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CLASS-SIZE CHAOS:

Districts are scrambling to meet new requirements by initiating layoffs and eliminating enhancement teachers

Introduction

Controversy over class-size requirements in early grades has emerged as the biggest issue facing North Carolina's public schools in the 2017 legislative session.

Current law requires school districts (also known as local education agencies, or LEAs) to reduce class sizes in grades K-3 in the upcoming 2017-18 school year. However, the General Assembly has failed to provide the funding necessary to allow districts to meet the class size goals. Absent General Assembly action, districts are scrambling to meet the requirements by initiating layoffs and eliminating enhancement teaching positions in subjects like art, physical education, and music.

How does North Carolina fund classroom teachers?

In North Carolina, funding for classroom teachers is provided by a position allotment.¹ Under a position allotment, the state provides each school district a set number of teachers based on the number of students at particular grade levels in each district.

For example, the *allotment ratio* for kindergarten is one teaching position for every 18 kindergarten students. The state will then pay the salary for those teachers according to each teacher's placement on the teacher salary schedule, which establishes each teacher's minimum salary based on position type, experience level, and certain qualifications.² The district could hire any combination of teachers, from beginning teachers making \$35,000 per year to teachers with more than 25 years of experience, master's degrees, and National Board of Professional Teaching Standards certification, each making \$62,220 per year. In either case, the position allotment provides the district guaranteed state funding.

Under current law, districts have the flexibility to deploy teachers as they see fit, so long as they meet two conditions:

1. **LEA average class size:** The average K-3 class size across the LEA must be 21 or less
2. **Individual class-size maximum:** No individual K-3 class may exceed 24 students

This flexibility is important because it allows districts to:

1. Hire enhancement teachers in non-core subjects like art, physical education, and music.
2. Target class-size reductions to the students who would most benefit from smaller classes.
3. Manage the reality that students don't arrive to the district in neat packages of 18 or 21, and that enrollment can change mid-year.³

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Classroom teachers are not allotted evenly across grade levels. The current allotment ratios, LEA average class size, and individual class-size maximums are as detailed in Figure 1.

It is important to note that LEAs are also granted flexibility to deploy teachers in any grade level. That is, a teaching position generated due to the student count in grade 1 can teach any grade level.

FIGURE 1: FY 16-17 CLASS-SIZE REQUIREMENTS

Grade Span	Teacher Allotment Ratio	Class-Size Average for the LEA	Individual Class-Size Maximum
K	1:18	1:21	1:24
1	1:16	1:21	1:24
2-3	1:17	1:21	1:24
4-6	1:24	No limit	No limit
7-8	1:23	No limit	No limit
9	1:26.5	No limit	No limit
10-12	1:29	No limit	No limit

Historically, the LEA average class size limits has exceeded the allotment ratio by three students, and the individual class-size maximum has exceeded the allotment ratio by six students. The three-student difference between LEA average class size and the allotment ratio has been sufficient to allow districts to hire both classroom teachers and enhancement teachers. By eliminating this ratio difference, the General Assembly is eliminating funding for enhancement teachers.

Arts and physical education are both required under the North Carolina Basic Education Program. Therefore, **eliminating funding to provide such instruction is a clear example of an unfunded mandate.**

What is changing for the 2017-18 school year?

The General Assembly has radically changed class size requirements beginning in the 2017-18 school year.⁴ As shown in Figure 2, the LEA average class-size would not be allowed to exceed the teacher allotment ratio, and the individual class-size maximum would be set at three students above the allotment ratio.

How does this impact North Carolina’s school districts?

The unfunded class-size mandate increases both the operating and capital costs for North Carolina school districts, as well as other costs that are more difficult to quantify.

- **Operating costs will increase \$188 to \$338 million due to unfunded class-size mandate**

FIGURE 2: FY 17-18 CLASS-SIZE REQUIREMENTS

Grade Span	Teacher Allotment Ratio	Class-Size Average for the LEA	Individual Class-Size Maximum
K	1:18	1:18	1:21
1	1:16	1:16	1:19
2-3	1:17	1:17	1:20
4-6	1:24	No limit	No limit
7-8	1:23	No limit	No limit
9	1:26.5	No limit	No limit
10-12	1:29	No limit	No limit

North Carolina’s districts will need to find between 3,000 and 5,400 teachers in grades K-3 to comply with the General Assembly’s class size requirements,⁵ the equivalent of an unfunded mandate of between \$188 million to \$338 million.

Districts have three options for complying with the unfunded class size requirements:

1. **Eliminate enhancement classes** and re-deploy those positions to teach core early-

grade classes. Many physical education, art, and music teachers would need to be fired, and replaced with teachers licensed to teach core classes. The elimination of enhancement courses will have the secondary impact of eliminating planning periods for all elementary teachers.

