

Class Size in Elementary Grades

Westwood School Committee
September 7, 2017

Presentation Overview

Elementary class size in Westwood

Class size data from comparable districts

Educational research challenges

Research findings

Possible next steps

Westwood Elementary Class Size Lookback

	2006	2011	2016
Total Enrollment	1449	1487	1326
K-1 Range	15 - 23	16 - 22	15 - 23
K-1 Average	19.64	18.75	18.38
Grades 2-5 Range	16 - 25	16 - 25	15 - 26
Grades 2-5 Average	21.7	20.3	19.58

Snapshot: Westwood's Class of 2017

2nd graders during AY 2006-2007

Deerfield	Downey	Hanlon	Martha Jones	Sheehan
19	18	25	21	24
18	18	25	21	24
	17		22	

98% bound for 4-year colleges

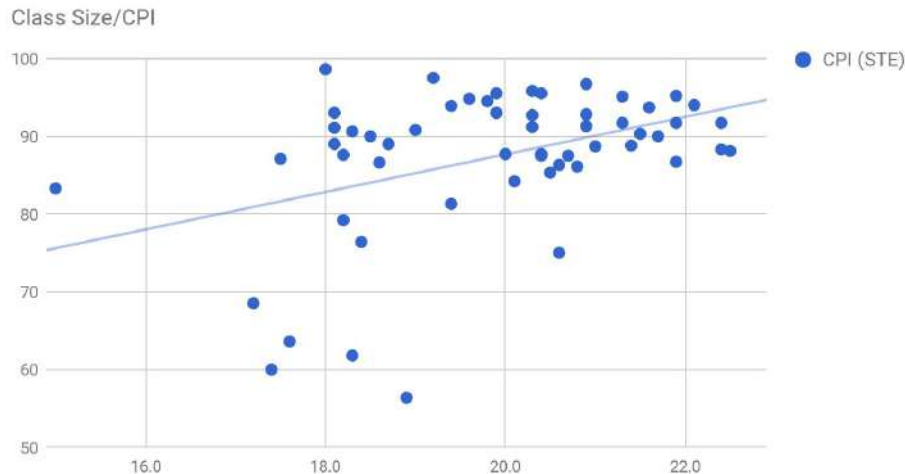
Class size in comparable districts

Two cohorts: FinCom comps and TEC

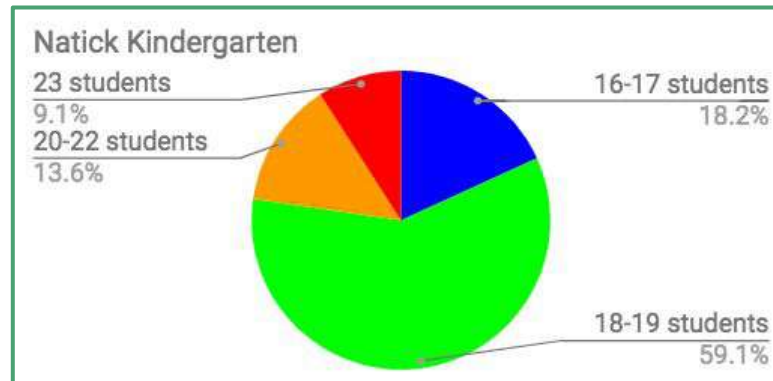
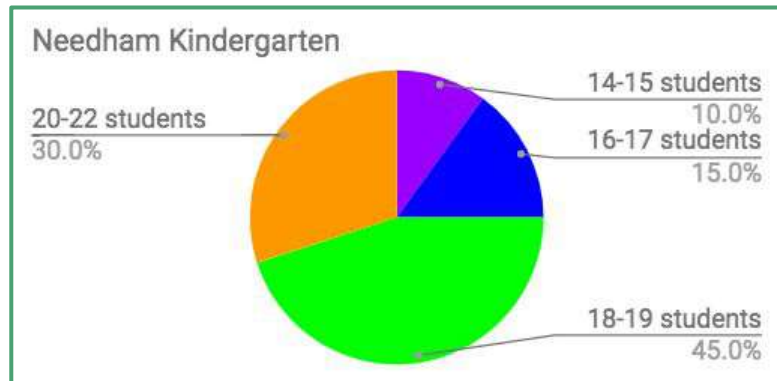
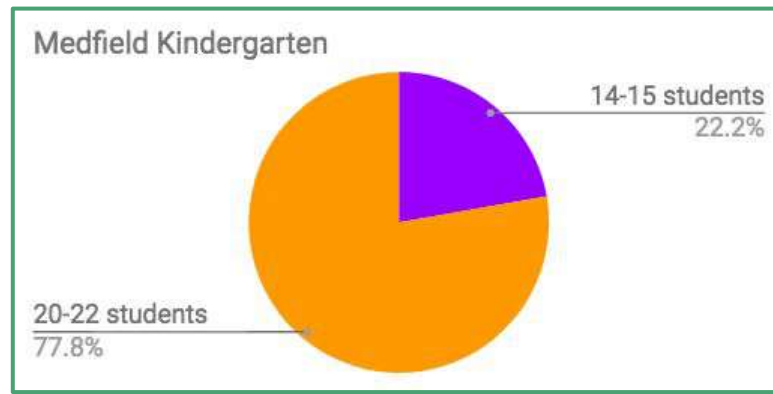
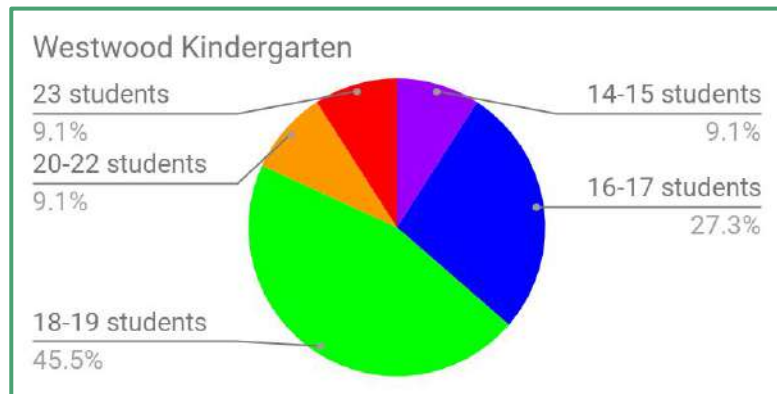
2015-2016 Data Set (most recent publically accessible data)

