

New Request

Renewal

**SCHOOL COMMUNITY COUNCIL
WAIVER/EXCEPTION REQUEST FORM**

(Please use one form for each request)

SCHOOL: Kailua High School DATE: 3/10/14

DISTRICT: Windward COMPLEX: Kailua/Kalaheo

School Strive HI Status:

Recognition

Continuous Improvement

Focus

Priority

Superintendent's Zone

*****Attach Trend Report and Strive HI Performance System School Report.**

A. List the specific policy, regulation, rule, procedure or the specific article within the collective bargaining agreement from which the school is seeking relief.

Kailua High School School Community Council is requesting a Waiver/Exception to:

1. The *2013-2017 Agreement with the Hawaii State Teachers Association (HSTA) and the State of Hawaii Board of Education, Article VI – Teaching Conditions and Hours, Section CC. Work Time Distribution, Weekly Totals Within the 7-Hour Day, 5-Day Week, paragraphs 2a, 2b, 2d; and,*
2. The *Hawaii Revised Statutes 302A-251 (Act 167/52)* requiring student learning time of 1650 minutes weekly.

B. Describe 1) the desired change, and 2) what the school hopes to accomplish as it relates to improving student learning and increasing student achievement. Include specific quantitative, qualitative and longitudinal data to support the need for the request.

Current

The current bell schedule does not meet the learning time requirement of 1650 minutes weekly of the *Hawaii Revised Statutes 302A-251 (Act 167/52)*. However, it does meet the requirements of the *2013-2017 Agreement with the Hawaii State Teachers Association (HSTA) and the State of Hawaii Board of Education (note: pursuant to a previous exception granted that is recurring)*.

Proposed Schedule (Attachment A).

In an effort to comply with both the *Agreement* and *Act 167/52*, a Bell Schedule Committee was established at the beginning of school year 2013-14 to study and develop various bell schedules that would comply with *Act 167/52* and the HSTA Agreement with the Board of Education. The School Community Council, oversees and engages all role groups in developing and monitoring our school's academic and financial plans, assessing our school climate, progress on school improvement and innovation; and, conducts opinion surveys. Information is shared at monthly SCC meetings and annual parent-community meetings.

Kailua High School's proposed bell schedule for SY2014-15 increases student instructional minutes from 1415 minutes weekly to 1535 minutes weekly. This, however, is 115 weekly minutes less than the 1650 student instructional minutes that are required in ACT 167/52.

The proposed schedule increases the agreed upon teachers instructional time delineated in the *2013-2017 Agreement with the Hawaii State Teachers Association (HSTA) and the State of Hawaii Board of Education* from 1285 minutes per work week (Article VI, CC. 2.a) to 1325 teacher instructional minutes per work week, an increase of 40 minutes.

The proposed schedule decreases teacher preparation time from the required 225 minutes per week (Article VI, CC.2.b) to 200 minutes per work week, a reduction of 25 minutes. (Attachment B-1)

The proposed schedule also decreases "Other" time from the 440 minutes that is provided in the *Agreement* (Article VI, CC. 2.d) to 425 minutes, a reduction of 15 minutes.

Rationale.

The proposed bell schedule results in a shortfall of 115 student instructional minutes per week in order to maintain small class size.

HSA reading test scores show an increase from 57% proficiency in SY 2011-2012 to 61% proficiency in SY 2012-2013. HSA math scores have also increased from 34% in SY 2011-2012 to 36% proficiency in SY 2012-2013. Keeping class size small has been essential for teachers to be able to provide students with timely and effective modifications, adjustments, and interventions, which is crucial to learning and student success (Attachment B).

If one of the state proposed bell schedules is adopted, teachers would have a floating prep increasing the average class size at Kailua High School from 24.6 to 30:3 (Attachment C). In February 2014, The National Education Policy Center published a brief by Diane Whitmore Schanzenbach titled, "Does Class Size Matter?" Their research suggests that, "Class size is an important determinant of student outcomes, and one that can be directly determined by policy. All else being equal, increasing class sizes will harm student outcomes" (*Executive Summary*, Attachment D). In addition, they found, "the payoff from class-size reduction is greater for low-income and minority children, while any increases in class size will likely be most harmful to these populations" (*Executive Summary*). 52.7% of Kailua High School's population receives free or reduced lunch, so an increase in class size would harm our students' learning. The brief also states that class size does matter in later grades:

Most of the high-quality evidence on class-size reduction is based on studies of the early grades. The available high-quality evidence on the impact of class size on outcomes in older grades is more limited, and more research in this area is

needed. A notable exception is Dee and West, who estimate class-size effects using variation in class sizes experienced by students across classes in different class periods. The study finds that smaller class sizes in eighth grade have a positive impact on test scores and measures of student engagement, and finds some evidence that these impacts are larger in urban schools (6).

Furthermore, if the state proposed bell schedule is adopted, the schedule would go from an eight credit earning schedule to a seven credit earning schedule. This would mean that 51 sections would not have a teacher and we would need to hire 7.2 teachers to maintain our current course and program offering. Having an array of programs and courses to meet students' needs and interests contributes to student success and motivation. When surveyed, all role groups (students, parents, community, faculty, staff), identified small class size to have the biggest impact on student success, even more so than increasing instructional minutes. (Attachment F)

Summary: Pursuant to Board of Education Policy 2413, Kailua High School requests the Board of Education grant this waiver request for the following reasons:

- 1) Kailua High is a small high school with an enrollment of 768 students. Demographics indicate 54% of our students qualify for free or reduced lunch; 29% of our students are enrolled in Honors courses, and 14% of our student population are in our Special Education program. 48% of our Special Education population are serviced in the general education classroom. In addition, due to declining enrollment our school has lost 6.0 teacher positions since the 2012-2013 school year. Maintaining a low class size ratio is critical to meet the unique needs of our diverse population. Smaller class sizes allow teachers to provide differentiated instruction and targeted intervention.
- 2) Class size is an important determinant of student outcomes, and one that can be directly determined by policy. All else being equal, increasing class sizes will harm student outcomes. (Diane Whitmore Schanzenbach, "Does Class Size Matter." Executive Summary. National Education Policy Center. Attachment D of the Waiver/Exception Request Form)
- 3) The school will continue to request renewal of this waiver until such time that we are able to increase instructional minutes without implementing a floating preparation period.
- 4) Complex Area Superintendent C. Suzanne Mulcahy has approved this request for a Board of Education waiver to Hawaii Revised Statutes 302A-251 (Act 167/52).
- 5) All other applicable processes related to the School Community Council Waivers and School Community Council Exceptions Policy were completed.
- 6) Kailua High School bell schedule committee and School Community Council considered many alternative bell schedules including those requiring a floating preparation period. We believe our proposed bell schedule provides for the learning needs of our students and is the best alternative.

C. If a renewal, describe and evaluate the outcomes of the requested change. Explain what was achieved and the impact on student learning. (Include specific quantitative and/or qualitative data.) **N/A**

D. Please provide additional information (data and narrative) for the following type of request applicable:

D1.) Parent-Teacher Conferences: N/A

For a waiver from the DOE Regulation 4510.3 Released Time for Conferences to Report Student Progress, the Superintendent requires that a parent satisfaction survey be conducted and the survey results submitted.

Number of surveys distributed	
Number of surveys returned	
Number of parents in favor	
Number of parents not in favor	
Number of parents undecided	

Summary:

D2.) School Attendance Procedures: N/A

For a waiver from the DOE School Attendance Procedures, Revised August 2001, a comparison of attendance data over a three (3) year period of time is required. Explain the increase or decrease in attendance rates. Provide provisions for allowing students to make-up missed work.

School Year	% of average daily attendance

Rationale:

D3.) Reporting of Quarterly Grades: N/A

For an exception from the collective bargaining contract for teachers for Reporting Quarterly Grades for Schools, an explanation of the interventions provided and the impact on student learning is required.

Number of students failing	
Number of students who received tutorial assistance/interventions	
Number of students whose grades improved after receiving tutorial assistance/interventions	

Explanation:

D4.) Modified Assessment Schedule: N/A

For an exception from the collective bargaining contract for teachers for a Modified Assessment Schedule, an explanation of the interventions provided and the impact on student learning is required. Describe tutorial opportunities provided for students during the assessment week.

Number of students failing	
Number of students who received tutorial assistance/interventions	
Number of students whose grades improved after receiving tutorial assistance/interventions	

Explanation:

E. All Other Requests: N/A

Provide information and explanation as indicated in Sections A, B, and C, and other additional information applicable.

