

QCSD School Reopening 2020-2021

Building Analysis of Instructional Model Options

August 13, 2020





PDE Guidance Updates

On August 10, 2020, PDE released updated guidance for [Determining Instructional Models During the COVID-19 Pandemic](#), summarized in this chart.

As of the Week Ending 8/7/20, Bucks County and surrounding counties are Moderate. PDE will update the data weekly.

Level of Community Transmission in the County	Incidence Rate per 100,000 Residents (Most Recent 7 Days)	AND/OR	PCR Percent Positivity (Most Recent 7 Days)	Recommended Instructional Models
Low	<10	AND	<5%	Full in-person Model OR Blended Learning Model
Moderate	10 to <100	OR	5% to <10%	Blended Learning Model OR Full Remote Learning Model
Substantial	\geq 100	OR	\geq 10%	Full Remote Learning Model



How does the new PDE Guidance affect our Health and Safety Plan?

This presentation is based on our board approved Health and Safety Plan. The situation continues to be very fluid, and as additional guidance emerges, our planning will allow us to pivot and adapt accordingly.



All Buildings – Times and Transportation

- Elementary Tier Live/Hybrid Student Day 9:00 a.m. to 2:00 p.m.
 - Affects Neidig, Pfaff, QE, Richland and Trumbauersville
 - Based on current analysis, transportation to and from school is feasible

- Secondary Tier Live/Hybrid Student Day 8:00 a.m. to 1:00 p.m.
 - Affects Sixth Grade Center, Strayer, and the High School
 - Lunch will be served via grab and go at dismissal (with snack break)
 - Based on current analysis, transportation to and from school is feasible
 - Hybrid students will be assigned geographically by sending area



All Buildings – Impact on Instruction

- Disruption to flow of elementary routines
- Limits on group work, class meetings on the carpet
- Positive: increased use of flipped classroom models
- Classroom rugs, group tables, flexible seating, etc. have been removed to provide room for enough socially distanced desks
- Students will house materials at their own desks to limit sharing
- Departmentalized grade levels (4th and 5th) will have teachers rotating and differentiating instruction instead of students regrouping
- Increased seat time
- Traditional room arrangements with desks in rows only - not ideal for viewing the board, and the teacher will have limited movement. Differentiated small group instruction is an especially integral part of primary reading instruction. No table or room to gather students will make this more challenging.



Building Analysis – All Buildings

- Students who have not registered are included in the # Live numbers, which means this analysis is the “worst case” scenario in terms of # of students that fit
- New enrollments, withdrawals, and changes will continue to occur
- New enrollments will be enrolled in virtual if there is not space in live
- All IEP and EL students are scheduled for live instruction every day that live instruction occurs in the building, if they selected Live instruction.
Requests for hybrid and virtual were honored
- Classes with too many live requests to maintain social distancing were relocated to larger spaces within the building
- Totals include the addition of co-teachers or aides in the classrooms and displacement of equivalent numbers of students.



Building Analysis – All Elementary

- Distances shown are the minimum distance in any dimension. For example, 4.5 feet means students are 6 feet from the student next to them, but a minimum of 4.5 feet from the students in front of and in back of them.
- Providing 6' social distancing at lunch is a significant concern. Options include spreading students out by using common areas including hallways, but we may not be able to maintain social distancing for most students in buildings during lunch, especially during inclement weather.
- FDK class size - K students who were not assessed to determine their eligibility for the FDK program will be assessed in September, and qualifying students will move to the FDK classroom
- Totals include the addition of co-teachers or aides in the classrooms and displacement of equivalent numbers of students.



Neidig Elementary Snapshot

	Total Enrollment	# Live	# Hybrid	# Virtual	# Sections	Total Class Size	Live Class Size	Fit?	Distance
Grade FDK	10	8	1	1	1	10	8.5	YES	~6'
Grade HDK	39	26	2	11	2	19.5	14	YES	~6'
Grade 1	65	42	9	14	3	21.6	15.5	YES	~5'
Grade 2	53	34	6	13	3	17.6	12.1	YES	~6'
Grade 3	64	40	6	18	3	21.3	14.3	YES	~6'
Grade 4	79	47	6	26	4	19.75	12.5	YES	~6'
Grade 5	53	29	13	11	3	17.6	11.8	YES	~6'



Neidig Elementary Additional Context

	Distance	Additional Context
Grade FDK	~6'	6 foot side to side, 6 foot front to back.
Grade HDK	~6'	6 foot side to side, 6 foot front to back.
Grade 1	~5'	Approximately 5 foot side to side, 5 foot front to back.
Grade 2	~6'	6 foot side to side, 6 foot front to back.
Grade 3	~6'	6 foot side to side, 6 foot front to back.
Grade 4	~6'	6 foot side to side, 6 foot front to back.
Grade 5	~6'	6 foot side to side, 6 foot front to back.

