Staff

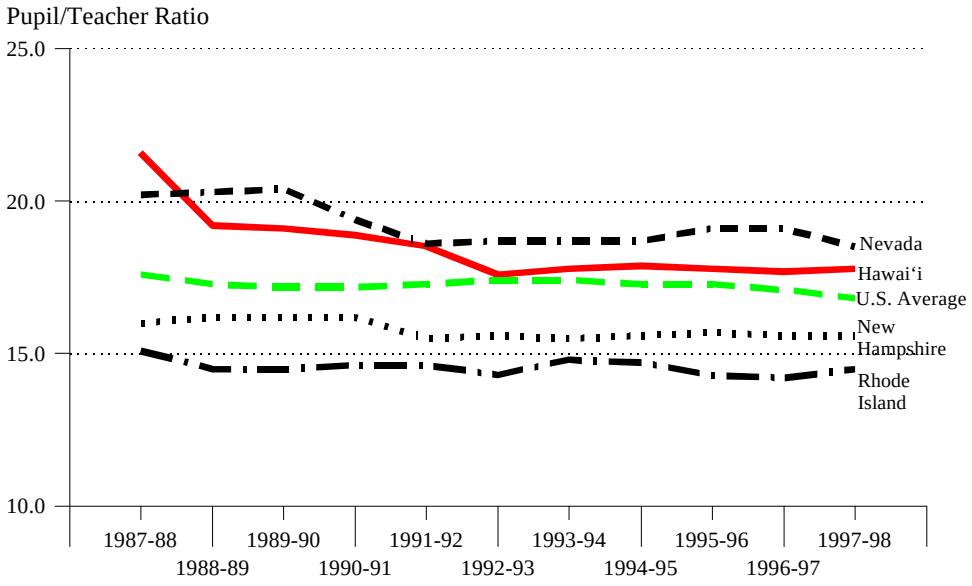
Teachers

In 1997-98, there were about 11,400 teachers in the public schools of Hawai'i. Of these teachers:

- The average length of service was almost 13 years;
- almost 64% had been teaching in their current schools for at least five years;
- 69% were teaching subjects in the regular instructional program;
- 16% taught in the supplementary program (remedial instruction, etc.);
- just over 14% were teaching in special education; and
- just over 1% 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 9**. In the late 1980s and early 1990s, Hawai'i considerably improved its pupil to teacher ratio and its rank on this indicator; but during the last five or six years the state's ratio and rank have been virtually stagnant.

Figure 9. Pupil to Teacher Ratios in Hawai'i and Comparable States, 1987-88 to 1997-98



The pupil to teacher ratio in Hawai'i improved over the last decade, but it has since leveled off and is still well above the United States' average.

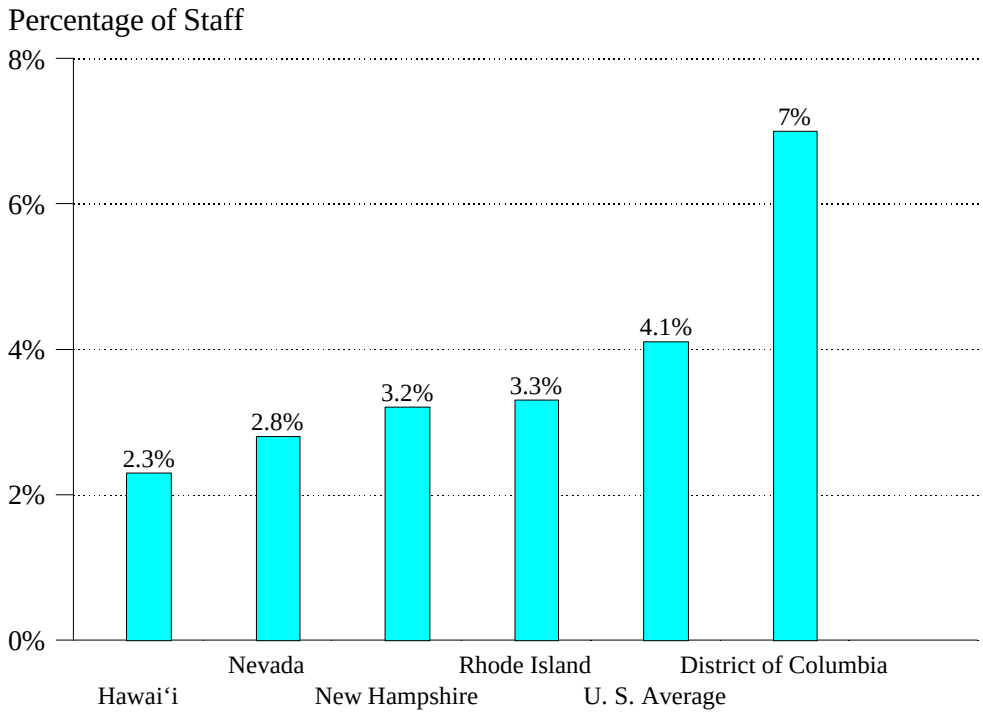
In 1987-88, Hawai'i ranked 48th among the 50 states in pupil to teacher ratio. By 1992-93, it had improved its rank to 35th, having lowered its pupil to teacher ratio from 21.6 to 17.6. That improvement was the result of both deliberate policy and major effort, but the relative gain was also partly the result of increasing enrollments and financial difficulties in other states. While mainland states have recovered from the recession of the early 1990s, Hawai'i has not. Mostly as a consequence of financial strains, the state's pupil to teacher ratio has begun to rise; in 1997-98 it was 17.9, and the state's rank among the 50 states had dropped back to 40th.

