



Board Presentation

Elementary School Planning

February 22, 2023

Agenda

1. BBHCSD Enrollment History
2. BBHCSD Class Size and Staffing
3. A day in the life of an elementary teacher (schedule)
4. National and Local Data (as it relates to class size)
5. Options
6. Recommended Plan for KG Class thru Grade 5
7. Summary of Options

Historical Kindergarten ENROLLMENT

2016 = 203

2017 = 210

2018 = 243

2019 = 248

2020 = 213

2021 = 241

2022 = 290

KINDERGARTEN DATA FROM OTHER DISTRICTS

District	Per Class	District Action on Class Sizes
Berea	20	per the contract; teachers are paid for each additional student
Solon	25	educational aides are added to classes with over 27 students
Rocky River	24	current class sizes
Nordonia	22	cap of 25 students
N. Royalton	23	if over 23 a team, defined by the contract, decides needed supports
Strongsville	21	will cap at 25 in grades K-3
Twinsburg	21-23	currently class sizes

HISTORICAL CLASS SIZES

Central - Grade 4

2016	2017	2018
26	28	23
22	24	22
26	24	24
25	26	25
23	29	26
26	26	24
24	25	25
26	20	26
25	29	23
27	27	25
24	19	24

Central - Grade 5

2016	2017	2018
25	31	22
24	25	24
25	27	23
29	23	23
25	23	21
23	22	19
24	26	23
22	26	25
24	25	25
26	24	27
24	28	24
		23

PROFILE OF A CLASS

(Our Current **3rd** Graders)

In 2019-2020 (as kindergartners)	248
In 2020-2021 (as 1st graders)	244 (<i>down four</i> students since kindergarten)
In 2021-2022 (as 2nd graders)	249 (<i>up one</i> student since kindergarten)
Current school year 2022-2023	277 (<i>up 28</i> students this school year)

PROFILE OF A CLASS

(Our Current **4th** Graders)

In 2018-2019 (as kindergartners)	243
In 2019-2020 (as 1st graders)	240 (down three students since kindergarten)
In 2020-2021 (as 2nd graders)	233 (down ten students since kindergarten)
In 2021-2022 (as 3rd graders)	241 (down two students since kindergarten)
Current school year 2022-2023	262 (up 21 students this school year)

STUDENT ENROLLMENT

School Year 2022-2023

Preschool	113
Kindergarten	290
First Grade	273
Second Grade	274
Third Grade	277
Fourth Grade	262
Fifth Grade	253
TOTAL	1,742

School Year 2023-2024

Preschool	58 (as of 2-7-23)
Kindergarten	232 (as of 2-21-23)
First Grade	290
Second Grade	273
Third Grade	274
Fourth Grade	277
Fifth Grade	262

HOMEROOM TEACHERS PER GRADE LEVEL

School Year 2022-2023

Preschool	6
Kindergarten	12
(10 full & 2 half day sections)	
First Grade	11
Second Grade	10
Third Grade	10
Fourth Grade	10
Fifth Grade	10
TOTAL	72

AVERAGE HOMEROOM SIZE

(no pullouts)

School Year 2022-2023

Kindergarten	26.3
First Grade	24.8
Second Grade	27.4
Third Grade	27.7
Fourth Grade	26.2
Fifth Grade	25.3

School Year 2023-2024

Kindergarten	
First Grade	26.3
Second Grade	27.3
Third Grade	27.4
Fourth Grade	27.7
Fifth Grade	26.2

CURRENT ENROLLMENT LEVELS

Students Qualifying for Gifted Services
for the 2022-2023 school year

Third Grade	83
Fourth Grade	81
Fifth Grade	80

NON-HOMEROOM STAFFING

1. Special Education Inclusion
2. Special Education Self-Contained Units
3. Gifted Teachers (Grades 3,4,5)
4. Title I / Reading Intervention

NOTE: Ideally, during instruction, groupings are smaller with above staff

AVERAGE ELA CLASS SIZE

(with pullouts)

School Year 2022-2023

Kindergarten- 26.3

(+ 1 TUTOR)

First Grade- 24.5

(+ 1 TUTOR)

Second Grade- 24.5

(+ 1 LONG TERM SUB)

Third Grade- 16.5

(+ 1 GIS & +1 LONG TERM SUB)

Fourth Grade- 16.7

(+ 1 GIS)

Fifth Grade- 15.9

(+ 1 GIS)

School Year 2023-2024

Kindergarten-

First Grade- 23.7

(+1 additional teacher)

Second Grade- 24.5

(+1 additional teacher)

Third Grade- gifted?