2. **Re-deploy teachers in grades 4-12** to early grades. Class sizes have already risen in grades 4-12. Allotment ratios in these grades have risen by at least two students at each grade span compared to pre-recession allotment ratios. Additionally, it's unclear how many teachers in grades 4-12 would be effective transitioning to teaching much younger students.
3. **Raise local revenue** to hire the required number of additional teachers. Of course, local revenue capacity is highly variable. Poor counties already tax their residents at higher rates than wealthier counties.⁶ Students who reside in relatively wealthy counties may continue to receive access to enhancement classes, while students in poorer districts would likely have to go without.

- **Unfunded class-size mandate will significantly add to \$8.1 billion in school capital needs**

Districts will face significant capital costs due to the class-size mandate. Smaller classes will require school districts to have more physical classrooms for their students. Even without taking tightened class size requirements into account, North Carolina's school districts are facing nearly \$8.1 billion in capital needs over the next five years.⁷ Tightened class size requirements will force districts to expand their elementary schools, often resorting to housing students in trailers and other less-than-ideal temporary classrooms. Mobile classrooms are not cheap: mobile units—even those lacking a bathroom or water hook-up—can reportedly cost nearly \$100,000 each. Additionally, the process of adding a mobile unit takes approximately a year.⁸

These operating and capital costs imposed by tighter class size requirements will significantly impact school districts. Several have already estimated their district impacts publicly:

- **Asheville City Schools** would need 15 or 16 additional elementary teachers and find solutions for where to house additional classrooms.⁹
- **Buncombe County Schools** estimates needing an additional 80 teachers at a cost of \$4.2 million, which does not include potential capital costs.¹⁰
- **Chapel Hill-Carrboro City Schools** believes that, with elementary schools already at capacity, meeting capital needs in time for the next school year will be impossible. The district will need \$3 million of local funds to fund teacher supplements for new positions and maintain enhancement courses.¹¹

How districts use class-size flexibility to create enhancement positions and targeted class-size reductions

A North Carolina district with 252 kindergarten students would receive guaranteed funding for 14 teachers. However, it only requires 12 teachers to maintain a LEA average class size of 21 students. Existing flexibility could allow this district the option of hiring two enhancement teachers (e.g., an art teacher and a PE teacher) and 12 kindergarten teachers.

At the same time, this district could use its flexibility to provide targeted class-size reduction for at-risk students. Our example school district could use its flexibility to have eight classrooms with 24 students, and four classrooms with just 15 students.

- **Charlotte-Mecklenburg Schools** will need 353 additional positions at a cost of over \$23 million due to the changes.¹²
 - **Craven County Schools** leaders anticipate a total implementation cost of \$4.2 million for teachers and capital.¹³
 - **Durham County Schools** estimate needing to hire an additional 100 teachers.¹⁴
 - **Elizabeth City-Pasquotank Public Schools** estimates costs of \$1 million to fund 20 additional elementary school teachers, but has not estimated capital costs.¹⁵
 - **Greene County Schools** Superintendent Patrick Miller estimates additional classrooms will cost somewhere between \$800,000 and \$1 million.¹⁶
 - **Henderson County Schools** estimates spending over \$3 million to hire the additional 48 teachers required and purchase 21 mobile units.¹⁷
 - **Johnston County Schools** would need to add approximately 85 teaching positions and a number of mobile units.¹⁸
 - **New Hanover County Schools** are planning for total implementation costs of \$3.2 million for 48 new positions and additional classrooms.¹⁹
 - **Onslow County Schools** Superintendent Rick Stout estimates his district will require 147 additional positions, 139 classroom spaces, and 51 temporary classrooms.²⁰
 - **Surry County Schools** estimates the district will need 17 additional teachers and \$1.7 million to comply with the law.²¹
 - **Wake County Public Schools** will reportedly require 460 teachers and the creation of 400 new classrooms, totaling \$320 million in personnel, capital, and operating expenses.²²
- **Unfunded class-size mandate already diverting resources away from instruction**

The mandate will also lead to non-monetary costs, some of which are already being borne. Districts are already investing an immeasurable amount of time planning for next year's class-size limits. These limits will force many districts to change their school assignment policies, scrapping within-district choice programs, and requiring a number of students to change schools in the upcoming school year. Transportation plans are also being amended, and districts are beginning the process of firing enhancement teachers and recruiting new classroom teachers.

Will lowering class size be worth the additional costs?

Most of the research on the impact of smaller classes stems from an experiment in Tennessee in the late 1980s known as Project STAR. This study found that a seven-student reduction in class size (from 22 to 15) was found to increase student achievement by an amount equivalent to about three additional months of schooling four years later. The effects were largest for low-income students.

However, the General Assembly is not considering the same well-planned, fully-funded class-size reduction that was studied in Project STAR. At most, the planned class-size reductions for

the 2017-18 school year will reduce classes by three to five students. If data submitted to the Department of Instruction is accurate, actual reductions will be closer to 1 to 3 students.