F. Provide a chronology and summary of discussions and activities that document an inclusive, collaborative and consensus-building decision-making process.

BSC = Bell Schedule Committee
SCC=School Community Council
SLC=School Leadership Committee

DATE	TYPE OF MEETING	SUMMARY OF OUTCOME
September 21, 2013	SCC	School Community Council Survey (Attachment E)
October 25, 2013	BSC	BSC Meeting. All teachers invited.
November 1, 2013	Student, Parents, Community members, Faculty, and Staff.	PCDay – Presented bell schedule information and had faculty and staff complete the survey regarding what they feel is important in a schedule. See results on “Partial (#3 & 4) Survey Results for 2014-2015 Bell Schedule.” (Attachment F)
November 4, 2013	BSC	BSC Meeting - Reviewed data from PC Day and created/discussed different bell schedules.
November 8, 2013	BSC	BSC meeting. Created and discussed different bell schedules.
November 15, 2013	BSC	BSC meeting. Review all proposed schedules.
November 20, 2013	Students	Student Bell Schedule Survey regarding what they feel is important in a schedule through PTP/L. See results on “Partial (#3 & 4) Survey Results for 2014-2015 Bell Schedule.” (Attachment F)
November 20, 2013	Parents	Parent/Guardian surveys given to students to hand carry home for parents to complete and return by 11/22. See results on “Partial (#3 & 4) Survey Results for 2014-2015 Bell Schedule.” (Attachment F)

DATE	TYPE OF MEETING	SUMMARY OF OUTCOME
December 6, 2013	BSC	BSC meeting. Reviewed state schedule and proposed schedules. Committee members decided on top two schedules.
January 10, 2014	BSC	BSC meeting. BSC reviewed the top two schedules and came up with the Proposed Bell Schedule for SY 2014-15.
January 13, 2014	Faculty	Proposed Bell Schedule 1510 was given to SLC members to share with department members.
January 15, 2014	SLC	SLC Mtg.-Proposed Bell Schedule 1510 was presented and discussion about changes to proposed schedule was held. SLC approved the proposed schedule with changes.
January 17, 2014	Parent	Parent/Guardian surveys and the Proposed Bell Schedule for SY 2014-15 were mailed home with term 2 report cards for their vote. Deadline for parent surveys was 1/24/14. Results for <u>parents</u> were 20 out of 779 (3%) surveys returned. 17=yes and 3=No. Due to low parent return, surveys will be redistributed to parents on 2/20/14.
January 18-19, 2014	Parents	Mass phone message sent out to all families as a reminder of the parent meeting.
January 29, 2014	Students	Student surveys done in PTP/L. Teachers reviewed Proposed Bell Schedule for SY 2014-15 and students completed their surveys. Results for <u>students</u> were 610 out of 755 (81%) surveys returned. 310=yes, 286=No, 14=Don't Care/Undecided
January 31, 2014	Faculty and Staff	PC Day- Presentation of Proposed Bell Schedule for SY 2014-15 for Faculty and Staff and questions/answer session for clarification on schedule. Faculty and Staff completed survey. -Results for <u>teachers</u> were 69 out of 70 (99%) surveys returned. 62=yes, 6=No, 2=Abstain -Results for <u>staff</u> were 45 out of 59 (76%) surveys returned. 37=yes, 7=No

DATE	TYPE OF MEETING	SUMMARY OF OUTCOME
February 1 & 2, 2014	Parents	Mass phone message went out to families reminding them to return parent surveys by 2/7 extended deadline.
February 20, 2014	Parents	Parent surveys mailed out 2 nd time with Mid Term 3 Progress Report.
February 22-23, 2014	Parents	Mass phone message went out to families informing them of bell schedule survey being mailed and return deadline.
February 25, 2014	Parents	Mass phone message went out to families reminding parents that all surveys need to be returned by 2/26.
February 26, 2014	Students	Bulletin announcement was made for students to return parent surveys to front office. As of 3:00, thirty-three (33) surveys were returned.
February 27, 2014	Students and Faculty	Vice-Principal made intercom announcement at the end of Period 1 to remind students and teachers to turn in any parent surveys.
February 27, 2014	Parents	Security aides went to all classes to check if anyone had parent surveys. As of 3:00 pm on 3/12/14, seventy (70) parent surveys were returned. Results for parents were 70 out of 779 (9%) surveys returned. 64=yes, 6=No

G. SCC Waiver/Exception Signature Page

WAIVER/EXCEPTION SIGNATURE PAGE

The signatures on this page acknowledge that the decision to request the attached waiver/exception was reached through a collaborative process. If this request is an exception to a collective bargaining agreement, the decision by members of the bargaining unit was achieved through consensus. (Because exceptions to collective bargaining agreements involve the rights of other employees, consensus, specifically by affected unit members, is necessary to waive those rights. It is possible for these unit members to agree on a fallback decision-making option provided that the agreement on the fallback option was reached through consensus.)

Administration Francis H. Honala Date 3/13/2014

Community Representative(s) Diana Baldwin Date 3/13/2014

Parent Representative(s) Bruce Cle Date 3/13/14

Student Representative(s) John Johnson Date 3/13/14

Noncertificated Staff Representative(s) Roberta Sorensen Date 3/13/14

Teacher Representative(s) [Signature] Date 3/13/14

Teacher Representative(s) Chit Medun Date 3/13/14

Complex Area Superintendent (CAS): C. Suzanne Mulcahy (print name)
This waiver/exception request aligns with the goals and objectives of the school's strategic plan/academic and financial plan.

CAS Signature: Suzanne Mulcahy Date 3/13/14

HSTA PROCESS CHECK REQUIREMENT:
To ensure that the process to reach the decision for a contract exception request was followed, (the faculty either reached consensus or failing to reach consensus, the faculty held a secret ballot vote that resulted in active faculty members casting a ballot with 66-2/3% or higher affirmative vote), the Teacher Representative should email the UniServ Director with a cc to Raymond Camacho (rcamacho@hsta.org). Please attach a copy of the email sent to the UniServ Director.

RETURN FORM TO: OCISS, School Renewal and Redesign Section
475 22nd Avenue, Room 109
Honolulu, Hawaii 96816
OR FAX TO: 735-8379

FAILURE TO SUBMIT A COMPLETE AND TIMELY WAIVER/EXCEPTION REQUEST MAY RESULT IN THE REQUEST NOT BEING PROCESSED.

HSTA PROCESS CHECK LIST

IMPORTANT: The APC should compete and return this form to your UniServ Director, and attach a copy of exception requested.

Name: Joseph Barszcz Phone: 266-7900
 Email: joseph_barszcz@notes.k12.hi.us
 Position on APC: APC Faculty Rep. Grievance Rep.
 School: Kailua High School

Step	Action Needed by APC Please describe the contract exception	Completed	
		YES	NO
	2013-2017 HSTA Agreement and Hawaii Revised Statutes 302A-251 (ACT 167/52) School bell schedule for 2014-2015	X	
1	<ul style="list-style-type: none"> ✓ A meeting with the faculty should be called by the APC to discuss exception, and achieve consensus. ✓ At least 48 hours notice should be given to faculty. ✓ The discussion should be open and collaborative, and reserved for Bargaining Unit 5 members only, to avoid appearance of undue influence <ul style="list-style-type: none"> o Date of mtg. <u>January 31, 2014</u> 	X	
2	✓ If consensus reached, please check "YES" box and stop here		X
3	<ul style="list-style-type: none"> ✓ If no consensus has been reached, prepare a secret ballot for each exception requested. ✓ Make sure the ballot question is clearly worded 	X	
4	<ul style="list-style-type: none"> ✓ Make the ballots available to all faculty members. ✓ Contact all BU 05 members on paid or unpaid leave informing them of the vote. 	X	
5	✓ Notify the faculty of the voting deadline and provide for five (5) working days to cast their votes.	X	
6	✓ Have a roster to check off names for ballots. This helps ensure all Bargaining Unit 5 members had opportunity to vote.	X	
7	<ul style="list-style-type: none"> ✓ Count the votes after all ballots are in (including any ballots from teachers that are absent). ✓ Keep the ballot box in secure place until ready to count. ✓ Make sure you have a witness for the counting. ✓ Report the vote tallies to your UniServ Director. Vote Tally: Yes <u>62</u> No <u>6</u> Blank <u>2</u> Total Votes Casted <u>70</u> Percentage of votes in Affirmative: <u>88.5</u> %	X	



Kailua High School Bell Schedule Waiver/Exception SY2014-2015

Joseph Barszcz to: jparis

Cc: rcamacho

03/14/2014 09:32 AM

Aloha Jodi,

I keeping with HSTA Process, attached is the check list for our exception request.