Fourth Grade- 16.5

(+ 1 GIS)

Fifth Grade- 16.7

(+ 1 GIS)

TEACHER SCHEDULES

Example (grade 3) and Collaboration Times

8:10 - 8:45	Teacher Collaboration Time
8:45 - 9:00	Student arrival
9:00 - 9:15	Morning Meeting
9:15 - 10:00	ELA (IRA, RML, PWS)
10:00 - 10:50	Teacher Collaboration Time (Specials for students)
10:55 - 12:10	(PWS, Guided Reading, Gifted Pull outs, RI Pull outs)
12:15 - 1:15	Lunch & Teacher Collaboration Time (Student lunch & recess)
1:20 - 1:50	Writing Workshop
1:50 - 3:00	Math (gifted pull outs)
3:00 - 3:30	Social Students and Science
3:30	Dismissal

<u>Homeroom Teachers</u> (non-instructional time) 8:10 - 4:00		
8:10-8:45	Before students arrive	35 min/day 2.9hrs/wk
Common Planning and Conference	One 50 minute special	50 min/day 4.2 hrs/wk
Common Planning and Conference	Attached to teacher lunch	30 min/day 2.5 hrs/wk
3:45-4:00	After dismissal	15 min/day 1.25hrs/wk
TOTAL		130 min/day 10.85 hrs/wk

NATIONAL AND LOCAL DATA

(as related to class size)

The Tennessee Class Size Study & Wisconsin Class Size Study (Project Star)

(1985 Tennessee and 1990 Wisconsin)

Studies:

Considered to be the two most widely cited and influential studies on class size. Conducted in public schools comparing academic performance of students in smaller classes (15 students) with those in typical classes (22 to 25 students)

Results:

Students in smaller classes consisting of 15 students performed better on standardized tests, especially in reading and language arts, than their peers in larger classes. The results were most pronounced for students from low-income backgrounds

Conclusion:

Class sizes need to be reduced to 15 students in order to significantly impact long-term student academic performance

NATIONAL AND LOCAL DATA

(as related to class size)

John Hattie - [Reducing class size](#)

Effect Size = 0.18 (0.40 has a moderate impact on learning)

Overview

- Influence: *Reducing class size*
- Potential to Accelerate Student Achievement: *Likely to have a small positive impact*
- Influence Definition: *Reducing the number of students in the class often with the aim of increasing the number of individualized student-teacher interactions to improve student learning.*

Evidence

- Number of meta-analyses: 8
- Number of studies: 176
- Number of students: 556,119
- Number of effects: 1,158
- Effect size: 0.18

Conclusion

- Meta analysis is a far larger and continuous study between 1997 and 2018

NATIONAL AND LOCAL DATA

(as related to class size)

Historical state testing data and the three largest classes currently in BBHCSD:

Rank Size	Grade Level	Enrolled 22-23	ELA / Math Gr. 3	ELA / Math Gr. 5	ELA / Math Gr. 7	English & Algebra
#1	8th	316	(in 2018) 84% 90%	(in 2020) COVID	(in 2022) 87% 83%	(in 2024)
#2	9th	315	(in 2017) 90% 95%	(in 2019) 92% 91%	(in 2021) 89% 87%	(in 2023)
#3	11th	313	(in 2015) PARCC 88%	(in 2017) 94% 89%	(in 2019) 94% 93%	(in 2022) 90% (in 2021) 85%

NATIONAL AND LOCAL DATA

(i-Ready diagnostic growth data so far this year - fall to winter)

K-5 Reading (2022-2023)

Grade	Annual Typical Growth ⓘ		Annual Stretch Growth® ⓘ		% Students with Improved Placement	Students Assessed/Total
	Progress (Median) ⌵	% Met ⌵	Progress (Median) ⌵	% Met ⌵		
Grade K	61%	25%	45%	8%	59%	288/290
Grade 1	65%	23%	49%	8%	55%	271/274
Grade 2	77%	37%	55%	21%	56%	270/276
Grade 3	103%	51%	67%	29%	58%	274/278
Grade 4	90%	47%	50%	25%	49%	258/261
Grade 5	86%	47%	40%	21%	47%	251/253

NATIONAL AND LOCAL DATA

(i-Ready diagnostic growth data *last* year)

K-4 Reading (2021-2022)

Showing 5 of 5

Grade	Annual Typical Growth ⓘ		Annual Stretch Growth® ⓘ		% Students with Improved Placement	Students Assessed/Total
	Progress (Median) ⌵	% Met ⌵	Progress (Median) ⌵	% Met ⌵		
Grade K	43%	8%	31%	4%	46%	83/86
Grade 1	51%	10%	39%	5%	43%	81/82
Grade 2	52%	22%	36%	8%	43%	105/111
Grade 3	88%	44%	57%	25%	48%	79/81
Grade 4	56%	30%	33%	15%	37%	84/85