Administrators

In 1997-98, there were 667 full-time equivalent school level administrative positions in the state's public schools, of which 492 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 Hawai'i was responsible for overseeing the education of 384 pupils and supervising 22.7 teachers—about 16 pupils less than in 1996-97.

There is a common belief that public education in Hawai'i 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 the state's school system is actually smaller than in most school systems of similar size. **Figure 10** shows the 1996-97 percentages of professional staff performing district administrative functions in Hawai'i and comparable jurisdictions. The state's percentage (2.3%) is the lowest of the group. This is despite the fact that in Hawai'i, 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% of its professional staff performing district administrative functions.[7]

Figure 10. Proportions of Professional Staff Performing District Administrative Functions, Hawai'i and Comparable States



The administrative staff percentage in Hawai'i is the lowest of the comparable states; only Hawai'i, of all the states, includes state administrators in its percentage.

This information is corroborated by a report that Hawai'i spends less per student for administration than most other states. The report noted that in 1994-95, Hawai'i spent about $45 per pupil on administration (0.8% of total per pupil expenditures). The national average was $126 per pupil (about 2.3% of total per pupil expenditures).[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 declined. In 1989-90 it was 38%; in 1997-98 it was only 10.5%. This represents notable progress toward providing schools with stable leadership.

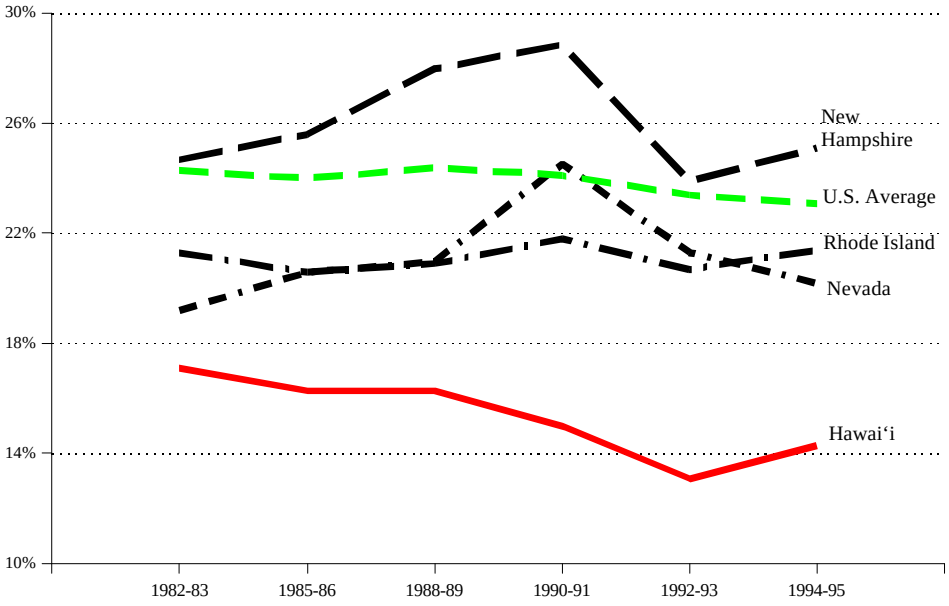
General Revenues and Expenditures for Public Education

Despite the stagnation that has troubled the state's tourism-dependent economy for most of this decade, Hawai'i remains a comparatively wealthy state. In 1997 Hawai'i ranked 16th among the states in personal income *per capita*, a decline from its peak of 6th in 1993 and 1994, but still among the top tier of states. The state also ranked **third** in state general revenue *per capita*, surpassed only by Alaska and Delaware, and **second** only to Alaska in tax collections per capita.[9] By contrast to this relative abundance of resources, the economic effort that Hawai'i has historically exerted on behalf of the children in its public schools has been less than mediocre.