By the end of today (Friday March 14th) I will fax you the copy of the waiver/exception document when it is finalized. I will also email a copy of the same document to you when it is finalized. We are uploading the document as I write.

Thank you,

Joseph Barszcz
Kailua High School
HSTA Faculty Rep.



HSTA PROCESS CHECK LIST.docx



Fw: Kailua High School School Community Council Waiver/Exception Request Form

Joseph Barszcz to: jparis
Cc: rcamacho

03/14/2014 02:30 PM

Aloha Jodi,
Here is the Waiver/Exception Request along with the attachments we put together with data to support the request.
Once again thank you for your guidance with documents and forms.

Joseph Barszcz
Kailua High School
HSTA Faculty Rep.

--- Forwarded by Joseph Barszcz/KAILUAH/HIDOE on 03/14/2014 02:27 PM ---

From: Kimberly Hoolulu/KAILUAH/HIDOE
To: Joseph Barszcz/KAILUAH/HIDOE@HIDOE,
Date: 03/14/2014 02:26 PM
Subject: Fw: Kailua High School School Community Council Waiver/Exception Request Form

--- Forwarded by Kimberly Hoolulu/KAILUAH/HIDOE on 03/14/2014 02:26 PM ---

From: Kimberly Hoolulu/KAILUAH/HIDOE
To: Misty Kaniho/WINDO/HIDOE@HIDOE
Cc: Francine Honda/KAILUAH/HIDOE@HIDOE
Date: 03/14/2014 09:36 AM
Subject: Kailua High School School Community Council Waiver/Exception Request Form



Kailua High School SCC Waiver Exception Request Form.pdf Kailua High School Attachment A.pdf



Kailua High School Attachment B.pdf Kailua High School Attachment C.pdf Kailua High School Attachment D.pdf



Kailua High School Attachment E.pdf Kailua High School Attachment F.pdf



Hawaii Department of Education
 School Schedule Submission Form - School Year 2014-15 (Secondary)

SCHOOL INFORMATION

Complex Area Name Kailua-Kalaheo Complex		Complex Name Kailua	School Name Kailua High School	
Principal	Select one: <input type="checkbox"/> The submitted schedule is in compliance with requirements. <input checked="" type="checkbox"/> The submitted schedule is not in compliance with requirements and we will seek a BOE waiver or contract exception. *	Signature <i>Francine de Hone</i>		Date <i>02/20/14</i>
Complex Area Superintendent	Select one: <input type="checkbox"/> The submitted schedule is in compliance with requirements. <input checked="" type="checkbox"/> The submitted schedule is not in compliance with requirements and the school will need to seek a BOE waiver or contract exception.	Signature <i>Campbell Mulcahy</i>		Date <i>2-21-14</i>

SUMMARY OF SCHEDULE

TEACHER CALENDAR - TEACHER DAYS		Scheduled (Date or Description)
Work days without students	2 days at beginning of school year for administrator-initiated activities	July 30, 2014 July 31, 2014
	2 days at beginning of school year for teacher-initiated activities	July 28, 2014 July 29, 2014
	1 day scheduled between semesters for grading and other teacher-initiated activities	January 9, 2015
	2 days for school planning and collaboration	November 3, 2014 February 4, 2015
	1 day at the end of the school year	June 4, 2015
	Other days without students	
Hours contiguous to the teacher work day for collaboration & professional development	21 hours for use in 1 hour increments	August 6, 13, 20, September 10, 17, 24, October 1, 15, November 5, 19, December 3, January 14, 28, February 11, 25, March 11, April 8, 15, 29, May 6, 20
	6 hours for use in multiples of 1/2 hour increments	Tuesday from 2:35-3:05 August 19, September 2, October 28, November 18, 25, January 20, February 3, March 3, 31, April 21, May 5, 12
	Additional information (if applicable)	

OTHER REQUIREMENTS	DESCRIBE
Secondary students have access to coursework in order to earn more than 6 credits per year.	Schedule provides students access to earn 8.5 credits.

ADDITIONAL COMMENTS FROM PRINCIPAL (OPTIONAL)

*The school will be submitting a request for both a BOE waiver and contract exception.

SUMMARY OF BELL SCHEDULE FOR SY 2014-15

In the "Number of Actual Minutes..." column, insert the number of minutes scheduled. Repeat that number in the applicable blue and green columns. In the "Total" row, tally the total number of minutes in the blue and green columns. In the "Difference" row, indicate the difference in minutes between the Total scheduled minutes and the Required minutes.

	Actual Minutes Scheduled per Week	STUDENT (Act 167/52)	TEACHER (2013-17 Agreement)			
		STUDENT LEARNING TIME*	TEACHER INSTRUCTIONAL TIME ¹	PREP TIME ²	LUNCH ³	"OTHER TIME" ⁴
Instructional Time	1325	1325	1325	n/a	n/a	n/a
Homeroom	0	0	n/a	n/a	n/a	0
Study hall	160	160	n/a	n/a	n/a	160
Opening	25	25	n/a	n/a	n/a	25
Closing	25	25	n/a	n/a	n/a	25
Recess	100	n/a	n/a	n/a	n/a	100
Passing	75	n/a	n/a	n/a	n/a	75
Meetings ⁵	40	n/a	n/a	n/a	n/a	40
Lunch	150	n/a	n/a	n/a	150	n/a
Teacher Prep	200	n/a	n/a	200	n/a	n/a
TOTAL	n/a	1535	1325	200	150	425
REQUIREMENT	n/a	1650	1285	225	150	440
DIFFERENCE	n/a	-115	+40	-25	0	-15

¹ Contract: Article IV (CC) (1) (a)

² Contract: Article IV (CC) (1) (b)

³ Contract: Article IV (CC) (1) (c)

⁴ Contract: Article IV (CC) (1) (d)

⁵ Including all faculty, departmental, grade level, and curriculum meetings.

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Kailua High
Trend Report:
Educational and Fiscal Accountability



School Report for School Year 2012-2013

A Guide to Understanding Trend Reports explains the educational and fiscal measures and lists schools in each of the complexes for the school year 2012-13. The Guide is available on-line at <http://arch.k12.hi.us>.

Background

Student Enrollment	Total	SPED		ELL		Free & Reduced-Cost Lunch Program		Kindergartners Who Attended Preschool
		#	%	#	%	#	%	
School Year	#	#	%	#	%	#	%	%
2010-2011	866	117	13.5%	17	2.0%	462	53.3%	na
2011-2012	853	129	15.1%	10	1.2%	456	53.5%	na
2012-2013	827	117	14.1%	15	1.8%	436	52.7%	na

Teachers	Total	Licensed	Years Experience	5+ Years at This School	Classes Taught by Teachers Meeting NCLB Requirements	Advanced Degree	Early Childhood Endorsement (Gr. K teachers)
School Year	#	%	Average	%	%	%	#
2010-2011	60	91.7%	10.7	62%	80%	33.3%	na
2011-2012	56	91.1%	10.3	66%	83%	35.7%	na
2012-2013	50	94.0%	11.5	72%	80%	30.0%	na

Academic Achievement

Hawaii State Assessment Standards-Based	Reading % Proficient by Grade Level								Math % Proficient by Grade Level							
	3	4	5	6	7	8	10	3	4	5	6	7	8	10		
School Year																
2010-2011	na	na	na	na	na	na	55.7	na	na	na	na	na	na	38.5		
2011-2012	na	na	na	na	na	na	57.2	na	na	na	na	na	na	33.7		
2012-2013	na	na	na	na	na	na	60.5	na	na	na	na	na	na	36.6		

Hawaii State Assessment Standards-Based	Science % Proficient by Grade Level			
School Year	4	8	10	HS
2010-2011	na	na	23.3	--
2011-2012	na	na	27.2	--
2012-2013	na	na	--	25.3

School Year	Proportion Ready for Kindergarten	Retention Rate %			Dropout Rate % (4-year rate)	Graduate On-Time %	Others %
		Elementary	Middle	Grade 9			
2010-2011	na	na	na	14.3%	10.6%	86.5%	2.9%
2011-2012	na	na	na	13.9%	10.1%	84.8%	5.1%
2012-2013	na	na	na	16.2%	13.3%	81.1%	5.6%