Of 69 schools, Westwood's ranked 10, 17, 19, 28 & 29 for lowest avg. class size

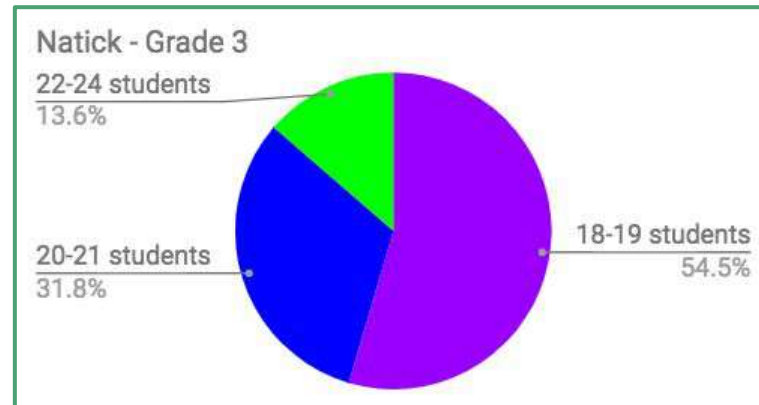
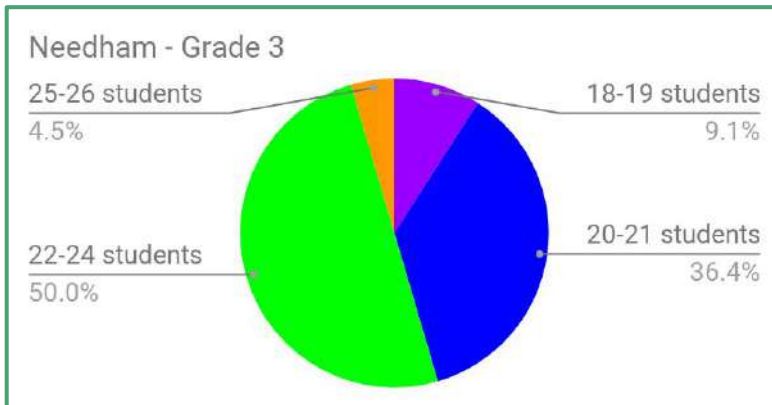
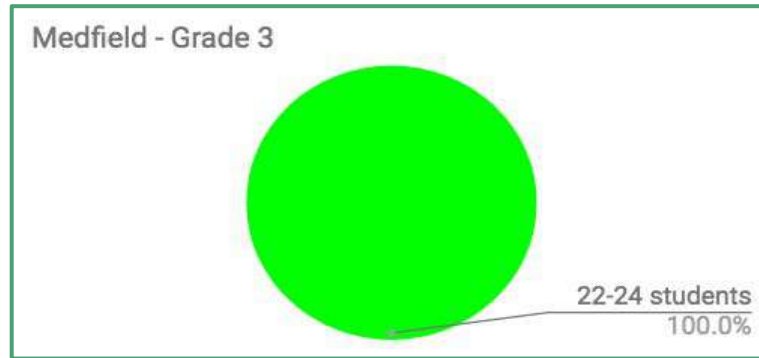
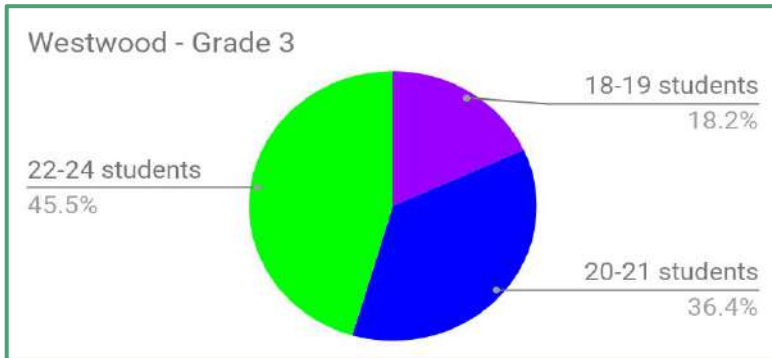
No positive correlation between class size and STE MCAS performance