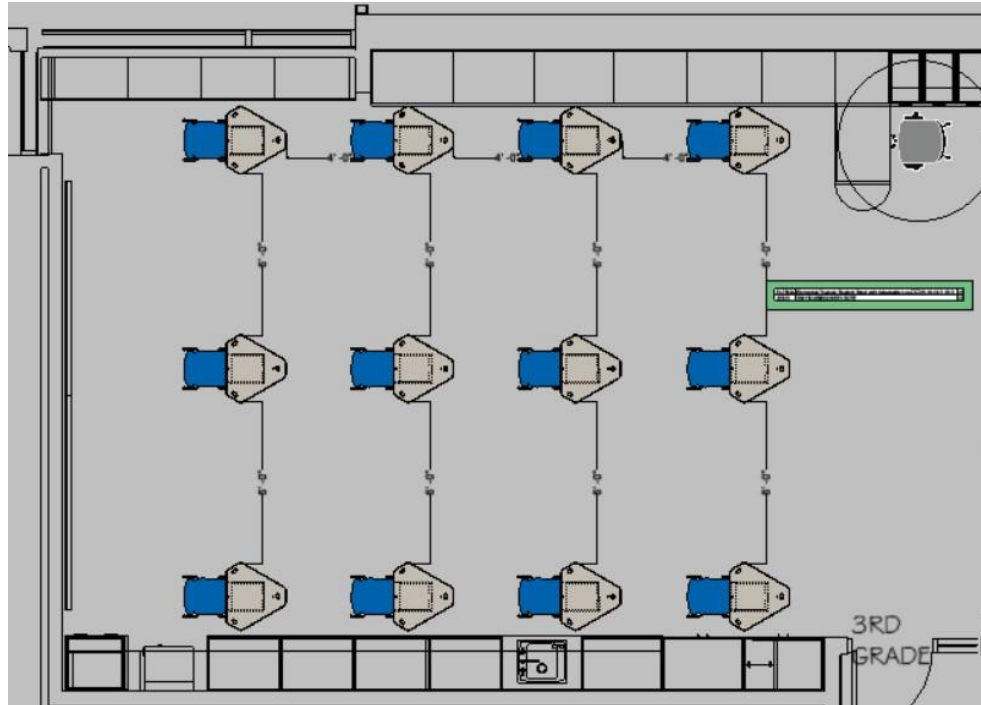


Neidig Elementary Notes and Needs

- Distances shown are the minimum separation in any dimension
- Third grade classrooms were not large enough to meet 6' social distancing recommendations, so those classes have been relocated to larger classrooms in the primary wing.
- First grade is just below 6' distancing. Enrollment at this grade level will be monitored carefully, since there are often late registrations at this grade level. As we move into the building late in August or early September, there is a possibility that these classrooms will need to be moved to larger spaces to provide social distancing. (library, art room, gym.)
- Fourth grade is at their limit for 6' distancing. There is enough space in the front of the room for one more desk, and that will allow them to meet 6' distancing. If any students are added, they will drop below 6' social distancing for desks and classrooms may need to be moved.
- There are 6 available classrooms at Neidig that do not have classes scheduled in them.



Neidig Elementary Photos





Pfaff Elementary Snapshot

	Total Enrollment	# Live	# Hybrid	# Virtual	# Sections	Total Class Size	Live Class Size	Fit?	Distance
Grade FDK	8	7	1	0	1	8	8	YES	~6'
Grade HDK AM	36	20	6	10	2	18	13	YES	~5'
Grade HDK PM	15	11	0	4	1	15	11	YES	~5'
Grade 1	87	63	3	21	3	29	22	YES	~6'
Grade 2	82	55	8	19	4	20.5	15.75	YES	~4.5'
Grade 3	79	55	11	13	3	26.33	22	YES	~4.5'
Grade 4	95	60	11	24	4	23.75	17.75	YES	~4.5'
Grade 5	73	45	9	19	3	24.33	18	YES	~4.5'



