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MEMORANDUM

TO: Superintendents, Business Managers and School Board Members
FROM: Rebecca Holcombe, Ed.D., Secretary of Education *RH*
COPY: VSA, VPA, VT-NEA, VCSEA, VSBA, VASBO
SUBJECT: Managing Staff Attrition
DATE: October 4, 2017

Over the past twenty years, consistent with demographic trends across the North East and rural states generally, our student population has shrunk by more than 20 percent. Some districts now educate fewer than half the students they had some 20 years ago. Unless we bring staffing levels in line with our smaller numbers of students, we will be bearing very high education costs that are unlikely to contribute to better student outcomes.

A handful of systems are beginning to adjust. For example, Rutland Northeast Supervisory Union, which contains the first two Act 46 mergers, has been managing attrition both to reduce overall staff and to shift where staff dollars are invested so that schools can address different educational priorities. However, our state level student-to-teacher and student-to-staff ratios are still declining.

In Vermont, we love small. But what we define as small and what is nationally defined as small are two different things. In Vermont, we have "micro systems," where entire schools can be as small as 15 to 20 students. Some publicly funded general education independent schools serve even fewer students. In some cases, the entire student body could fit in a neighboring school seven minutes away on a paved road, without incurring additional cost, and we could still maintain student-to-teacher ratios that are less than half the national average.

The fiscal pressures ahead are daunting, but they cannot be allowed to erode quality. Moreover, given fiscal pressures at the state level, we need to be careful that our K-12 expenditures do not crowd out other critical state priorities, including economic development and post-secondary investment.

We will be entering the next budget cycle with an almost \$50 million Education Fund budget gap, due in large part to use of one-time money to reduce the tax rate. We face uncertainty regarding what reductions in federal funds will occur, although some population driven appropriations are already declining. We know that the majority of Vermonters have not experienced growth in their real incomes over the past decade, and thus have constrained capacity to support investments in education.

As schools and class sizes shrink, per pupil costs increase. We need to be clear-eyed about both our fiscal capacity and the opportunity cost of our small and shrinking ratios. Preserving quality means thinking hard about how we use our dollars, to ensure the investments we make are actually those

that increase opportunities for children and those that ensure the greatest value out of every precious tax dollar we spend. Consider these facts below.

According to the National Center for Educational Statistics, Vermont has had the lowest student-to-teacher ratio for all fifty states and the territories for the last four available years of data. Often, we look to our neighboring states to compare; we have the lowest student-teacher ratio of any state and are almost two students lower per teacher than Maine (the state with the second lowest student-teacher ratio.) Some argue that this is because of our rurality, but our ratios are also lower than other similarly sized rural states.

State Name	Student-Teacher Ratio 2011-12	Student-Teacher Ratio 2012-13	Student-Teacher Ratio 2013-14	Student-Teacher Ratio 2014-15
VERMONT	10.75	10.67	10.59	10.55
MAINE	12.69	12.20	11.91	12.22
NEW HAMPSHIRE	12.75	12.66	12.57	12.50
CONNECTICUT	12.66	12.54	12.57	12.90
MASSACHUSETTS	13.75	13.52	13.56	13.30
NEW YORK	12.91	13.09	13.22	13.45
RHODE ISLAND	12.52	14.43	14.46	14.99
WYOMING	11.48	12.45	12.27	12.35
NORTH DAKOTA	11.45	11.65	11.80	11.78
SOUTH DAKOTA	13.84	13.98	13.76	13.83

Source: NCES. Note: numbers may vary slightly from numbers published elsewhere due to differences in, for example, dates on which data was pulled or how ratios were constructed.

Teacher numbers are declining, but declines are offset by increases in other staffing functions, especially support staff. Thus, our overall staffing numbers are not declining as fast as our student numbers and our total student-to-staff ratios are still declining. The figures below include all adults in the building, such as administrators, paraprofessionals and operational staff (e.g. custodians, office managers and food service workers).

	2012-13	2013-14	2014-15	2015-16	2016-17
Enrollment	80,392	79,560	78,311	77,182	76,355
Staff **	18,252.34	18,146.81	17,974.01	17,966.87	17,968.78
Ratio	4.40	4.38	4.36	4.30	4.25

Source: AOE Teacher/Staff collection and October 1, K-12 enrollments

*** Staff counts exclude prekindergarten teachers and staff at the three stand-alone CTE school districts.*

These data mean we currently employ about almost one adult for every four children we serve, and if we do not change our playbook, we could end up employing one adult for every three children.

While Vermonters love our micro classrooms and low ratios, they are a very expensive way to educate our children. Educational researchers typically define a “small class” as being fewer than 20 students. In Vermont, our classes are half as big as what other states consider small. No research

supports the notion that staffing ratios as small as ours lead to better outcomes. Our results are not proportional to our investment, which invites the question of whether we are investing the right way.

