



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	Babies
		to Single Mothers	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)

Year	Type of School			
	Elementary	Intermediate	High	Multi-Grade
1991-92	90.2%	93.5%	92.4%	93.2%
1992-93	89.7%	92.3%	91.5%	91.3%
1993-94	95.2%	96.0%	94.2%	95.2%
1994-95	89.5%	88.8%	88.8%	89.7%
1995-96	92.1%	93.8%	93.1%	93.6%
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	(\$498)	(\$82)	\$39	\$162	\$188	\$62	(\$137)	(\$609)
U.S. Average	-10.8%	-1.7%	0.8%	3.1%	3.5%	1.1%	-2.4%	-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)

Priority	Year					
	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
Accreditation	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)

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

Year	Seniors	Graduated		Certificate of Completion				Did Not Complete	
				Course Completion		IPP			
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 Students	17,723	101.7	20,869	118.0	22,677	126.1	21,672	118.3	24,409	130.7	26,799	142.2
Suspended Enrollment	10,686	61.3	12,088	68.3	13,104	72.9	12,839	70.1	14,232	76.2	13,233	70.2
	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