Chippewa (last year)

NATIONAL AND LOCAL DATA

(i-Ready diagnostic growth data *last* year)

K-4 Reading (2021-2022)

Showing 5 of 5

Grade	Annual Typical Growth ⓘ		Annual Stretch Growth® ⓘ		% Students with Improved Placement	Students Assessed/Total
	Progress (Median) ⌵	% Met ⌵	Progress (Median) ⌵	% Met ⌵		
Grade K	64%	21%	43%	4%	64%	77/82
Grade 1	46%	15%	36%	2%	48%	82/86
Grade 2	68%	26%	47%	12%	59%	69/70
Grade 3	88%	48%	57%	27%	51%	75/77
Grade 4	30%	30%	18%	15%	30%	66/70

Highland (last year)

NATIONAL AND LOCAL DATA

(i-Ready diagnostic growth data *last* year)

K-4 Reading (2021-2022)

Showing 5 of 5

Grade	Annual Typical Growth ⓘ		Annual Stretch Growth® ⓘ		% Students with Improved Placement	Students Assessed/Total
	Progress (Median) ⌵	% Met ⌵	Progress (Median) ⌵	% Met ⌵		
Grade K	70%	23%	50%	8%	65%	78/79
Grade 1	41%	13%	30%	5%	30%	91/93
Grade 2	49%	13%	34%	7%	34%	76/77
Grade 3	84%	43%	53%	20%	48%	86/87
Grade 4	71%	35%	42%	18%	38%	79/83

Hilton (last year)

NATIONAL AND LOCAL DATA

(i-Ready diagnostic growth data summary)

SUMMARY

	2021-2022		2022-2023	
Grade Level	Progress (Median)	% Met	Progress (Median)	% Met
K	59	17	61	25
1	46	12	65	23
2	56	20	77	37
3	86	45	103	51
4	52	31	90	47
5	62	42	86	47

Storage



Option 1 Current Plan

(Recommended)

Maximize the use of time and all spaces

Recreate the master schedule based on student learning needs

1. Increase professional learning for teachers in flexible learning groups
2. Teachers utilizing collaborative spaces – and other spaces to reduce class sizes
3. This option requires a multi-year change process
4. Obtain pricing for collapsable walls with secured door for KG and 1st Grade collaborative space to allow for more flexibility now and in the future should we encounter future bubble classes.
5. Cap ADK at 210 students.

2023-2024

- Kindergarten = closely monitor registration and possibly cap all day KG
- 1st Grade = 11 homerooms (add one additional teacher to make 12 sections in total)
- 2nd Grade = 10 homerooms (add one additional teacher to make 11 sections in total)
- 3rd Grade = 10 homerooms (1 GIS to pull out during ELA and math)
- 4th Grade = 10 homerooms (1 GIS to pull out during ELA and math)
- 5th Grade = 10 homerooms (1 GIS to pull out during ELA and math)

Critical pressure points:

*23-24 KG at >260 - plan to implement option 2 or 3

Recommended Plan

Financial Implications

- This year we hired additional staff - we would maintain that staff under this plan with exception.
- New Hires in FY23 due to enrollment:
 - 1 Preschool Certified Teacher & 1 PS Special Education Assistant
 - 1 Special Education Certified Teacher
 - 2 Grade Level Certified Teachers
 - **TOTAL: 4 certified teachers and 1 Sp.Ed.Asst**
- Hires needed in FY24 under the plan
 - 1 Special Education Certified Teacher (Building wide)
 - 2 Grade Level Certified Teachers (1st and 2nd)
 - **TOTAL: 3 certified teachers**
 - reduction from FY23 due to preschool - 1 teacher and 1 aide.

OPTION 2

(Half Day KG Only)

Eliminate Full Day Kindergarten (only offer half day)

1. Reduce 4 FTEs while offering 11 sections of KG
2. Adds 1 FTE to 1st grade
3. Loss of all day KG tuition - approximately \$650,000
4. Savings of 5 FTE - approximately \$625,000
5. Net loss of \$25,000

OPTION 3

(Modify Grade Levels)

- Move 5th grade to the middle school and **look at** moving 8th grade to the high school
 - We hear the MS was **near capacity** with 4 grade levels. The HS has additional space that could accommodate another grade level. Planning could take a year to implement.
- **Financial Cost Implications**
 - A third access road to the campus would almost certainly be needed if we maintained 2 tiers of busing because this would add 300 additional students to the campus for drop off and pick up.
 - Cost estimate to add 3rd access road is between \$600,000 and \$800,000.
 - More time would be needed to see if we could make 2 tiers work or if the elimination of High School busing could help us maintain 2 tiers of busing. With 2 tiers, the addition of the 3rd access road would be crucial due to more car traffic though.
 - If we would require 3 tiers of busing, there are financial implications for that scenario as well. So far, 2 tiers of busing has saved the district money in regular wages and overtime.
 - Switching to 3 tiers could add between \$300,000 and \$400,000 to the annual budget.
 - Logistics of relocating grade levels would be costly.
 - Moving company costs: \$30,000 - \$50,000 per grade level estimate
 - Teacher stipends to compensate them for time to move classrooms. \$200 per staff member per day.