*Results suppressed to protect student identity, in accordance with the Family Educational Rights and Privacy Act (FERPA)

Safety and Well-Being

Students	Average Daily Attendance %		Offenses by Type of Incident (number of citations per 1,000 students)					
			Violence		Property		Illicit Substances	
School Year	Elementary	Secondary	Elementary	Secondary	Elementary	Secondary	Elementary	Secondary
2010-2011	na	90.3%	na	62	na	8	na	33
2011-2012	na	88.6%	na	55	na	8	na	25
2012-2013	na	88.4%	na	47	na	4	na	12

School	Persistently Dangerous Schools (NCLB)	Workers' Compensation Claims	Student and Teacher Perceptions on School Quality Survey	Transition from home/preschool to Kindergarten	
School Year	Yes/No	Total # of claims	% of claims resulting in loss-time	Positive Responses % of student % of teacher	School mean. (range 1-3)
2010-2011	No	7	14.3%	48.1% 81.7%	na
2011-2012	No	1	100.0%	75.3% 94.0%	na
2012-2013	No	2	0.0%	77.6% 95.8%	na

Civic Responsibility

	Young Voter Registration	Kids Voting Hawaii		Students Who Are Not Suspended	Volunteer Hours
School Year	# of students participating	# of students participating	% of students participating	% of Enrollment	# of PCNC volunteer hours per 100 students
2010-2011	25	424	49.0%	88.7%	8
2011-2012	--	--	--	88.5%	1
2012-2013	11	315	38.1%	90.7%	--

Fiscal Accountability

School Year	State General Funds				Significant Budget Changes*
	School Salaried Payroll	Allocation Excluding School Salaried Payroll	Expended	Carryover	
2010-2011	\$5,513,192	\$559,290	\$471,976	\$87,314	none
2011-2012	\$5,096,314	\$581,722	\$510,075	\$71,647	none
2012-2013	\$4,957,180	\$542,535	\$483,467	\$59,068	none

*Explanation of Significant Budget Changes

SchCode: 309
 School Year Ending: 2013

Strive HI: Student Group Performance Report
Kailua High

Target	Reading				Math				Science				Graduation Rate	
	Participation 95%		Proficiency 72%		Participation 95%		Proficiency 64%		Participation 95%		Proficiency 34%		Objective >= 82%	
	%	Met?	%	Met?	%	Met?	%	Met?	%	Met?	%	Met?	%	Met?
All Students	95%	Yes	61%	No	93%	No	37%	No		n/a	25%	No	85%	Yes
Disadvantaged	95%	Yes	50%	No	92%	No	28%	No		n/a	12%	No	81%	No
Disabled (SPED)		n/a		n/a		n/a		n/a		n/a		n/a		n/a
Limited English (ELL)		n/a		n/a		n/a		n/a		n/a		n/a		n/a
Asian/Pacific Islander	95%	Yes	59%	No	93%	No	38%	No		n/a	24%	No	84%	Yes
Black		n/a		n/a		n/a		n/a		n/a		n/a		n/a
Hispanic		n/a		n/a		n/a		n/a		n/a		n/a		n/a
Native American		n/a		n/a		n/a		n/a		n/a		n/a		n/a
White		n/a		n/a		n/a		n/a		n/a		n/a		n/a
Asian		n/a		n/a		n/a		n/a		n/a		n/a		n/a
Pacific Islander		n/a		n/a		n/a		n/a		n/a		n/a		n/a
Native Hawaiian	94%	No	52%	No	91%	No	27%	No		n/a	16%	No		

Index Classification: Continuous Improvement

Source of Displayed Percentage Value

- i ELL and ELL Exits Proficiency Rate
- ii SPED and SPED Exits Proficiency Rate

Run Date: Monday, October 21, 2013

Final Results

Kailua High Strive HI 2012-13 Step: Continuous Improvement Index Score: 175

Automatic Classification: None

	Step 1	Step 2 - Unweighted Points	Step 3	Step 4 - Weighted Points	Step 5 - All Schools
Achievement	Math Proficiency 36%	Math Achievement (Math Proficiency Rate) x (40pts) 14	14	14	44 pts of 100 pts
	Reading Proficiency 61%	Reading Achievement (Reading Proficiency Rate) x (40pts) 24	24	Achievement (High School Weight) 44 x (1.0) = 44	
	Science Proficiency 25%	Science Achievement (Science Proficiency Rate) x (20pts) 5	5	5	
Growth	Math Median SGP 36	Math SGP Points assigned based on growth category 0	0	Growth (High School Weight) 0 x (0.6) = 0	0 pts of 60 pts
	Reading Median SGP 35	Reading SGP Points assigned based on growth category 0	0	0	
Readiness	11th Grade ACT 30%	11th Grade ACT (11th Grade ACT Rate) x (45pts) 14	14	27	118 pts of 200 pts
	Grad Rate 85%	On-Time Graduation (Graduation Rate) x (50pts) 42	42	85	
	College-Going Rate 65%	College-Going (College-Going Rate) x (5pts) 3	3	6	
Achievement Gap	Non-High Ability Proficiency 63%	Current-Year Gap Points assigned based on Current-Year Gap Rate* 30	30	12	12 pts of 40 pts
	High-Needs Proficiency 38%	Two-Year Gap Reduction Points assigned based on Gap Reduction Rate* 0	0	0	
	Gap Reduction -11%				

175 pts of 400 pts P F CI R

For more information: hawaiipublicschools.org

* Numbers may be rounded for presentation purposes.

Class Size by Department for SY 2014-15

3/13/14

Department	# of Tchrs	(X 8) Sections	(Minus) Preps	Sect ions	# of Request	KHS Block(8)	# of Tchrs	(X 6) Sections	(Minus) Preps	Sect ions	# of Reques	State A or B(7)	Increase of
English	7	56	DH=2 ELL=2 Test=1 AVID=4	47	1070	22.5	7	42	DH=1 ELL=2 Test=1 AVID=2	36	1020	28.3	5.8
Social Studies	6.5	52	DH=2 AVID=4 SMC=4	42	1012	24.1	6.5	39	DH=1 AVID=2 SMC=4	32	938	29.3	5.2
w/o 1.5 Title 1	5	40	DH=2 AVID=4 SMC=4	30	1012	33.7	5	30	DH=1 AVID=2 SMC=4	23	938	40.7	7
Math	6	48	DH=2 MIP=4	42	899	21.4	6	36	DH=1 MIP=4	31	732	23.6	2.2
w/o 1.5 Title 1	4.5	36	DH=2 MIP=4	30	899	29.9	4.5	27	DH=1 MIP=4	22	732	33.2	3.3
Science	5.5	44	DH=2 Unten=4	38	814	21.4	5.5	33	DH=1 Unten=4	28	780	27.8	6.4
PE/Hlth	3	24	DH=2 Hlth Coord=2	20	572	28.6	3	18	DH=1 Hlth Coord=1	16	572	35.7	7.1
WL/FA	5	40	DH=2 Band Prep=2	36	783	21.7	5	30	DH=1 Band Prep=1	28	783	28	6.3
CTE	7	56	Ohta =8 Ho=4 ROTC=10	34	788	23.2	7	42	Ohta =6 Ho=4 ROTC=8	24	788	32.8	9.6
Sped Resource	8.5						8.5						
Sped FSC	8						8						
Leadership	1						1						
							Common Prep				Floating Prep		
Totals	67	396	77	319	7849	24.6	67	297	57	240	7283	30.3	5.7

Class Size by Department for SY 2014-15

3/13/14

Department	# of Tchrs	Sections	# of Request	KHS Block (8)	# of Tchrs	Sections	# of Request	State A or B (7)	Increase of
English	7	47	1070	22.5	7	36	1020	28.3	5.8
Social Studies	6.5	42	1012	24.1	6.5	32	938	29.3	5.2
w/o 1.5 Title 1	5	30	1012	33.7	5	23	938	40.7	7
Math	6	42	899	21.4	6	31	732	23.6	2.2
w/o 1.5 Title 1	4.5	30	899	29.9	4.5	22	732	33.2	3.3
Science	5.5	38	814	21.4	5.5	28	780	27.8	6.4
PE/Hlth	3	20	572	28.6	3	16	572	35.7	7.1
WL/FA	5	36	783	21.7	5	28	783	28	6.3
CTE	7	34	788	23.2	7	24	788	32.8	9:6
Sped Resource	8.5				8.5				
Sped FSC	8				8				
Leadership	1				1				

Common Prep

Floating Prep

Totals	67	319	7849	24.6	67	240	7283	30.3	5.7
				Range: 21-33				Range: 23-41	

Class Range by Department for SY 2014-15

3/13/14

Department	KHS Block		State A or B		Increase of
	Low	High	Low	High	
English	22	29	28	35	6
Social Studies	22	29	27	35	5
Math	15	28	17	30	2
Science	6	26	12	32	6
PE/Hlth	25	29	32	36	7
WL/FA	8	33	14	39	6
CTE	12	30	22	40	10
Sped Resource					
Sped FSC					
Leadership					



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DOES CLASS SIZE MATTER?

