17%	21%	13%
Number of Schools	56	40	38	31	37	30	14	246

Table 16. Mean Number of Days Absent by School Type and Year
(Figure 18)

School 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
1996-97	9.9	10.8	16.3	16.1

Table 17. Number of School Reporting Specific Improvement Priorities , 1991-92 to 1996-97
(Figure 19)

	Year					
Priority	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97
Achievement	151	170	163	167	161	158
Curriculum	132	144	167	152	157	137
Staff Development	126	124	122	115	95	66
SCBM	73	85	78	57	48	26
Community	60	60	48	55	48	48
Attitudes or Behavior	98	83	88	81	80	60
Accredition	n/a	n/a	2	1	5	20
Facilities	17	18	27	66	114	106
Other	23	28	12	12	20	111

Table 18. Implementation of School/Community-Based Management , 1989-92 to 1996-97
(Figure 20)

	Current Status			Cumulative Status		
Year	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	149
1996-97	7	23	20	211	177	169

Table 19. Stanford Achievement Test -- Reading
(Figures 21 and 23)

		Norm	1992-93	1993-94	1994-95	1995-96	1996-97
3rd Grade	Below Average	23%	33.5%	37.0%	34.9%	38.7%	36.9%
	Average	54%	54.7%	50.6%	54.4%	48.8%	52.7%
	Above Average	23%	11.8%	12.5%	10.7%	12.5%	10.4%
	Mean	608	593.4	590.7	591.9	588.7	590.2
6th Grade	Below Average	23%	24.0%	28.8%	23.2%	29.9%	22.9%
	Average	54%	57.5%	54.9%	58.2%	53.2%	57.9%
	Above Average	23%	18.5%	16.3%	18.6%	16.9%	19.2%
	Mean	649	645.6	641.0	645.8	640.4	646.4
8th Grade	Below Average	23%	36.0%	36.0%	36.4%	36.5%	34.9%
	Average	54%	48.0%	45.8%	47.5%	46.1%	48.8%
	Above Average	23%	16.0%	18.2%	16.0%	17.4%	16.3%
	Mean	673	661.7	663.5	661.5	662.4	662.2
10th Grade	Below Average	23%	29.7%	27.9%	29.1%	27.7%	30.6%
	Average	54%	48.1%	54.3%	50.1%	54.0%	49.8%
	Above Average	23%	22.2%	17.8%	20.8%	18.3%	19.6%
	Mean	685	679.9	679.3	679.5	679.9	677.6

Table 20. Stanford Achievement Test -- Mathematics
(Figures 22 and 24)

		Norm	1992-93	1993-94	1994-95	1995-96	1996-97
3rd Grade	Below Average	23%	21.8%	22.3%	24.1%	26.3%	26.0%
	Average	54%	51.6%	51.1%	51.0%	49.1%	50.9%
	Above Average	23%	26.6%	26.5%	24.9%	24.7%	23.1%
	Mean	594	598.2	597.8	595.4	594.4	593.0
6th Grade	Below Average	23%	19.3%	19.9%	20.3%	21.9%	20.0%
	Average	54%	55.0%	56.2%	53.6%	54.3%	54.2%
	Above Average	23%	25.7%	24.0%	26.1%	23.7%	25.9%
	Mean	654	659.3	658.0	659.5	656.5	659.3
8th Grade	Below Average	23%	32.5%	26.7%	31.7%	27.8%	33.3%
	Average	54%	45.6%	50.6%	47.7%	50.9%	46.1%
	Above Average	23%	22.0%	22.7%	20.6%	21.3%	20.6%
	Mean	684	682.2	685.8	681.9	685.1	681.1
10th Grade	Below Average	23%	27.7%	22.7%	28.3%	22.4%	30.2%
	Average	54%	50.6%	57.0%	50.2%	58.2%	50.4%
	Above Average	23%	21.7%	20.3%	21.5%	19.4%	19.4%
	Mean	704	707.1	708.7	706.5	708.3	703.8

Table 21. High School Senior Completion and Non-Completion, 1986-87 to 1996-97
(Figure 25)

				Certificate of Completion					
				Course Completion		IPP		Did Not Complete	
Year	Seniors	Graduated							
1986-87	10,161	9,595	94.4%	n/a		n/a		566	5.6%
1987-88	11,173	10,517	94.1%	n/a		n/a		656	5.9%
1988-89	11,190	10,534	94.1%	n/a		n/a		656	5.9%
1989-90	10,204	9,393	92.1%	n/a		139	1.4%	672	6.6%
1990-91	10,041	9,066	90.3%	225	2.2%	180	1.8%	570	5.7%
1991-92	10,062	9,235	91.8%	207	2.1%	168	1.7%	452	4.5%
1992-93	9,852	8,924	90.6%	211	2.1%	185	1.9%	532	5.4%
1993-94	10,367	9,411	90.8%	301	2.9%	158	1.5%	497	4.8%
1994-95	10,552	9,435	89.4%	344	3.3%	205	1.9%	568	5.4%
1995-96	10,395	9,405	90.5%	365	3.5%	223	2.1%	402	3.9%
1996-97	10,189	8,977	88.1%	535	5.3%	227	2.2%	450	4.4%

n/a – option not available

Table 22. High School Seniors Plans, 1991-92 to 1996-97
(Figure 26)

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%
1996-97	77.7%	13.9%	6.0%	3.5%	5.7%

Table 23. Student Suspensions by Chapter 19 Classification, 1991-92 to 1996-97
(Figure 27)

	1991-92		1992-93		1993-94		1994-95		1995-96		1996-97	
	Number	Rate	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	3,287	17.4
Type B	6,268	36.0	7,112	40.2	8,002	44.5	7,207	39.3	7,774	41.6	8,541	45.3
Type C	7,434	42.7	9,283	52.5	9,734	54.1	9,663	52.8	10,767	57.6	11,356	60.3
Type D	1,501	8.6	1,685	9.5	2,018	11.2	1,769	9.7	2,335	12.5	3,615	19.2
All Types	17,723	101.7	20,869	118.0	22,677	126.1	21,672	118.3	24,409	130.7	26,799	142.2
Students Suspended	10,686	61.3	12,088	68.3	13,104	72.9	12,839	70.1	14,232	76.2	13,233	70.2
Enrollment	174,249		176,923		179,876		183,164		186,805		188,465	

Rates are in suspensions per 1,000 students

Table 24. Chapter 19 Charges Categorized by Type of Incident, 1991-92 to 1996-97 (Figure 28)

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
1996-97	18.4	5.7	23.1	5.4	89.6