A telling indicator of support for public education is the proportion of total state and local revenues that is allocated to the operation of public elementary and secondary schools. State policy makers can get a sense of the actual priority given to public education by comparing school expenditures to total expenditures rather than viewing school expenditures in isolation.

The proportions of state and local revenues allocated to public education by Hawai'i and comparable states from 1982-83 to 1994-95 are presented in **Figure 11**. On this measure of support for public education, Hawai'i has consistently ranked ***last*** among the states.

Figure 11. Percentage of State and Local Revenue Allocated to Public K-12 Education, Hawai'i and Comparable States



Hawai'i devotes the lowest percentage of its total state and local revenues to public K-12 education of any state in the U.S. Hawai'i has consistently ranked last among the states on this measure.

The sole positive indication in these data is that after declining substantially over a decade, the proportion of its resources that Hawai'i devoted to its public schools rose modestly in the last year for which data are available. This rise is very likely the result of decisions to protect public schools against funding cuts while allocations for other state programs were being reduced.

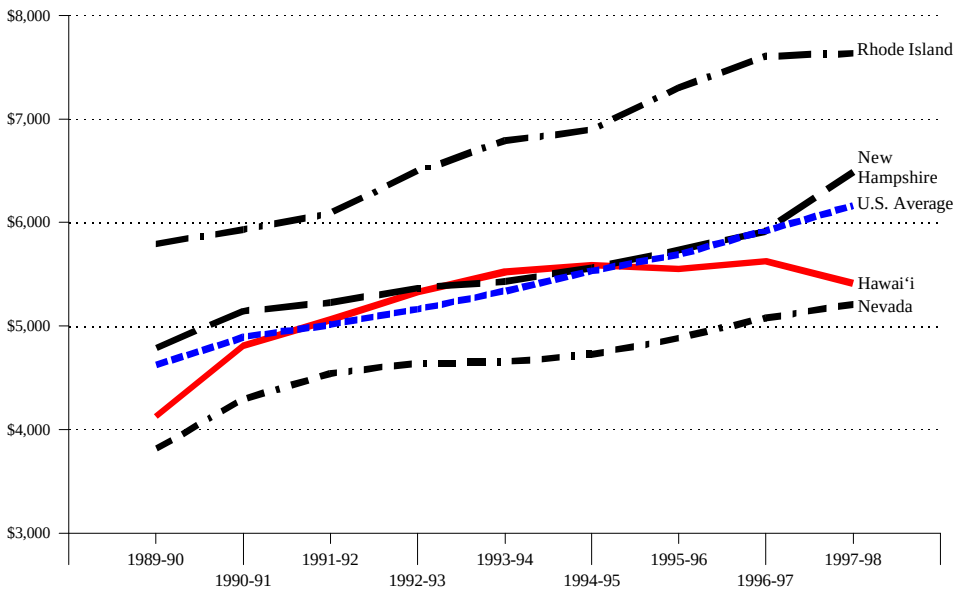
Current Expenditures per Pupil

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, operating expenditures per pupil in Hawai'i grew in parallel with the state's economy and somewhat faster than tax revenues. During that period, the state'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 (1997-98) at $5,432, 127% over what they were in 1980-81. The Gross State Product/ADM has continued to rise as enrollment growth receded and in 1997-98 was $184,460/ADM, an increase of 133% from its 1980-81 value. Current data on state tax revenues are not yet available.[11]

Despite its wealth, Hawai'i has never spent discernibly more per pupil than the national average on public education. The state's per pupil spending has increased over the last four decades, as has educational spending throughout the nation. However, the state'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 **Appendix B** (**Table 12**). The trend since 1989-90—shown in **Figure 12**—was positive until 1994-95 and has levelled off or declined since.