Kindergarten in comparable districts 2017



Grade 3 in comparable districts 2017



Educational research challenges

Correlation, not causation

Randomization

Context

Effect size

Measurable versus important



State level class size initiatives

1983: Texas School Reform

Major legislation includes CSR for Kindergarten (22 limit).

1986: Tennessee STAR Study

State-funded study assigns K-3 students to small (13-17), regular (22-25), or regular with aide classes.

1996: California SB1777

Reduced K-3 class sizes from 28 avg to 20 max.

2002: Florida Constitution

Limits core class sizes to 18:1 (K-3), 22:1 (4-8) and 25:1 (9-12)

1984: Indiana Project Prime Time

K-2 initiative reduces to avg of 18 OR avg of 24 with an aide.

1989: Nevada Class Size Reduction Act

Goal of lowering student-teacher ratios to 15:1 (K-3), 22:1 (4-6), 25:1 (7-12)

1996: Wisconsin Project SAGE

Reduced K-1 student teacher ratio to 15:1 in high-poverty schools

Research findings

“Research on class size is decidedly mixed and offers little guidance as to what grades, students and range of class sizes represent opportunities for cost-effective investments. An advocate with a conclusion in search of a study can surely find one...”

-Matthew Chingos

“Class Size and Student Outcomes: Research and Policy Implications.” Journal of Policy Analysis and Management. 32(2), (2013), 411-438.

Positive results from CSR efforts

Smaller class sizes in early grades (K-5) correlate with higher standardized test scores (Krueger, 1999)

Long-term studies link both class size and teacher quality to positive outcomes later in life: college attendance, earnings and retirement savings (Chetty et al, 2011)

Stronger correlations for low income and minority students (Krueger, 1999)

International studies based on class size limit impact show positive correlations (Chingos, 2013)

Helpful STAR context

STAR study looked at large differences in class size (15 vs. 24 students)

108 out of 1678 students removed from small classes and reassigned after year 1

Large differences in outcomes at different schools

All participating teachers were offered training after year 2 as part of the study

Small elementary schools (fewer than 3 classes per grade) were not included in the study

Unclear or neutral results

Florida education reform--test scores improved but studies showed little to no CSR effect (Chingos, 2012)

In Texas, modest effect that declined after 1 year (Rivkin et al, 2005)

In California, positive effect in some classrooms offset by negative in others (Jepsen and Rivkin, 2009)

Effect Size

When school finances are limited, the cost-benefit test any educational policy must pass is not “Does this policy have a positive effect?” but rather “Is this policy the most productive use of these educational dollars?”

-Whitehurst and Chingos, 2011

John Hattie: 2009 meta-study on effect sizes in educational research

Rank-ordered list

Strong effects: self-reported grades (1.44), intervention (1.07), formative evaluation for teachers (0.90), feedback (0.75)

Class size has a relatively modest impact (0.21)

Possible next steps

Review current elementary professional staffing guidelines: reaffirm or revise?

Analyze costs and benefits of changing guidelines

Create a consistent process for responding to classes that are outside of guidelines

Sources

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