Pfaff Elementary Additional Context

	Distance	Additional Context
Grade FDK	~6'	6 ' from side to side & front to back
Grade HDK AM	~5'	5 ' from side to side & front to back
Grade HDK PM	~5'	5 ' from side to side & front to back
Grade 1	~6'	6 ' from side to side & front to back
Grade 2	~4.5'	4.5 ' from side to side & front to back
Grade 3	~4.5'	4.5 ' from side to side & front to back
Grade 4	~4.5'	4.5 ' from side to side & front to back
Grade 5	~4.5'	4.5 ' from side to side & front to back



Pfaff Elementary Notes and Needs

- Distances shown are the minimum separation in any dimension
- First grade could not be accommodated in the existing classrooms, so these classes were moved to common areas (Library, Cafeteria, Gym.) Some newly enrolled 1st grade students could be transferred to an elementary school with a lesser population
- Third grade could not be accommodated in the existing classrooms, so third grade and fifth grade were switched to meet social distancing requirements.
- HDK-AM - To accommodate AM class size, those classes will be moved into former first grade classrooms since the first grade classes are being relocated to alternative spaces (gym, cafeteria, library).
- Because we are using itinerant teachers' classrooms for alternative spaces this year, they will be relocated to other rooms in the building.
- Provision will need to be made to afford social distancing when the students board and disembark the buses daily. We are considering adding an additional location for bus drop off.



Pfaff Elementary Photos





Quakertown Elementary Snapshot

	Total Enrollment	# Live	# Hybrid	# Virtual	# Sections	Total Class Size	Live Class Size	Fit?	Distance*
Grade FDK	9	8	0	1	1	9	8	YES	~6'
Grade HDK	38	28	2	6	1	19	14.5	YES	~5'
Grade 1	49	29	5	16	3	16.6	10.5	YES	~5 1/2'
Grade 2	59	43	3	13	3	19.6	14.8	YES	~4 1/2'
Grade 3	37	26	2	9	2	17	13.5	YES	~5 1/2' and 6 plus
Grade 4	60	43	3	14	3	19	14.8	YES	~4 1/2' and 5 1/2'
Grade 5	48	31	4	13	2	24	16.5	YES	~4 1/2'



Quakertown Elementary Additional Context

	Distance	<u>Additional context</u>		
Grade FDK	~6'			
Grade HDK	~5'	4 1/2' front to back, 5' side to side		
Grade 1	~5 1/2'	5 1/2' front to back, 6' side to side		
Grade 2	~4 1/2'	4 1/2' front to back, 6' side to side		
Grade 3	~5 1/2' and 6 plus	5 1/2' front to back, 6' side to side	6 ' front to back and side to side	
Grade 4	~4 1/2 ' and 5 1/2'	4 1/2' front to back, 5' side to side	4 1/2' front to back, 5' side to side	5 1/2' front to back, 5' side to side
Grade 5	~4 1/2'	4 1/2' front to back, 6' side to side		



Quakertown Elementary Notes and Needs

- Distances shown are the minimum separation in any dimension
- QE does not have AC. While AC is not feasible given the facility, we would like to request additional outdoor tents for instruction. (Note: We have at least one fan per classroom and most rooms have two fans.)

QE Photos





Richland Elementary Snapshot

	Total Enrollment	# Live	# Hybrid	# Virtual	# Sections	Total Class Size	Live Class Size	Fit?	Distance *
Grade FDK	13	7	3	3	1	13	10	YES	~6'
Grade HDK	32	18	2	12	2	16	10	YES	~6'
Grade 1	53	33	6	14	3	17.7	12	YES	~4.5'
Grade 2	71	47	6	18	3	23.7	16.7	YES	~4.5'
Grade 3	66	46	7	13	3	22	16.7	YES	~4.5'
Grade 4	75	52	8	15	3	25	18.7	YES	~4.5'
Grade 5	65	39	12	14	3	21.7	15	YES	~4.5'



Richland Elementary Additional Context

	Distance	Additional Context
Grade FDK	~6	6' front to back, 6' side to side
Grade HDK	~6	6' front to back, 6' side to side
Grade 1	~4.5	4.5' front to back, 5' side to side
Grade 2	~4.5	4.5' front to back, 5' side to side
Grade 3	~4.5	4.5' front to back, 5' side to side
Grade 4	~4.5	4.5' front to back, 5' side to side
Grade 5	~4.5	4.5' front to back, 5' side to side



Richland Elementary Notes and Needs

- Distances shown are the minimum separation in any dimension
- Our common areas are an art/music room the same size as a classroom, a library of comparable size, and multi-purpose room. Moving one grade level to the multi-purpose room would still not accommodate 6 feet between all students. We could move two classrooms there, but instruction would be further impacted as teachers do not have access to whiteboards, technology, etc.
- Due to class sizes and classroom dimensions, we are unable to provide full 6 foot distance in grades 1-5 classrooms in both directions.