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

Figure 12. Expenditures per Pupil, Hawai'i and Comparable States



From 1989-90 through 1993-94, the state's per pupil expenditures gained against the national average, rising from 31st among the states to 19th. Since then, per pupil expenditures in Hawai'i have declined by about $500 per pupil, dropping Hawai'i to 33rd among the states, 10.2% below the national average, in 1996-97. The rise of Hawai'i 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 (2nd) and its ranking on expenditures per pupil (33rd) is striking.

The low state of the fiscal priority Hawai'i gives to 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 the state'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 fiscal policy makers in Hawai'i 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 the state's school funding, but reiterated the low rating of the state's financial support of its public schools. The new report went on to address specifically the problems of urban schools in Hawai'i stemming from years of inadequate funding for repair and maintenance of school facilities.[13]

Facilities

Over one-third (85) of the 248 regular schools operating in 1997-98 had fewer classrooms than they needed.[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 13** (next page). 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, where the population of school-aged children is growing. The slowing of growth in overall enrollment has helped, but the shifting of population outward from Honolulu has made keeping up with the demand for classrooms and facilities difficult.

Classrooms

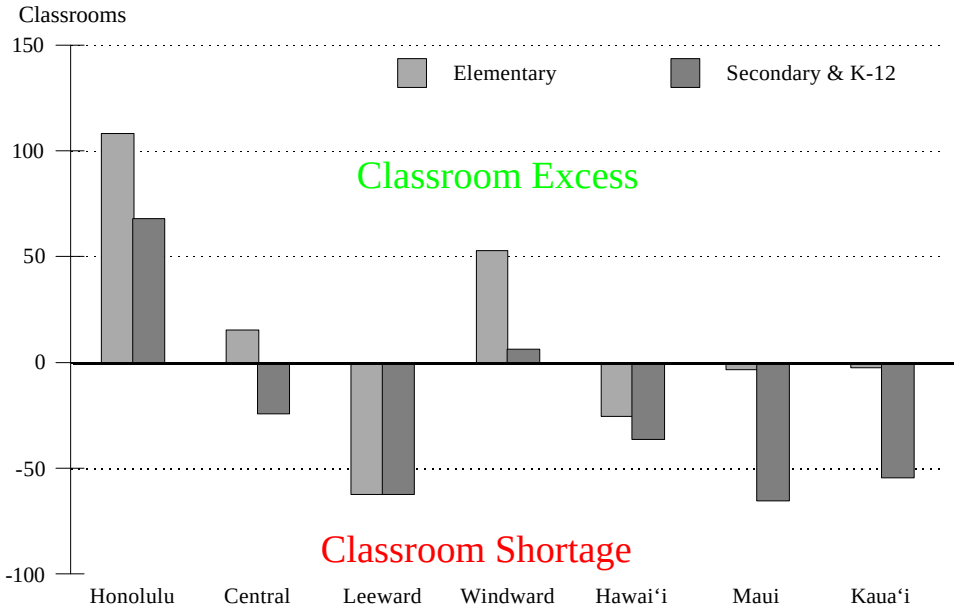
A second measure of the adequacy of school classrooms is the ratio of the school's enrollment to its rated capacity. Capacity is calculated by multiplying the number of classrooms by the state's standard for class size.[15] This calculation, which allows for smaller classes for lower grades and special education, estimates an upper limit for a school's desirable enrollment. It is noteworthy that in 1997-98, 94 schools were operating at or above their rated capacity, 48 of which were operating at more than 10% over capacity. This represents a modest improvement over 1996-97, but the shortage of classrooms in Hawai'i is real and it continues.

Other Facilities

Our schools' ancillary facilities remain underdeveloped. However, 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, libraries, or administrative facilities declined. However,

