Class Size Reduction

Research & Implications

Contemporary Understanding

Class Size Reduction (CSR)

Class size reduction has been suggested by several researchers as a strategy to address various challenges in education. Here are three key reasons why researchers advocate for class size reduction:

- **Mitigating the Effects of Inequities:** Smaller class sizes can help alleviate the negative impact of economic and social inequities on students' educational experiences.
- **Improving Academic Achievement:** Research suggests that smaller class sizes can have a positive impact on students' academic achievement.
- **Strengthening Foundational Skills:** Class size reduction is particularly beneficial in the primary grades when students are building essential foundational skills.

(Achilles, Finn, & Bain, 1997; Biddle & Berliner, 2002; Molnar & Zmrazek, 1994)

Contemporary Understanding

Class Size Reduction (CSR)

- Over the past two decades, numerous states and the federal government in the United States have made investments in class size reduction programs, with a particular focus on grades K-3 (kindergarten through 3rd grade). These initiatives have involved allocating resources to hire additional teachers and reduce the number of students in each classroom.

- Class size reduction programs often involve hiring and training additional teachers, constructing new classrooms, and implementing policies that limit the number of students per class. The goal is to create an environment where teachers can effectively engage with students, tailor instruction to their needs, and promote positive learning outcomes.

- It is important to note that while class size reduction is recognized as a potentially effective strategy, its implementation should consider various factors, including available resources, infrastructure, and teacher-student ratios.

Review of Literature

Class Size Reduction (CSR)

Student Teacher Achievement Ratio, or STAR

Most significant study on class size reduction

Conducted in the late 1980s and early 1990s in Tennessee, United States.

The aim of the STAR project was to investigate the effects of reduced class sizes on student achievement, particularly in the early grades. The project's findings suggested that students in smaller classes outperformed their counterparts in regular or larger classes.

The STAR project involved three distinct class size categories:

- Small Class Size: Classes with approximately 15 students per teacher.
- Regular Class Size: Classes with approximately 22 to 25 students per teacher.
- Regular with Aide Class Size: Classes with approximately 22 to 25 students per teacher, supplemented with a full-time teaching assistant.

Students demonstrated higher academic achievement, improved test scores, and increased engagement with smaller class size.

Review of Literature

Class Size Reduction (CSR)

The Student Achievement Guarantee in Education (SAGE) is a multifaceted reform aimed at reducing the impact of poverty on student achievement.

The SAGE law defines class size reduction as "reduce class size to 15" ("SAGE law," 2004).

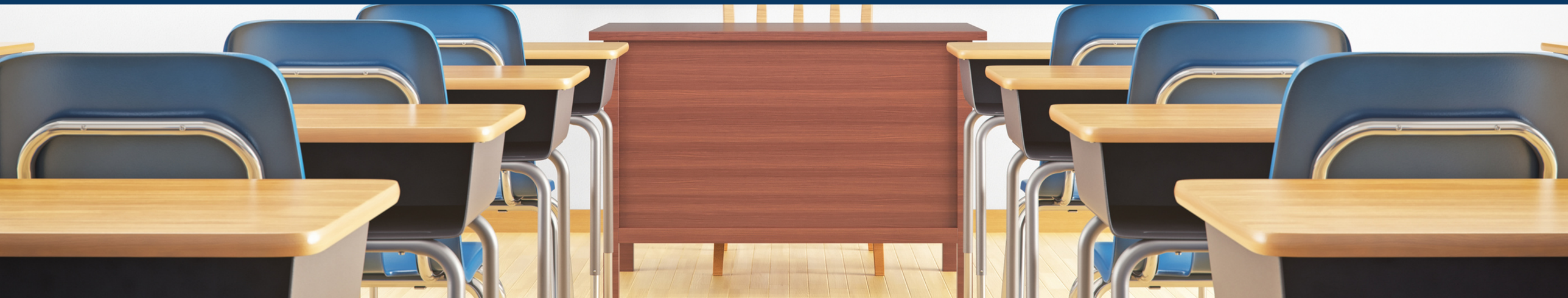
In practice, the Department of Public Instruction (DPI) allows four distinct configurations of CSR.

1. A single teacher with fifteen students in a classroom (15:1).
2. Two teachers sharing a single classroom space but practicing separately so they maintain the CSR format of 15:1 in a much smaller space (30:2 shared space).
3. A PTR approach, allowing 2 full time teachers in a classroom with up to 30 students (30:2 team taught).
4. Hybrid called a SAGE block approach, combining group size and PTR considerations. In this configuration, a part time teacher is added to teach literacy and math, reducing class size in those core subjects. In some cases, the teacher has separate classroom space, and in others s/he teams with the core classroom teacher.