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February 2014

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DOES CLASS SIZE MATTER?

By Diane Whitmore Schanzenbach, Northwestern University

Executive Summary

Public education has undergone major reforms in the last 30 years with the rise in high-stakes testing, accountability, and charter schools, as well as the current shift toward Common Core Standards. In the midst of these reforms, some policymakers have argued that class size does not matter. This opinion has a popular proponent in Malcolm Gladwell, who uses small class size as an example of a “thing we are convinced is such a big advantage [but] might not be such an advantage at all.”

These critics are mistaken. Class size matters. Research supports the common-sense notion that children learn more and teachers are more effective in smaller classes.

This policy brief summarizes the academic literature on the impact of class size and finds that class size is an important determinant of a variety of student outcomes, ranging from test scores to broader life outcomes. Smaller classes are particularly effective at raising achievement levels of low-income and minority children.

Considering the body of research as a whole, the following policy recommendations emerge:

- Class size is an important determinant of student outcomes, and one that can be directly determined by policy. All else being equal, increasing class sizes will harm student outcomes.
- The evidence suggests that increasing class size will harm not only children's test scores in the short run, but also their long-run human capital formation. Money saved today by increasing class sizes will result in more substantial social and educational costs in the future.
- The payoff from class-size reduction is greater for low-income and minority children, while any increases in class size will likely be most harmful to these populations.
- Policymakers should carefully weigh the efficacy of class-size policy against other potential uses of funds. While lower class size has a demonstrable cost, it may prove the more cost-effective policy overall.

DOES CLASS SIZE MATTER?

Introduction

Public education has undergone major reforms in the last 30 years with the rise in high-stakes testing, accountability, and charter schools, as well as the current shift toward Common Core Standards. The availability of new datasets that follow large numbers of students into the workforce has allowed researchers to estimate the lifetime impact of being taught by teachers who increase students' standardized test scores.¹ In the midst of these new reforms and policy concerns, some have argued that class size does not matter. This opinion has a popular proponent in Malcolm Gladwell, who uses small class size as an example of a "thing we are convinced is such a big advantage [but] might not be such an advantage at all."

The critics are mistaken. Class size matters. Class size is one of the most-studied education policies, and an extremely rigorous body of research demonstrates the importance of class size in positively influencing student achievement. This policy brief first reviews the research on class size. Special attention is given to the literatures in economics and related fields that use designs aimed at disentangling causation from correlation. It then documents the recent rise in class size and considers how to compare the effects of class-size reduction with other commonly discussed policy alternatives.

Review of research

Research shows that students in the early grades perform better in small classes. This is especially the case for students who come from disadvantaged backgrounds, who experience even larger performance gains than average students when enrolled in smaller classes. Small class sizes enable teachers to be more effective, and research has shown that children who attend small classes in the early grades continue to benefit over their entire lifetime.²

The importance of research design

Isolating the causal impact of policies such as class-size reduction is critical, but challenging, for researchers. Sometimes people will argue based on less sophisticated analyses that class size does not matter. Simple correlational arguments may be misleading, though. Since variation in class size is driven by a host of influences, the simple correlation between class size and outcomes is confounded by other factors. Perhaps the most common misinterpretation is caused by low-achieving or special needs students being systematically assigned to smaller classes. In these cases, a simple correlation would find class size is *negatively* associated with achievement, but such a

finding could not be validly generalized to conclude that class size does not matter or that smaller classes are harmful. Instead, because class size itself is correlated with other variables that also have an impact on achievement, such as students' special needs status, the estimated relationship between class size and outcomes would be severely biased.

The academic research has many examples of poor-quality studies that fail to isolate the causal impact of class size, most of them written and published prior to the so-called "credibility revolution" in economics.³ Eric Hanushek has surveyed much of the early research on class size, as well as other educational inputs such as per-pupil spending, in a

Importantly, small classes have been found to have positive impacts not only on test scores during the duration of the class-size reduction experiment, but also on life outcomes in the years after the experiment ended.

pair of older but influential articles from 1986 and 1997, which have been revived in Gladwell's popularized book.⁴ Based on these surveys, he concluded at the time that "there is not a strong or consistent relationship between student performance and school resources" such as class size or spending. In a thorough re-analysis of Hanushek's literature summary, Krueger demonstrates that this conclusion relies on a faulty summary of the data. In particular, Hanushek's summary is based on 277 estimates drawn from 59 studies, but while more estimates are drawn from some studies than others, each estimate is weighted equally. As a result, Hanushek's literature summary places a disproportionate weight on studies that analyzed smaller subsets of data. Krueger argues that since studies, not individual estimates, are what are accepted for publication, weighting by study is more appropriate than weighting by the number of estimates. When Krueger re-analyzed the data giving each study equal weight, he found that there is indeed a systematic positive relationship between school resources and student performance in the literature surveyed by Hanushek.

More troubling, many of the studies included in the survey employed research designs that would not allow researchers to isolate causal effects. For example, one-third of the studies ignored the relationship between different measures of school inputs, and held constant per-pupil spending while studying the "impact" of class size. Because smaller classes cannot be had without increased spending on teachers, it is inappropriate to include spending as a control variable and effectively hold spending constant when investigating class size. The resulting estimate does not provide insight about the impact of reducing class size, but instead estimates a convoluted value that is something like the impact of reducing class size while simultaneously paying teachers less, which is unrealistic.⁵ Such evidence does not reflect the impact of class size and should not be used to inform policy.⁶ Nonetheless, in his 2013 book *David and Goliath*, Malcolm Gladwell uncritically cites the Hanushek literature summary and its argument that the class size literature is inconclusive.⁷ As demonstrated below, well-designed studies generally—with a few notable exceptions—find strong class-size impacts.

The modern research paradigm strongly prefers the use of research designs that can credibly isolate the cause-and-effect relationship between inputs and outcomes. Scholars generally agree that true randomized experiments, such as the Project STAR class-size experiment described below, are the "gold standard" for isolating causal impacts. When an experiment is not available, researchers are sometimes able to employ other techniques that mimic experiments—termed "quasi-experiments" in the literature—that can better infer causality.

In implementing a quasi-experimental study, there must be some sort of variation in class size that is random or nearly random. Such variation is hard to come by, and in many cases there is no way for researchers to isolate the impact of class size. Thus, some of the older and better-designed studies inform the policy debate more accurately than newer studies that employ less sophisticated and simpler correlational designs.

Evidence from Tennessee's STAR randomized experiment

The best evidence on the impact of reducing class sizes comes from Tennessee's Student Teacher Achievement Ratio (STAR) experiment.⁸ A randomized experiment is generally considered to be the gold standard of social science research. In STAR, over 11,500 students and 1,300 teachers in 79 Tennessee elementary schools were randomly assigned to small or regular-sized classes from 1985-89. The students were in the experiment from kindergarten through third grades. Because the STAR experiment employed random assignment, any differences in outcomes can be attributed with great confidence to being assigned to a smaller class. In other words, students were not more or less likely to be assigned to small classes based on achievement levels, socio-economic background, or more difficult-to-measure characteristics such as parental involvement.⁹

The results from STAR are unequivocal. Students' achievement on math and reading standardized tests improved by about 0.15 to 0.20 standard deviations (or 5 percentile rank points) from being assigned to a small class of 13-17 students instead of a regular-sized class of 22-25 students.¹⁰ When the results were disaggregated by race, black students showed greater gains from being assigned to a small class, suggesting that reducing class size might be an effective strategy to reduce the black-white achievement gap.¹¹ Small-class benefits in STAR were also larger for students from low socio-economic-status families, as measured by eligibility for the free- or reduced-priced lunch program.