Richland Elementary Photos





Trumbauersville Elementary Snapshot

	Total Enrollment	# Live	# Hybrid	# Virtual	# Sections	Total Class Size	Live Class Size	Fit?	Distance *
Grade FDK	10	9	0	1	1	10	9	YES	~6
Grade HDK	33	26	2	5	2	16.5	14	YES	~6
Grade 1	55	37	5	13	2	27.5	21	YES	~6
Grade 2	48	32	4	12	2	24	18	YES	~4.5
Grade 3	84	53	12	19	4	21	16.25	YES	~6
Grade 4	61	36	9	16	3	20.33	15	YES	~6
Grade 5	63	45	7	11	3	21	17.3	YES	~4.5



Trumbauersville Elementary Additional Context

	Distance	Additional Context
Grade FDK	~6	Center of desk to center of desk
Grade HDK	~6	Center of desk to center of desk
Grade 1	~6	Center of desk to center of desk
Grade 2	~4.5	~4.5 ft side to side / ~5 ft front to back
Grade 3	~6	Center of desk to center of desk
Grade 4	~6	Center of desk to center of desk
Grade 5	~4.5	~4.5 ft side to side / ~5 ft front to back



Trumbauersville Elementary Notes and Needs

- Distances shown are the minimum separation in any dimension
- First grade - One classroom in between the two first grade classrooms will be split between the two classrooms. With the ability to open part of the walls this will give each first grade class 1.5 classrooms to use. The divided classroom will be seperated with bookcases and dividers and will be open from the top of the book cases and dividers to the ceiling.
- Third grade - One third grade classroom will be located away from the other third grade classrooms.
- Fifth grade - Due to the larger class sizes in fifth grade 6 feet of distance is not possible.



Trumbauersville Elementary Photos





Secondary Notes – All Buildings

- No lockers will be used
- Secondary buildings used an overflow strategy to relocate excess students to a common area to participate in their class or classes remotely from within the building
 - Overflow areas will be supervised by an aide (not teacher)
 - Students will attend overflow coming from multiple classes/subject areas
 - Teachers will create an internal rotation in which students would go to overflow each day
 - Students may spend multiple periods in an overflow area in one day
- Secondary transition times will be longer to allow for some staggering, but social distancing will not be able to be maintained during class changes
- To minimize transitions, maximize effectiveness of instructional time during the shortened day, and reduce the books and materials students need to carry, a modified block schedule will be used.



Sixth Grade Center Snapshot

	Total Enrollment	# Live	# Hybrid	# Virtual
All Classes	365	253	46	66



Sixth Grade Center Snapshot

Overflow Analysis - Number of Students Reassigned to a Common Area Each Period

Period	Total Number of Classes	Total Number of Seats Available (All Classes)	# of Classes With Overflow Students (All students first choice at 6')	# Students Overflow for all students first choice at 6 feet center to center	All students first choice at 3 feet (conflicts with the approved Health and Safety Plan)	All students Hybrid A/B at 6 feet*
Period 1	18	342 (392 w/ Gym)	3	16	0	0
Period 2	17	278 (328 w/ Gym)	6	21	0	0
Period 3	17	295 (345 w/ Gym)	6	29	0	0
Period 4	21	347 (397 w/ Gym)	2	5	0	0
Period 5	20	327 (377 w/ Gym)	2	8	0	0
Period 6	20	325 (375 w/ Gym)	5	17	0	0
Period 7	18	312 (362 w/ Gym)	7	17	0	0

*The gymnasium is the "classroom" for PE classes and the capacity is 50.

Totals include the addition of co-teachers or aides in the classrooms and displacement of equivalent numbers of students.



Sixth Grade Center Notes and Needs

- Strategies such as adjusting student schedules, reassigning large classes to larger spaces, etc. will be used to remain under room capacities
- The library is a potential alternate location for room 121 (FCS) classroom as normal seating is clustered and allows small numbers of students with any physical distancing.
- Two aides each period will be used for supervising bathrooms to ensure staggered student use and physical distancing.
- There are currently two empty classrooms because of teacher transfers during the summer of 2020 and three limited use classrooms because of staff shared with other schools.
- The art room may need to be relocated because of its relatively small classroom area (some square footage is lost because of the sink area and kiln closet) and normal cluster seating at tables. The FCS lab may be an option.