Additionally, students were taught in traditional classrooms in the Tennessee study. Due to haphazard planning and lack of funding, many of North Carolina’s students will be housed in converted offices and closets.

The lack of adequate time for teacher recruitment also means that schools will be scrambling to hire additional teachers. Enrollment at the 15 UNC schools of education is down 30 percent since 2010. The potentially lower quality of new hires could easily negate any potential benefits from smaller classes, particularly for minority students. An evaluation of a class-size reduction initiative in California found just that: academic gains for some students were dampened by a decrease in teacher quality, particularly at schools that serve minority populations.²³

Low-income and minority students will also lose out on initiatives providing targeted, small class-sizes for at-risk students. Such programs were made possible by the flexibility afforded under the current class-size policies. Absent this flexibility, districts will be forced to provide nearly all students near-uniform class sizes.

Finally, one must consider that money spent on purchasing mobile units and hiring lower-quality teachers could be spent on other initiatives. Perhaps the money being used for class-size reduction would be better spent on instructional materials, tutoring, literacy coaches, teacher training, teacher assistants, child nutrition, school technology or mental health. **Every dollar invested in class-size reduction is one less dollar that could be spent on other initiatives that might have greater educational impact.**

House Bill 13 is a reasonable step forward

Early in the 2017 Legislative Session, lawmakers introduced House Bill 13 (HB 13), which provides a reasonable compromise to avoiding the negative impacts created by unfunded class-size reductions. **HB 13 would restore the past relationship between the allotment ratio, the LEA average class size, and the individual class-size maximum, allowing districts to maintain enhancement courses within existing funding (see Figure 3).**

HB 13 passed the House unanimously on February 16, but since then, the Senate has refused to consider the bill. Senate leadership expressed concern that funds for class-size reduction have not resulted in smaller class sizes in all districts. It is unclear what data is driving such concerns.

As Figure 4 shows, districts have received additional funding that could allow them to meet the class size requirements proposed by HB 13 while still having sufficient funds for enhancement teachers.

FIGURE 3: H.B. 13 PROPOSED CLASS-SIZE LIMITS, 2017-18

Grade Span	Teacher Allotment Ratio	Class-Size Average for the LEA	Individual Class-Size Maximum
K	1:18	1:21	1:24
1	1:16	1:19	1:22
2-3	1:17	1:20	1:23

It is important that General Assembly leaders move quickly in resolving this issue. School districts are well into their local budgeting processes, and state law requires superintendents to submit budget requests to their boards of education by May 1. Additionally, districts must begin

FIGURE 4: HISTORIC CLASSROOM TEACHER ALLOTMENT RATIOS & FUNDING

Grade Span	FY 13-14	FY 14-15	FY 15-16	FY 16-17	FY 17-18
K	1:19	1:18	1:18	1:18	1:18
1	1:18	1:17	1:17	1:16	1:16
2-3	1:18	1:17	1:17	1:17	1:17
4-6	1:24	1:24	1:24	1:24	1:24
7-8	1:23	1:23	1:23	1:23	1:23
9	1:26.5	1:26.5	1:26.5	1:26.5	1:26.5
10-12	1:29	1:29	1:29	1:29	1:29
Funds Provided	\$0	\$82,468,710	\$0	\$26,898,798	\$0

the process of making personnel decisions. Districts are required to provide written notice to dismissed teachers, provide procedures for appeals, and make payments for accumulated leave. Such decisions will need to be made well in advance of the start of the new school year. ■