Review of Literature

Class Size Reduction (CSR)

The results of the 1996-97, 1997-98 and 1998-99 evaluations are generally consistent with Tennessee's Student Teacher Achievement Ratio (STAR) Project (1985-1989)



Review of Literature

Class Size Reduction (CSR)

"There is very little good research that has to do with class size reduction in the upper grades. Even though the teachers unions are very much in favor reducing class size and Perspectives on CSR 20 teachers are very much in favor of reducing class size at all grade levels and I would prefer not to subject sophomores in high school to large lecture classes. It sounds ridiculous but the fact of the matter is that there is just very little really good evidence at that level. In other words, most of the stuff that has been done has been done at the early grades." Biddle (CSR Researcher)

"There is no magic number but the small classes in the STAR study were between 13 and 17 students. So then states look at that and say how much can we afford and come up with a number like California did, 20. There is nothing you can point to in research that says well 20 is the magic number." McRobbie (CSR California)

Extracted from Perspectives on Class Size Reduction; A paper presented at the symposium Early Childhood Policy in Practice: The Case of Class Size Reduction at the annual meeting of the American Educational Research Association, Tuesday, April 12, 2005, Montreal, Canada.

Recommendations from Literature

NCPEA POLICY BRIEF: 2012

1. EARLY INTERVENTION. Start when the pupil enters "schooling" in kindergarten or pre-kindergarten.

2. SUFFICIENT DURATION. For enduring effects, maintain the small-class environment for at least three—preferably four—years.

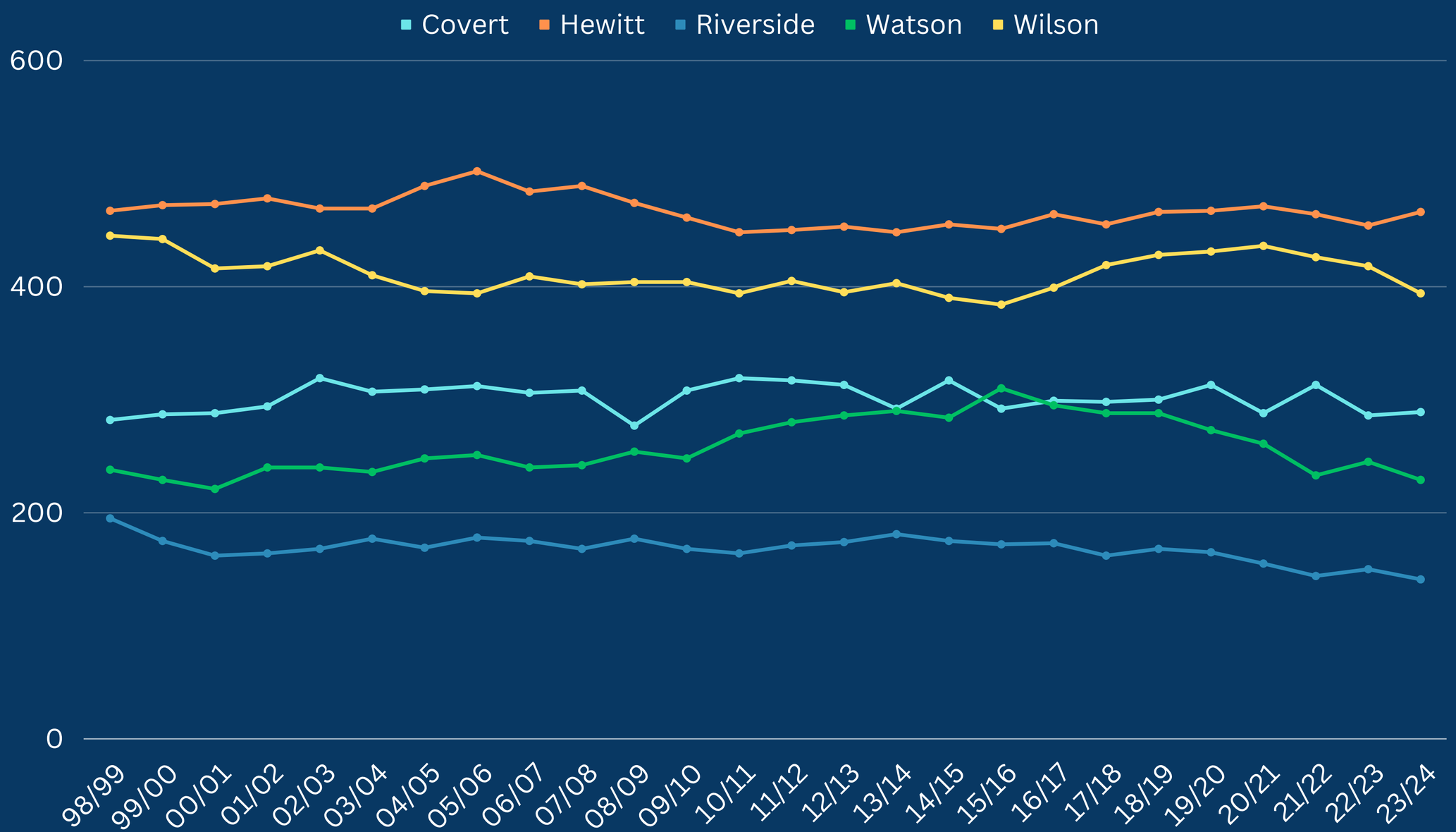
3. INTENSE TREATMENT. Ensure the pupil spends all day, every day in the small class. Avoid "pull-out" projects or team teaching. Small classes facilitate intense treatment, fostering a psychological sense of community, close student-teacher relations, and coherence. Although teacher aides may assist in the building, there is scant evidence that they influence student outcomes positively.