We see this most pointedly in our outcomes for students with disabilities. These students trail their peers in neighboring states that spend less and see better results. How can this be? As a central reason, there is a growing body of research in Vermont, that points to an over-reliance on the hiring of paraprofessionals to provide direct educational services to these students. Instead, they need to get their instruction from their teacher. Observations of instructional methods are showing that the current practice of hiring 1 to 1 paraprofessionals may, in many cases, be reducing access of our children with disabilities to high quality teaching. This costs a lot and erodes our educational goals for these children. We need to take a disciplined look statewide at the use of special education paraprofessionals, and ask if we are using them in appropriate ways.

The most talked about benefits of addressing ratios will be fiscal. If we committed our public and publicly funded 501(c)(3) independent schools to student-teacher ratios closer to 12-13, which is still small by every national measure, we would free up critical dollars. In some regions with very high spending per pupil, adjusting ratios through retirements would reduce the tax burden on our communities. In others, these dollars would be better expended on strategies that research shows actually improve outcomes for students. For example, targeted professional development for teachers to systematically improve initial instruction in literacy and math, as well as development of social and emotional skills, would reduce the need for supplemental instruction, specialized services and paraprofessionals. These higher ratios would free up funds for early care and summer learning for our most vulnerable students. Research says these interventions will do more to close our equity gaps and improve life outcomes than maintaining class sizes as small as those in many of our schools.

Micro also applies to school size. In both the public and private sector, we have micro schools. This means we spend proportionally more on overhead in institutions that may not have sufficient scale to provide comprehensive supports and breadth of opportunity. That has implications for cost. The more institutions we support, when we have empty seats in all of them, the higher our costs statewide. In addition, AOE data suggests that the smallest institutions are more likely those that cannot adjust their ratios in response to declining enrollments. One reason the communities of Bethel and Royalton voted to unify their high school and middle school programs is that by doing so, they can substantially expand the peer group, academic offerings and co-curricular activities that benefit their children, even as they substantially reduce total expenditures. Other communities will come up with other solutions, as they work to address the triplet of goals: equity, quality and affordability.

To help you evaluate your ratios, we have attached two Excel files, one that includes student-to-teacher and student-to-staff ratios for all schools and systems, and one that includes student-to-paraprofessional ratios. The files include notes on what is included in each ratio. Staffing data are from the Teacher/Staff Report and enrollments are K-12 counts as of October 1.

Staffing data used for the ratios are the data as reported. When calculating the ratios, it was apparent that data had been entered incorrectly in a number of cases. These ratios have been the subject of inquiry by a number of interested parties looking for affordability and accountability. Several parties at the state level are interested in these ratios, because increasing the ratios will reduce overall education expenditures, reducing pressure on the Education Fund and taxpayers. We believe these staffing data and subsequent ratios will be used in the upcoming Legislative session. Therefore, it is

imperative that these data are as accurate as possible. We are attaching a third Excel file that shows the staffing data as reported by category for FY2016 and FY2017 for your review.

Here are some questions we offer, to help you evaluate locally the staffing levels in your proposed FY19 budget, as well as any longer-term planning related to staff attrition and your strategic plan to improve the efficiency and effectiveness of the education you provide your children:

1. **How many administrators do you need?** Our number of teachers-per-administrator ranges on average from about 3 to about 40, with the median at about 15. The median number of students-per-administrator is about 179.
2. **How many staff members per pupil do you need?** As noted above, we currently have just over 4 students per staff member. Some systems contract out for services, but contracted services are often more expensive on a per pupil basis than staff. Does your current staffing configuration reflect habit or need? As people retire, what opportunities do you have to reconfigure?
3. **How many teachers do you need?** Our number of students-per-teacher ranges from about 5 to about 25, with our median at about 11.
4. **How many paraprofessionals do you need and how are you using them, while ensuring that high quality, first instruction is provided to all students by qualified teachers with strong instructional strategies and skills, and not by less well-trained support staff?**
Overreliance on paraprofessionals, including teaching students with disabilities, has been documented in numerous studies in the Vermont context. UVM Professor Michael Giangreco and colleagues have published multiple peer-reviewed articles on the use of paraprofessionals in inclusive classrooms. Much of Giangreco's work was done in Vermont, so his studies may be of interest to you.

We realize these questions are not a solution, but a first step.

The Vermont Supreme Court's Brigham decision held that funding education was a state responsibility. This is how we make sure every community has an equal ability to raise revenue for schools. Act 60 and its successors tried to balance this state requirement with Vermont's tradition of local decision-making on how to provide opportunity. Balance requires discipline on all sides. Local decision-making means education is provided in ways that are responsive to local priorities; however, the state has an obligation to protect the shared interest of all Vermonters in affordability, growing the economy and protecting the vulnerable.

Different regions will pursue different paths to quality, affordability and equity, but all systems must attend to these goals, or we will not be able to sustain our system and serve our shared interest in social wellbeing and economic prosperity.