1. The other type of allotment is called a dollar allotment. Under a dollar allotment, districts are provided a fixed dollar amount and then required to manage their budget to keep purchases or salaries within the fixed dollar amount.
2. The teacher salary schedule can be found here: <http://www.ncpublicschools.org/fbs/finance/salary/>.
3. For further discussion on this topic, see Philip Price, “Why the class size average cannot equal the teacher allotment ratio.” Education NC, March 14, 2017, as found at: <https://www.ednc.org/2017/03/14/class-size-average-cannot-equal-teacher-allotment-ratio/>
4. Section 8A.3 of the 2015 Budget (S.L. 2015-241) first established the tightening of class size requirements effective the 2017-18 school year. The policy was clarified and re-affirmed in the 2016 Budget (Section 8.33 of S.L. 2016-94).
5. If districts are currently maintaining class sizes of 19 students in grades K-3, as indicated by data from the North Carolina School Report Cards (see: <http://www.dpi.state.nc.us/src/researchers/>), then districts will need an additional 3,033 teachers. If districts are meeting the minimum requirement of 21 students per class, then they will need an additional 5,439 teachers.
6. The Public School Forum’s 2017 Local School Finance Study found that in 2014-2015, the ten poorest counties taxed themselves at nearly double the rate of the ten wealthiest counties – \$0.83 compared to \$0.44, a 39-cent difference. As found at: <https://www.ncforum.org/2017-local-school-finance-study/>
7. Department of Public Instruction, 2015-16 Facility Needs Survey Report, as found at: [http://www.schoolclearinghouse.org/otherinf/FacilityNeedsSurvey/2015%20Facility%20Needs%20Survey%20\(SBE\).pdf](http://www.schoolclearinghouse.org/otherinf/FacilityNeedsSurvey/2015%20Facility%20Needs%20Survey%20(SBE).pdf)
8. Alex Granados & Kelly Hinchliffe, “How do we create 400 classrooms?’ NC schools say class size cap will cause scramble for space.” Education NC, March 7, 2017, as found at: <https://www.ednc.org/2017/03/07/create-400-classrooms-nc-schools-say-class-size-cap-will-cause-scramble-space/>
9. Julie Ball, “Asheville schools wrestle with class size requirements.” Asheville Citizen-Times. January 30, 2017, as found at: <http://www.citizen-times.com/story/news/local/2017/01/30/asheville-schools-wrestle-class-size-requirements/97265192/>
10. Julie Ball, “Class size changes could force Buncombe school cuts.” Asheville Citizen-Times, January 12, 2017, as found at: <http://www.citizen-times.com/story/news/local/2017/01/12/class-size-changes-could-force-buncombe-school-cuts/96519970/>
11. Billy Ball, “New rules to lower class sizes force stark choices, threatening the arts, music and P.E.” NC Policy Watch, November 14, 2016, as found at: <http://www.ncpolicywatch.com/2016/11/14/new-rules-lower-class-sizes-force-stark-choices-threatening-tas-specialty-education-positions/>

12. T. Keung Hui, "Impact on Charlotte unclear as NC schools say they may cut arts, PE to meet class limits." The Charlotte Observer, January 19, 2017, as found at: <http://www.charlotteobserver.com/news/local/education/article127421184.html>
13. Jannette Pippin, "Class size legislation to impact school districts across Eastern NC." Jacksonville Daily News, March 27, 2017, as found at: <http://www.jdnews.com/news/20170327/class-size-legislation-to-impact-school-districts-across-eastern-nc>
14. T. Keung Hui, "NC schools say they may cut arts, PE to meet new class size limits." The Charlotte Observer, January 18, 2017, as found at: <http://www.charlotteobserver.com/news/local/education/article127291144.html>
15. Billy Ball, "New rules to lower class sizes force stark choices, threatening the arts, music and P.E." NC Policy Watch, November 14, 2016, as found at: <http://www.ncpolicywatch.com/2016/11/14/new-rules-lower-class-sizes-force-stark-choices-threatening-tas-specialty-education-positions/>
16. Alex Granados & Kelly Hinchcliffe, "'How do we create 400 classrooms?' NC schools say class size cap will cause scramble for space." Education NC, March 7, 2017, as found at: <https://www.ednc.org/2017/03/07/create-400-classrooms-nc-schools-say-class-size-cap-will-cause-scramble-space/>
17. Liz Bell, "House committee moves forward bill loosening class size restrictions." Education NC, February 8, 2017, as found at: <https://www.ednc.org/2017/02/08/houses-moves-bill-loosening-class-size-restrictions-forward/>
18. T. Keung Hui, "NC schools say they may cut arts, PE to meet new class size limits." The Charlotte Observer, January 18, 2017, as found at: <http://www.charlotteobserver.com/news/local/education/article127291144.html>
19. Cammie Bellamy, "Schools scramble to meet N.C.'s new class-size rule." Wilmington Star-News, March 20, 2017, as found at: <http://www.starnewsonline.com/news/20170320/schools-scramble-to-meet-ncs-new-class-size-rule>
20. Jannette Pippin, "Class size legislation to impact school districts across Eastern NC." Jacksonville Daily News, March 27, 2017, as found at: <http://www.jdnews.com/news/20170327/class-size-legislation-to-impact-school-districts-across-eastern-nc>
21. Jeff Linville, "Surry County Schools need 17 more teachers to satisfy state law." The Mount Airy News, March 10, 2017, as found at: <http://mtairynews.com/news/49035/surry-county-schools-need-17-more-teachers-to-satisfy-state-law>
22. Alex Granados & Kelly Hinchcliffe, "'How do we create 400 classrooms?' NC schools say class size cap will cause scramble for space." Education NC, March 7, 2017, as found at: <https://www.ednc.org/2017/03/07/create-400-classrooms-nc-schools-say-class-size-cap-will-cause-scramble-space/>
23. Jepsen, Christopher and Steven Rivkin. 2009. "Class Size Reduction and Student Achievement: The Potential Tradeoff between Teacher Quality and Class Size." Journal of Human Resources, 44(1): 223–250.