4. MIXED ABILITY GROUPINGS. Randomly assign students and teachers to a class to facilitate peer tutoring, problem-solving groups, student-to-student cooperation, and active participation and engagement.

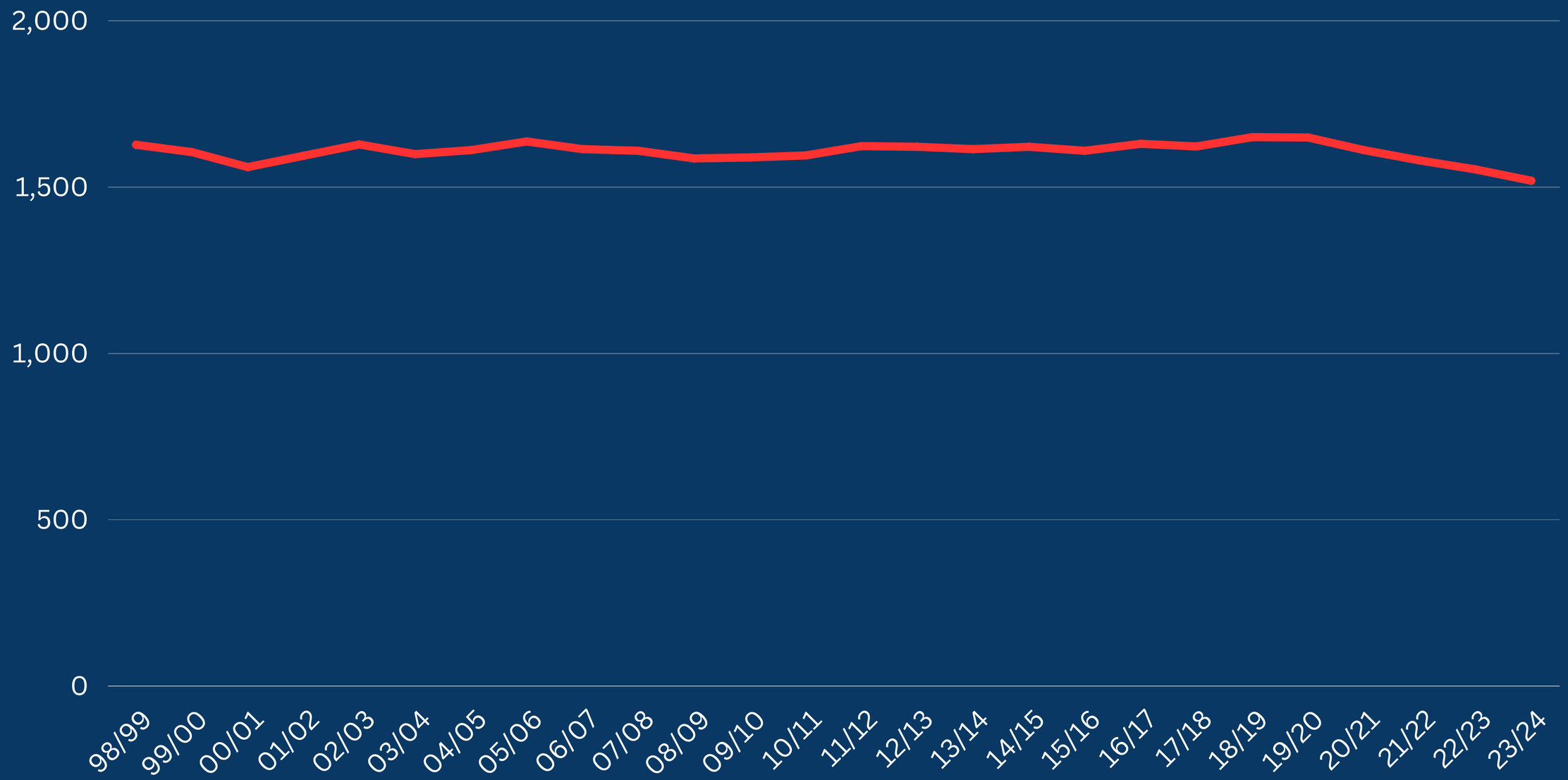
5. EMPLOY A COHORT MODEL for several years so students develop a sense of community.