Figure 13. Net Classroom Shortage or Excess, by District

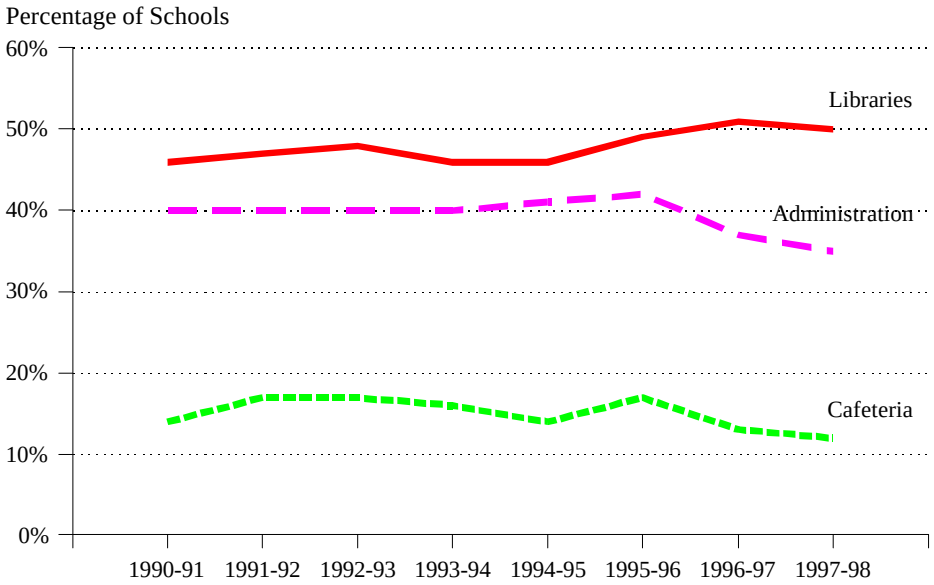
Classroom shortages in Hawai'i are unevenly distributed. There are excess classrooms in Honolulu, but there are shortages in each of the districts with growing populations.



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 are displayed in **Figure 14**.

Figure 14. Percentages of Substandard Facilities, 1990-91 to 1996-97

The proportions of schools with less than adequate administrative and cafeteria facilities declined in the last two years. However, over half our schools still lack adequate space for libraries.



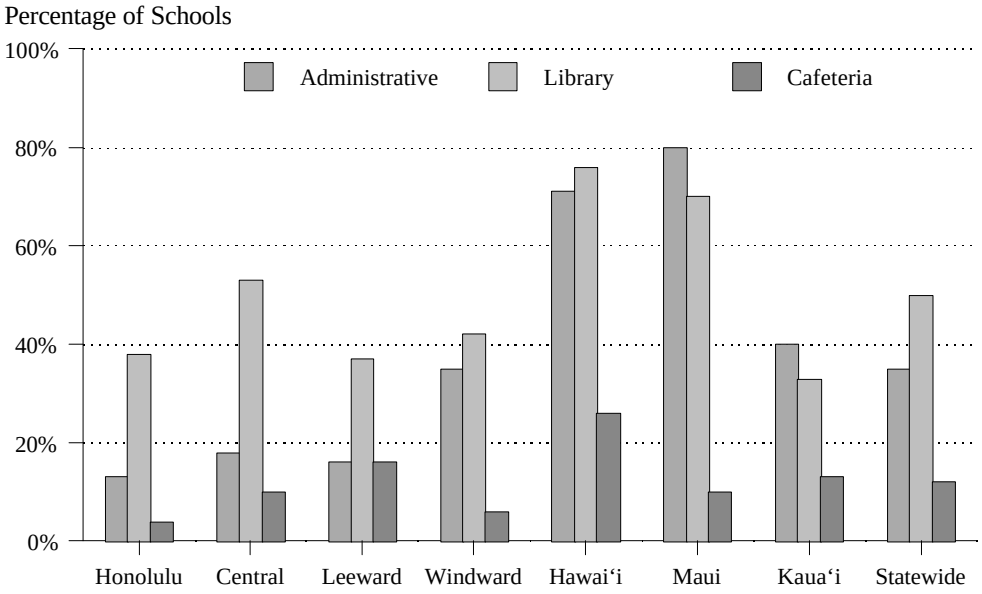
This problem is long standing and is shared with other states. A recent U.S. General Accounting Office document reported that similar problems affect all states.[16] In Hawai'i as elsewhere, the problem resulted from years of under investment in school facilities. It will take a long time and much effort 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 the state's public schools up to the state's standards. The investment thus far proposed and appropriated has been far short of that.

The problem Hawai'i has 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 57 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 15**. In Honolulu District, with a nominal excess of classrooms and stable enrollments, 38% of schools have inadequate library space. In Hawai'i District, the ratio is 71%. As with libraries, Hawai'i and Maui Districts show the most severe shortages of administrative space (offices, workrooms, storage, etc.).

Figure 15. 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 Hawai'i and Maui

The percentage of schools with inadequate cafeteria space (less than 70% of state standard) is lower than with libraries and administrative space–**only** 29 schools remain without adequate eating facilities. Substantial progress has been made in recent years to reduce the shortfall in this area.