A follow-up study of the most effective teachers in STAR found that teachers used a variety of strategies to promote learning and that small classes allowed them to be more effective in employing these strategies. For example, they closely monitored the progress of student learning in their classes, were able to re-teach using alternative strategies when children did not learn a concept, had excellent organizational skills, and maintained superior personal interactions with their students.¹²

Importantly, small classes have been found to have positive impacts not only on test scores during the duration of the class-size reduction experiment, but also on life outcomes in the years after the experiment ended. Students who were originally assigned to small classes

did better than their school-mates who were assigned to regular-sized classes across a variety of outcomes, including juvenile criminal behavior, teen pregnancy, high school graduation, college enrollment and completion, quality of college attended, savings behavior, marriage rates, residential location and homeownership.¹³

Most other quasi-experimental evidence is consistent with STAR

True randomized experiments such as Tennessee's random assignment of students across an entire state to experimental and control groups are quite rare. Therefore, researchers must also look for quasi-experimental approaches that allow isolation of the causal impact of class-size reduction. Other high-quality studies that isolate the effect of small class size in elementary school on student outcomes generally show results similar to those found in STAR.

For example, a quasi-experimental approach was used to evaluate Wisconsin's targeted class-size reduction program. In the Student Achievement Guarantee in Education (SAGE) program, high-poverty school districts could apply to implement a pupil-teacher ratio of 15-to-1 in grades K-3.¹⁴ While most participating schools reduced class sizes, some schools chose to attain the target pupil-teacher ratio by using two-teacher teams in classes of 30 students. Test scores of first-grade students in SAGE schools were higher in math, reading, and language arts compared with the scores of those in selected comparison schools in the same districts with average pupil-teacher ratios of 22.4 to 24.5. Attending small classes improved student achievement by approximately 0.2 standard deviations.¹⁵

The most famous quasi-experimental approach to studying class-size reduction comes from Angrist and Lavy's use of a strict maximum-class-size rule in Israel and a regression discontinuity (RD) approach.¹⁶ In Israel, there is a strict maximum class size of 40 students. As a result, class size drops dramatically when enrollment in a grade in a school approaches the point when the rule requires the school to add a new classroom—i.e., when enrollment tips above a multiple of 40. For example, if a grade has 80 students, then a school could offer as few as 2 classrooms, with the maximum allowable class size of 40 students in each. If a grade has 81 students, however, the school is required to offer at least 3 classrooms, and consequently the maximum average class size falls to 27 students. In practice, some schools add an additional classroom prior to hitting the 40-student cap. Nonetheless the maximum-class-size rule is a good predictor of actual class sizes and can be used in an instrumental-variables research design to isolate the causal impact of class size on student achievement. Using the variation in narrow bands around enrollment sizes that are multiples of 40 students, Angrist and Lavy find strong improvements overall in both math and reading scores, of a magnitude nearly identical to that of Project STAR's experimental results. Consistent with the STAR results, they also find larger improvements among disadvantaged students.

Several subsequent papers have identified the impact of smaller class sizes using maximum class-size rules in other international settings.¹⁷ (Note that quasi-experimental approaches tend to require large datasets and data spanning a large number of years. Such datasets are more likely to derive from settings outside the United States.) Most recently,

Fredriksson *et al.* evaluated the long-term impact of class size using data from students in Sweden between ages 10 and 13 who were facing a maximum-class-size rule of 30 students.¹⁸ At age 13, students in smaller classes had higher cognitive and non-cognitive skills, such as effort, motivation and self-confidence. In adulthood (between ages 27 and 42), those who had been in smaller classes had higher levels of completed education, wages, and earnings. Urquiola used a similar regression discontinuity approach in Bolivia and found that a one standard-deviation reduction in class size (about 8 students in his data) improves test score performance by 0.2 to 0.3 standard deviations.¹⁹ Browning and Heinesen derive similar results from data from Denmark, even though the average class size is much smaller in their study (20 pupils per classroom, compared with 31 students in Angrist and Lavy's Israeli data).²⁰

A different quasi-experimental approach is to use variation in enrollment driven by small variations in cohort sizes across different years. Hoxby takes this approach using data from the state of Connecticut, finding no statistically significant positive effect of smaller class size.²¹ One drawback of the Connecticut study is that test scores are only measured in the fall, so the impact of the prior year's class size may be somewhat mitigated by the time spent away from school in the summer. The discrepancy between Hoxby's Connecticut results and those of other studies that also use research designs capable of uncovering causal relationships is an unresolved puzzle. Despite the overwhelming pattern in the literature of positive class-size impacts, Malcolm Gladwell, intent on supporting his point about what he calls the "theory of desirable difficulty," described only the Hoxby results in his description of research on class size in his recent book.²²

Results from statewide class-size-reduction policies

Based in part on the research evidence on the impact of class-size reduction, several U.S. states, including California, Texas and Florida, have implemented class-size caps. The most widely studied of these policies is the 1996 California law that gave strong monetary incentives to schools to reduce class size in grades K-3 to 20 or fewer students. Sometimes when a new policy is introduced it is phased in slowly across locations, which gives researchers the opportunity to compare outcomes in schools that have adopted the policy with those that have not yet done so. In California, however, the policy was nearly universally adopted within a short period of time, so there was very little opportunity to compare early implementers with later implementers. Furthermore, test scores are only available starting in grade 4, so any evaluation of the policy is forced to use test scores from later than the year in which the reduced class size was experienced. Although there were positive impacts on achievement due to class-size reductions on the order of 0.05 to 0.10 standard deviations, these impacts may have been offset because many inexperienced teachers had to be hired to staff the new classrooms, reducing average teacher quality.²³

Why are small classes more effective?

The mechanisms at work linking small classes to higher achievement include a mixture of higher levels of student engagement, increased time on task, and the opportunity small

classes provide for high-quality teachers to better tailor their instruction to the students in the class. For example, observations of STAR classrooms found that in small classes students spent more time on task, and teachers spent more time on instruction and less on classroom management.²⁴ Similar results have been found in other settings.²⁵ However, qualitative research from the pupil-teacher ratio reduction in Wisconsin's SAGE program indicates that such beneficial adaptations in teachers' practices will not necessarily occur. It is important to provide professional-development support to instruct teachers on how to adapt their teaching practices to smaller classes.²⁶

In addition, small classes may have a positive impact on student "engagement behaviors," which include the amount of effort put forth, initiative taken, and participation by a student. Not surprisingly, these characteristics have been shown to be important to classroom learning. Finn finds that students who were in small classes in STAR continued to have higher engagement ratings in subsequent grades.²⁷

It is sometimes argued that class size only matters for inexperienced or low-quality teachers because more effective teachers are better able to adapt their teaching styles to accommodate larger classrooms. The evidence suggests that the opposite is true. In STAR, the positive impacts of small classes were found to be larger for experienced teachers.²⁸ Experienced teachers are better able to take advantage of smaller class sizes to make pedagogical changes.

What does the evidence say about how small is small enough?

The best evidence on class-size reduction is from the STAR experiment, which estimated substantial positive impacts from class-size reduction from an average of 22 to an average of 15. In fact, the class sizes targeted in STAR were informed by influential work by Glass and Smith that found strong impacts from class sizes below 20.²⁹ Based on this, some researchers conclude that the evidence supports better outcomes only if classes are below some threshold number such as 15 or 20. Sometimes the argument is extended to suggest that reducing class size is not effective unless classes are reduced to within this range. The broader pattern in the literature finds positive impacts from class-size reductions using variation across a wider range of class sizes, including class-size reductions mandated by maximum class-size rules set at 30 (Sweden) or 40 (Israel). In fact, the per-pupil impact is reasonably stable across class-size reductions of different sizes and from different baseline class sizes. For example, when scaled by a 7-student class-size reduction as in the Tennessee experiment, the Israeli results imply a 0.18 standard deviation increase in math scores, which is nearly identical to the Tennessee results.³⁰ The weight of the evidence suggests that class-size impacts might be more or less linear across the range of class sizes observed in the literature—that is, from roughly 15 to 40 students per class. It would be inappropriate to extrapolate outside of this range (as is done in the Gladwell book).