Sixth Grade Center Photos





Strayer Middle School Snapshot

	Total Enrollment	# Live	# Hybrid	# Virtual
Grade 7	427	266	89	72
Grade 8	451	275	99	80
Total	878	541	188	152
%	100%	62%	21%	17%



Strayer Middle School Snapshot

Overflow Analysis - Number of Students Reassigned to a Common Area Each Period

Period	Total Number of Classes	Total Number of Seats Available (All Classes)	# of Classes With Overflow Students (All students first choice at 6' center to center)	All students first choice (72%) at 6' center to center	All students first choice (72%) at 3 feet (conflicts with the approved Health and Safety Plan)	All students Hybrid A/B (42%) at 6 feet center to center
1	47	774	23	106	4	<10
2	41	678	21	102	4	<10
3	44	664	24	109	3	<10
4	41	648	23	143	0	<10
5	50	797	17	40	0	<10
6	43	701	24	113	0	<10
7	45	730	10	69	1	<10

*We would be able to absorb the overflow with minor schedule adjustments



Strayer Middle School Notes and Needs

- Available overflow areas include one gym, cafeteria, and auditorium. Other common areas will be in use as instructional spaces.
- If social distancing is less than 6', additional impacts include inability to provide mask breaks, and difficulty with maintaining distancing during lunch and snack breaks.
- Two additional aides needed to monitor bathrooms.
- Two large tents recommended for outdoor instructional space (e.g. classrooms, band/chorus classes).



Strayer Middle School Photos





High School Snapshot

	Total Enrollment	# Live	# Hybrid	# Virtual	# Unknown / Not registered
High School	1741	884	433	249	175
%	100.00%	50.78%	24.87%	14.30%	10.05%



High School Snapshot

Overflow Analysis - Number of Students Reassigned to a Common Area Each Period

		Measured 6ft from the center of each desk			
		If all Live and half Hybrid is in the building AND with 6ft distancing (all first choices)		If we move all Hybrid A/B AND with 6 ft distancing	
	Total Number of Classes	# of Classes With Overflow Students	# Students in the overflow room	# of Classes With Overflow Students*	# Students in the overflow room*
Period 1	74	29	165	3	3
Period 2	72	27	111	1	2
Period 3	67	23	92	1	1
Period 4	68	35	153	2	3
Period 5	67	28	180	9	10
Period 6	62	30	172	3	4
Period 7	62	26	124	3	3

NOTES: This calculation was based on a flat capacity increase by percentage, as not all rooms were re-measured to obtain this data. We used the "edge to edge" data, then re-measured 8 rooms and found an average capacity increase of 50%. For lab rooms we used an average increase of 25%. This percent increase was applied to the findings of the edge-to-edge measurements to yield these results. These are our best estimated numbers with the limited time. A more accurate number would require room by room measurements, as we did with the other data.

*This assumes that students are hybrid as registered. If SPED/ELL's or other students will be Live when the school goes all A/B, then these numbers will increase.

Overflow capacity at 6 feet -146 Overflow capacity at 3 feet - 279



High School Notes and Needs

- Distancing is not able to be accommodated during transitions. We will reduce the number of transitions to three by using a block schedule.
- Band classes will take place in the cafeteria.
- Choir classes will take place in the QPAC.
- Overflow locations - Upper gym and track.



High School Notes and Needs

- UBCTS Students who are scheduled for UBCTS will attend based on a hybrid schedule: On Monday's 11th and 12th graders will attend, and on Thursday's 9th and 10th graders will attend.
- Students will attend the UBCTS based on their current schedule and will attend the HS based around their "UBCTS days."

High School Photos





Conclusions

At **Elementary**, we can provide every family with their first choice - **Live, Hybrid, or Virtual**, with social distancing ranging from 4.5 feet to 6 feet on center. This conforms to the Health and Safety Plan.

At the **SGC**, we can provide every family with their first choice - **Live, Hybrid, or Virtual**, with social distancing of 6 feet on center. This conforms to the Health and Safety Plan.

At **Strayer and the High School**, we can provide **Hybrid A/B or Virtual**, with minimal overflow and with 6 foot social distancing on center. This also conforms to the Health and Safety Plan.

- Of those requesting Live Instruction, their second choice was Hybrid A/B for 844 High School, and 439 Strayer, but over 1,000 families did not make a second choice selection