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

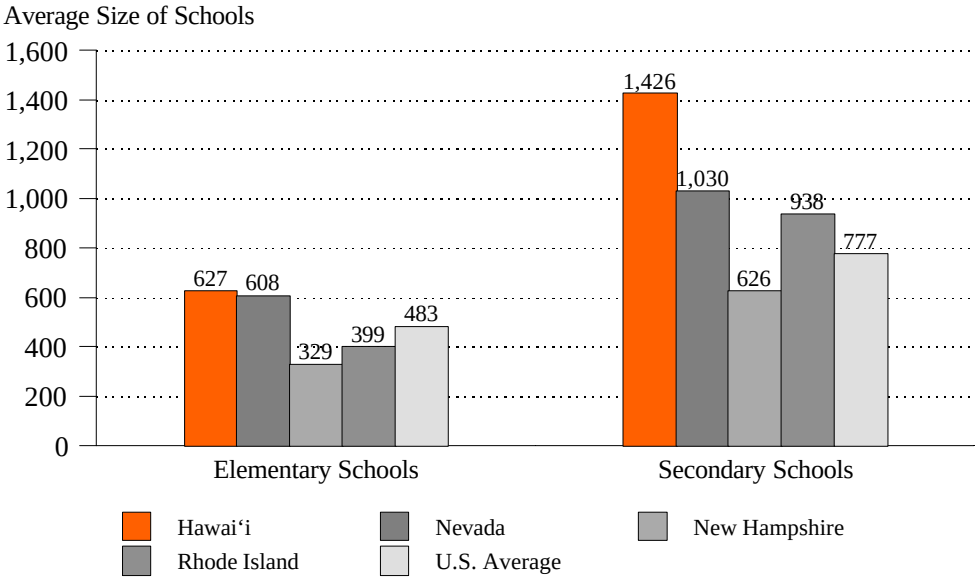
small classes (13 to 17) have substantial and lasting benefits for children in early grades, and that they have greater benefits for disadvantaged children–about double–than for those from advantaged backgrounds.[17]

School Size

In previous reports, we have noted that Hawai‘i has uncommonly large schools. Regular secondary schools in Hawai‘i have the second largest average size in the nation–smaller on average only than those in Florida, but still 85% larger than the national average. The state's regular elementary schools, averaging 627 pupils, ranked fourth largest in the nation behind those of Florida, California, and Georgia, and are 30% larger than the national average.[18] These ranks take into account a 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, Hawai‘i has the largest secondary schools in the nation. The average sizes of elementary and secondary schools in Hawai‘i and comparable states are shown in **Figure 16**.

Regular secondary schools in Hawai‘i are the second largest, on average, in the nation--85% larger than the U.S. average. Its elementary schools are 30% larger than the U.S. average.

Figure 16. Average Size of Schools, Hawai‘i 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 for new schools at 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 the state's public school system. In 1997-98, 71 of 165 elementary schools (43%), 11 of 40 intermediate or elementary/intermediate schools (28%), and 8 of 37 high or intermediate/high schools (22%) met those standards. To bring the average size of existing schools into compliance with the new policy would require a prodigious building program. Even if the task were undertaken 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.