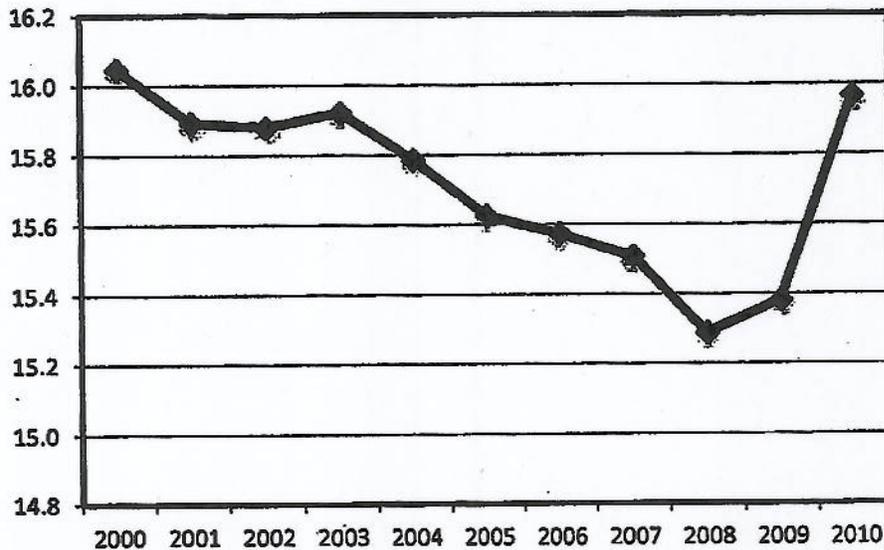
Do small classes matter in later grades?

Most of the high-quality evidence on class-size reduction is based on studies of the early grades. The available high-quality evidence on the impact of class size on outcomes in

older grades is more limited, and more research in this area is needed. A notable exception is Dee and West, who estimate class-size effects using variation in class sizes experienced by students across classes in different subjects, and by students taking classes from the same teachers in different class periods. The study finds that smaller class sizes in eighth grade have a positive impact on test scores and measures of student engagement, and finds some evidence that these impacts are larger in urban schools.³¹

Recent Developments

Student-teacher ratios in public schools fell steadily over the past 40 years until recently. Between 2008 and 2010, however, the student-teacher ratio increased by 5%, from 15.3 to 16.0 (see Figure 1). Note that actual class sizes are typically larger than student-teacher ratios, because these ratios include special teachers who are not included in class-



Source: Digest of Education Statistics (table 78, 2012; table 69, 2011)

Figure 1. Student/Teacher Ratios in Public Elementary and Secondary Schools

size counts, such as teachers for students with disabilities.³² For example, imagine a grade level in a school that contains three “regular” classes with 24 students in each and one compensatory class with only 12. This school would have a pupil-teacher ratio of 21, even though most of the students in that grade (in fact, 85% of them) are in classes with 24 students. This is a reason why simple correlations between class size and student outcomes may be misleading. If some students are placed in smaller classes because they have low

performance levels, this biases the estimate of the positive effect of small classes downward.³³

According to the Schools and Staffing Survey, in 2011-12 the average United States class size for public primary school teachers in self-contained classes was 21.6, up from 20.3 in 2007-08.³⁴ During this time frame, the recession forced California to abandon its class-size reduction policy, which had provided incentives for districts to adopt a 20-student cap in grades K through 3.³⁵ In response, the average K-3 class size increased from 23 students in 2008-09 to 26 students in 2012-13.

Table 1. Hypothetical Distribution of Students with Different Numbers of Teachers

Grade	Enrollment	Allocation with 24 teachers		Allocation with 23 teachers	
		Number of classes	Class size	Number of classes	Class size
K	100	4	25	4	25
1	100	4	25	4	25
2	100	4	25	4	25
3	100	4	25	4	25
4	100	4	25	4	25
5	100	4	25	3	33.3
Total	600	24		23	
Average class size			25		26.4
Average pupil-teacher ratio			25		26.1

Small increases in average class sizes can mask large class-size increases in some districts and schools. For example, sometimes policymakers will calculate the cost savings from increasing the average class size by a single student, arguing or implying that the impact on test scores from this “modest” one-student increase will be negligible.³⁶ This line of reasoning is misleading because actual classes and teachers are not easily divisible into fractions.³⁷ As illustrated in Table 1, imagine a K-5 school that has 100 students in each grade with four classrooms for each grade. Each of the 24 classes in the school has a class size of 25 students. If this school had to lay off one fifth-grade teacher, the aggregate numbers would not increase very much. The average pupil-teacher ratio would increase only slightly, from 25.0 to 26.1, while the average class size would increase from 25.0 to 26.4. These averages mask the sharp increase in class size experienced by the fifth-grade students, from 25 to 33.3. The negative impact of increasing class size by 8 students in

fifth grade would be expected to be sizeable, but it might not raise alarms to the average parent told that the pupil-teacher ratio increased by only 1 student.³⁸

Discussion and Analysis

Recently some policymakers and education analysts have argued that manipulating other educational inputs would be more effective or more cost-effective than class-size reduction. By and large, though, these suggestions do not pit class-size reductions against some other policy alternative that has been implemented and evaluated. It is only appropriate to compare effectiveness across a variety of policy alternatives.

For example, recent studies have found that teachers with high value added on standardized test scores also have an impact on such subsequent outcomes for their students as wage earnings.³⁹ Based on these findings, some argue that giving students a high-test-score value-added teacher is more cost-effective than class-size policy. The problem with this suggestion is that there are few—if any—policies that have been designed, implemented and evaluated that increase the availability of teachers with high-test-score value added and result in higher student achievement. It's one thing to measure the impact of teachers on their students' standardized test scores, but it is a separate challenge to design a policy lever to bring more teachers into the classroom who can raise test scores. A recent report from the Institute of Education Sciences documents that disadvantaged students are taught by teachers with lower value added on tests.⁴⁰ At this point we know relatively little about how to increase teacher quality, much less how much it will cost to induce more high-quality teachers to work and stay in the schools that need them. Much more needs to be done in terms of pilot programs, policy design and evaluation before improving teacher quality can be considered a viable policy option.

Another proposal has been floated (e.g. by Bill Gates) to pay high-quality teachers bonus payments for taking on extra students.⁴¹ It is certainly possible that such a reallocation of students could increase overall achievement, but it is also possible that it would backfire. For example, imagine a school with a grade containing two classes. One teacher is an excellent, experienced teacher, while the other is an untested, first-year "rookie" teacher. One option would be for both teachers to get classes with 25 students. Another option would be to pay the experienced teacher a bonus to take a class of 29 students, leaving the rookie teacher with a class of 21 students. All else equal, children in the experienced teacher's class would likely record lower test score gains if there were 29 students than if there were 25, but these gains would be enjoyed by more students. Perhaps the 21 students in the rookie teacher's classroom would be better off than if they would have been in a classroom of 25 students, though the research is less clear about whether the rookie teacher will be more effective in a small class. In this hypothetical case, it is possible that the aggregate test score gains could be larger when the classrooms have unequal sizes, especially if the experienced teacher is substantially more skilled at raising test scores than the rookie teacher. Whether it is an effective policy, however, hinges crucially on a variety of factors: how large the skill differential is between teachers, how large a bonus payment is required to induce the experienced teacher to accept a larger class, what the next best

use is for the funds used for the bonus payment, and whether the gains persist over time. While this is a potentially interesting area for policy development, much more pilot testing needs to be done before it could be considered a credibly policy alternative to class-size reduction.

Recommendations

The academic literature strongly supports the common-sense notion that class size is an important determinant of student outcomes. Class-size reduction has been shown to improve a variety of measures, ranging from contemporaneous test scores to later-life outcomes such as college completion.

Based on the research literature, I offer the following policy recommendations:

- Class size is an important determinant of student outcomes and one that can be directly influenced by policy. All else being equal, increasing class sizes will harm student outcomes.
- The evidence suggests that increasing class size will harm not only children's test scores in the short run but also their long-term human capital formation. Money saved today by increasing class sizes will be offset by more substantial social and educational costs in the future.
- The payoff from class-size reduction is larger for low-income and minority children, while any increases in class size will likely be most harmful to these populations.
- Policymakers should carefully weigh the efficacy of class-size-reduction policy against other potential uses of funds. While lower class size has a demonstrable cost, it may prove the more cost-effective policy overall.