6. EVALUATE process and outcomes carefully, and share results. Appropriately sized classes in elementary grades will take policy and perhaps even legislative change.

RVC Elementary Enrollment History



Total RVC K-5 Enrollment History



Class Size Guideline History

Prior to 05/06	**K-2**	**25**
	3	27
	4/5	28

05/06 to 09/10	**K-2**	**25**
	3-5	26

10/11 to Current	**K-5**	**25**

Rockville Centre School District

Current Class Size Projections for 2023/2024

School	K	1	2	3	4	5	8/12:1:2	Total	Sections	Classrooms
Covert	23 23	23 22	23 23	21 21	22 23	23 23	6 5 8	289	15	16
Hewitt	22 22 22 22	24 23 23	20 19 19 19	21 20 20 20	24 24 23	25 25 25	4	466	22	23
Riverside	19	13 13	15	14 14	15 15	23	0	141	9	11
Watson	17 16	22 21	15 15	18 17	24 24	20 20	0	229	12	15
Wilson	20 20 20	23 22 22	21 21 20	23 22 22	24 24 24	22 22 22	0	394	18	21

Changes with K-2 Class Size at 22

School	K	1	2	3	4	5	8/12:1:2	Total	Sections	Classrooms
Covert	16 15 15	15 15 15	16 15 15	21 21	22 23	23 23	6 5 8	289	18	16
Hewitt	22 22 22 22	18 18 17 17	20 19 19 19	21 20 20 20	24 24 23	25 25 25	4	466	23	23
Riverside	19	13 13	15	14 14	15 15	23	0	141	9	11
Watson	17 16	22 21	15 15	18 17	24 23	20 20	0	229	12	15
Wilson	20 20 20	17 17 17 16	21 21 20	23 22 22	24 24 24	22 22 22	0	394	19	21

Changes with K-5 Class Size at 20

School	K	1	2	3	4	5	8/12:1:2	Total	Sections	Classrooms
Covert	16 15 15	15 15 15	16 15 15	14 14 14	15 15 15	16 15 15	6 5 8	289	21	16
Hewitt	18 18 18 17 17	18 18 17 17	20 19 19 19	17 16 16 16 16	18 18 18 17	19 19 19 18	4	466	27	23
Riverside	19	13 13	15	14 14	15 15	12 11	0	141	10	11
Watson	17 16	15 14 14	15 15	18 17	16 16 15	20 20	0	229	14	15
Wilson	20 20 20	17 17 17 16	16 16 15 15	17 17 17 16	18 18 18 18	17 17 16 16	0	394	23	21

Rockville Centre School District

Possibilities & Implications

Scenario : K-5: 20 pupils in a class with 1 teacher Grades K-5-Need Cost implications, space implications, staffing implications

Additional Sections	19		
Additional Classroom Teachers Required	19	$ 1,900,000	Specials? PE, Art, Music, FLES, STELLAR
Additonal Classrooms Required	11	$11,000,000	Special Area space limitations?
Pre-K Teachers @ 20 students/class	16	$ 1,600,000	Specials?
Pre-K Classrooms	16	$16,000,000	

Class Size Reduction

Discussion

Bibliography

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