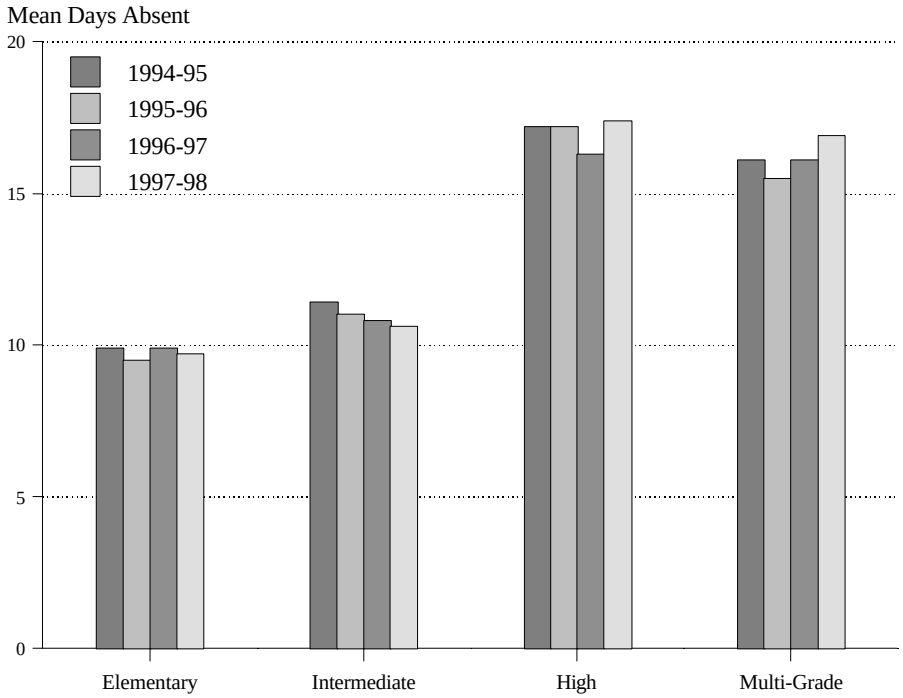
Attendance

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 1990-91 Hawai'i lagged behind other states in the length of its school year. In 1997-98, Hawai'i had 177 instructional days. That was lengthened to 184 instructional days for 1998-99.

While the state sets the length of the school year, it is up to students (and their parents) to make use of the time they have. That means attending school. While attendance rates for all schools average over 90%, this still means that the state's average student misses ***over 12 days*** of school per year. As might be expected, the rates of absence vary with the school level.

The average number of days absent from school by school type for the last four years is shown in **Figure 17**. 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 1997-98 there were 15 schools whose average rates of absence exceeded 20 days per year.

Figure 17. Mean Number of Days Absent by School Type



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

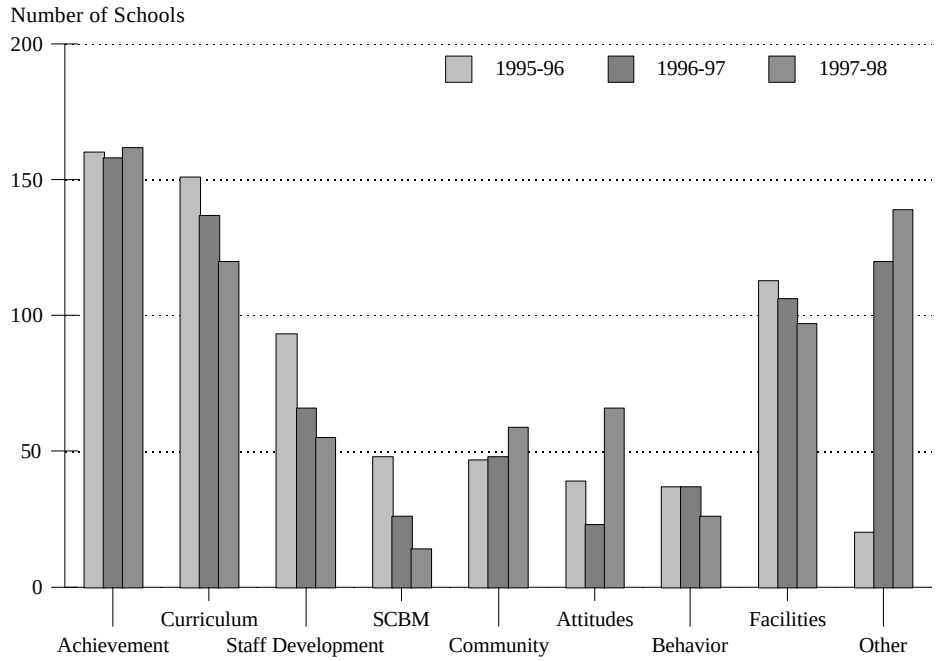
There have been marked increases in reported absence rates for some high schools and multi-grade schools since1994-95 that have accompanied changes in attendance accounting. Prior to 1994-95, attendance procedures had been quite varied, with many smaller schools reporting only the results of once daily manual counts. The system-wide adoption of school management software has made possible standardization of attendance counting. Standard procedures for attendance, based on computer counting, will be fully 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 deteriorating student behavior. That said, we need to improve students' attendance substantially; and to do so, we shall need to find out why our students 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*** (the individual, annual school reports), school leaders identify and describe their school improvement priorities and efforts. The categories of concerns expressed in these short-term improvement priorities for 1995-96 through 1997-98 are presented in **Figure 18**. 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 students' 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 18. Improvement Priorities of Public Schools in Hawai'i



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 in the ***School Status and Improvement Reports*** of school improvement priorities and activities are highly individual and particular to school situations and needs.