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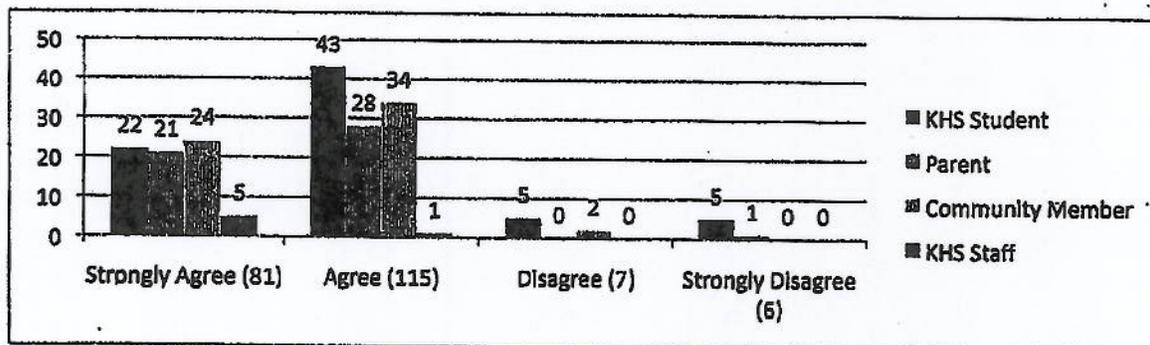
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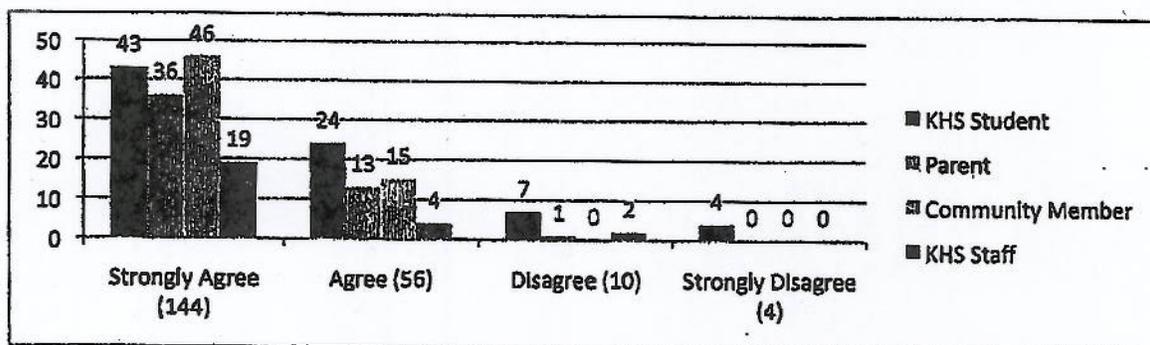
Introduction

On September 21, 2013, Kailua High School hosted our homecoming football game on the football field. Kailua welcomed students, parents, community members and staff to this event. On the way to home side bleachers, we asked people ages 13 and up to voluntarily complete this survey. Participants identified themselves as a student, parent, community member, or staff (each category being a different color) and were given four stickers. They placed their stickers on a chart indicating their response to each statement. The following data was collected from this event.

Statement #1: KHS has programs and/or resources that support a college going culture.

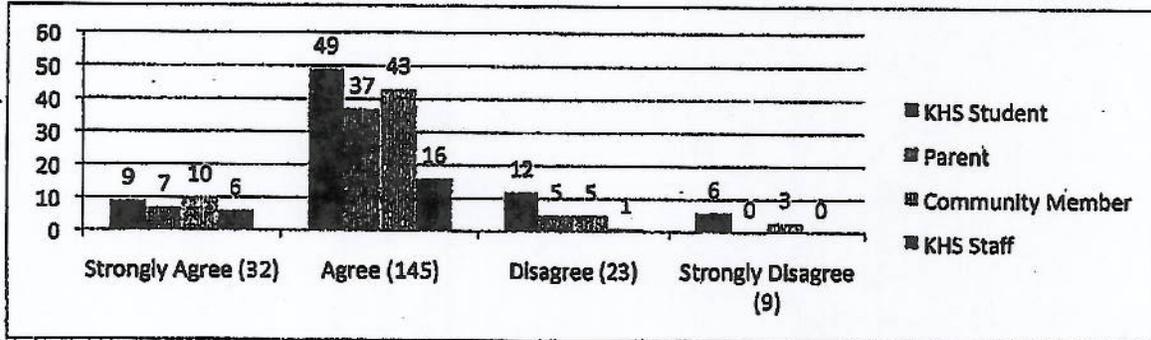


Statement #2: Small class size is important for student learning.

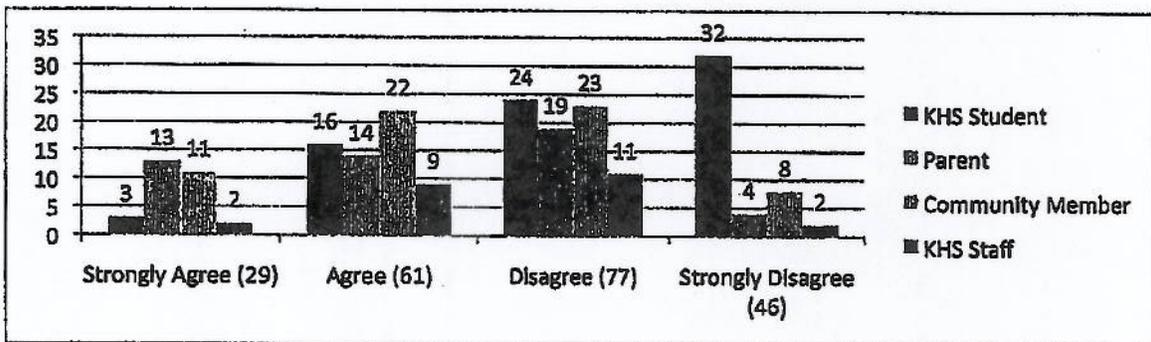


Kailua High School 2013-2014 School Community Council: Data #2

Statement #3: Our classrooms are physically and intellectually safe, learning environments.



Statement #4: Lengthening the school day will help ensure student learning.



**Partial (#3 & 4) Survey Results for 2014-15 Bell Schedule
(November 20, 2013)**

Returned Surveys:

(S)Students= 584/789 (75%) (P)Parents=68/789 (9%) (T)Teacher=51/74 (68%) (ST)Staff=10/40 (25%)

The following information are the results of the bell schedule survey distributed on November 20, 2013:

3. What do you believe is the importance of each of the following conditions and their impact on student learning and success:

a. SMALL CLASS SIZE TO ALLOW TEACHERS TO DIFFERENTIATE INSTRUCTION AND PROVIDE INDIVIDUAL ASSISTANCE TO STUDENTS.

No Importance/ Little or No Impact	Some Importance/ Some Impact	Important/ Great Impact	Of Great Importance/ Significant Impact	Extremely Important/ Very High Impact	"Results" Important to Extremely
Students=36	82	192	137	136	(S)=465/584 (80%)
Parents=2	1	13	13	27	(P)=53/68 (78%)
Teachers=1	0	3	17	30	(T)=50/51 (98%)
Staff=0	0	1	4	5	(ST)=10/10 (100%)

b. LONGER CLASS PERIODS TO INCREASE TIME FOR INSTRUCTION.

No Importance/ Little or No Impact	Some Importance/ Some Impact	Important/ Great Impact	Of Great Importance/ Significant Impact	Extremely Important/ Very High Impact	"Results" Important to Extremely
Students=36	149	205	62	38	(S)=305/584 (52%)
Parents=4	14	14	13	27	(P)=54/68 (79%)
Teachers=4	15	10	16	6	(T)=32/51 (63%)
Staff=0	3	0	3	4	(ST)=7/10 (70%)

c. TEACHER PROFESSIONAL DEVELOPMENT TO INCREASE AND IMPROVE TEACHER KNOWLEDGE, SKILLS AND INSTRUCTIONAL PRACTICE.

No Importance/ Little or No Impact	Some Importance/ Some Impact	Important/ Great Impact	Of Great Importance/ Significant Impact	Extremely Important/ Very High Impact	"Results" Important to Extremely
Students=23	100	208	123	137	(S)=468/584 (80%)
Parents=4	4	13	13	22	(P)=48/68 (71%)
Teachers=1	7	16	17	9	(T)=42/51 (82%)
Staff=0	1	3	2	4	(ST)=9/10 (90%).

4. The ONE condition which you believe to be the MOST IMPORTANT FOR STUDENT LEARNING AND SUCCESS.

Small Class Size. S=319, P=32, T=37, St=6 ----- Total=394/713 (55%)
 Longer periods to increase time for instruction. S=75, P=10, T=7, St=2 ----- Total=94/713 (13%)
 Teacher professional development. S=163, P=13, T=5, St=2 ----- Total=183/713 (26%)¹

¹ Timeline 11/1/13; 11/20/13