OPTION 4

(Build Walls)

Continue a traditional school model

Close all collaborative spaces in KG thru Grade 5

- Add permanent wall/door in KG and 1st Grade
- Add 6 permanent walls/2 doors per grade (2nd, 3rd, 4th, 5th)

Financial Cost Implications

- Hire 1 additional teacher in KG and 1st Grade and 2 additional in grades 2 thru 5
- 10 additional teachers at a cost well over \$1,000,000 per year
- Cost to build walls:

OPTION 5

(Blended Learning)

- **Blended Learning Model**
 - Students attend some of their day in the physical building and some of their day learning remotely
- **Financial Cost Implications**
 - Various factors and difficult to predict cost implications without knowing if this would require hiring additional staff or simply repurposing staff
 - Difficult to predict transportation costs if students would be assigned specific days or part of the day, i.e. half day in person and half day remote would require mid-day transportation

OPTION 6

- Reopen Hilton to house one or two grade levels (preschool & kindergarten)
- Financial Cost Implications
 - Costly renovations would be necessary
 - Roof replacement - \$2,000,000
 - Air Conditioning, Building Controls, Technology, Cameras, Security/Fire Alarms
 - Approximately - \$500,000 to \$650,000
 - Partial Demolition/Asbestos abatement approximately \$300,000 - \$500,000
 - Personnel costs would increase
 - Would require its own secretary, custodian, administrator, etc.
 - Approximate operating costs between \$300,000 and \$350,000
 - 3 tiers of bussing may be necessary due to a different location for drop off.
 - Moving expenses would be costly
 - Cost of adding an additional SRO - \$100,000 annually

OPTION 7

(Switch the HS and ES)

- Be creative with spaces, switch high school and elementary school
 - Is this truly a space issue? If so, the HS has 1,200 students and could fit in the new ES
 - The HS has over 300,000 square feet of space and could easily accommodate 1700 students.
- Financial Cost Implications
 - Retrofitting the spaces would take more time to consider.
 - millions of dollars in retrofitting the spaces (bathrooms, furniture, safety features, etc.
 - Large expense to move two buildings (contents) at the same time
 - Could easily reach \$300,000 to move both buildings
 - Large expense to compensate 75% of staff to move and set up new spaces (stipends).

RECOMMENDED PLAN FOR CURRENT KINDERGARTEN CLASS THRU GRADE 5

2023-2024 (1st Grade)

- Offer 12 sections of 1st Grade to decrease class ratio to at or below 25 to 1
- Keep collaborative space available by utilizing 1 KG classroom so all students are home based in a classroom.

2024-2025 (2nd Grade)

- Offer 11 walled sections of 2nd Grade
- Utilizing collaborative spaces by using one additional teacher to pull groups during instructional blocks

2025-2026 (3rd Grade)

- Offer 11 walled sections of 3rd Grade
- Utilizing collaborative spaces with gifted pull-outs and additional small groups during instructional blocks

2026-2027 (4th Grade)

- Offer 11 walled sections of 4th Grade
- Utilizing collaborative spaces with gifted pull-outs and additional small groups during instructional blocks

2027-2028 (5th Grade)

- Offer 11 walled sections of 5th Grade
- Utilizing collaborative spaces with gifted pull-outs and additional small groups during instructional blocks

SUMMARY OF OPTIONS

Option	Summary	Cost
1	(Recommended Plan)	- No staffing increase over FY23 - Cost of collapsable walls TBD
2	Only offer half-day kindergarten	Offer only ½ ADK - Loss of \$25,000
3	Move 5th grade to the MS and consider relocating 8th grade to the HS	- Plus \$300-\$400K yearly, if 3 tiers - One-time \$600-\$800K - driveway - Plus cost to move staff
4	Close in all collaborative spaces; install permanent walls	- Personnel Costs ~ \$1 million/yr - Wall Cost ~ more info needed.
5	Blended learning model; not all students are on campus simultaneously	Difficult to predict transportation and staffing in this model
6	Reopen Hilton	- Recommend study for true cost est ~ \$20-\$30K & est. \$3-\$4 million - Operational - >\$1million annually
7	Switch HS and ES	Millions - would need to explore full study.