

# **The Argument Against Small Public School Closure**

by  
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## **Portland Schools Should Not Be Closed at This Time**

Clearly, Portland Public Schools currently faces a funding crisis of catastrophic proportions. Bridge funding, marketing of surplus properties, and a variety of budget and programmatic cutbacks are expected to keep the District afloat for the current year.

### **The Stated Rationale for Closure is Specious**

The Superintendent's memorandum states that despite these emergency rescue measures, the District must still find ways to close a multi-million dollar gap in order to ensure a 30:1 staffing ratio in classrooms. This is the rationale he provides for closing and consolidating schools.<sup>1</sup>

This argument is specious. The present District average is around 18:1; the state average is about 20:1. What is the evidence that the District is even close to approaching, let alone needing *to ensure*, a 30:1 ratio? And what educational research provides evidence that a 30:1 ratio is appropriate for all schools at all levels in all neighborhoods?

If it is the desire of the District to close and consolidate schools, it is incumbent upon the decision-makers to provide a sound educational rationale. There may be reasons related to economic efficiency for closing and consolidating schools – for filling to capacity larger, older facilities with underutilized space – but the District has a responsibility to put educational considerations above economic efficiency. School closure and consolidation are controversial processes. The District needs a well-reasoned policy that balances academic and economic factors *before* making irrevocable decisions that affect entire communities.

### **First, Do No Harm**

**Once a school is closed, it is gone forever.** School closures and consolidations, are analogous to unnecessary surgical remedies for medical emergencies for which more conservative approaches exist. For example, a physician first tries to save an injured limb, not amputate it. Once the limb is cut, it is gone forever. The patient suffers not only the physical pain of the injury, but the emotional trauma of the loss as well.

Closing a school in a time of crisis is the same. Once a school is closed, it is gone forever. Even if its students are consolidated with another school, the original entity – with its institutional history, culture, and soul – ceases to exist.

The pain that all Portlanders are experiencing right now in the face of our school funding crisis must not be exacerbated with the additional emotional trauma of closing – amputating – neighborhood schools, the soul of their communities.

**There are alternatives to school closure.** In his memo of March 3, 2003, Superintendent Scherzinger states:

*Closures are still necessary.*<sup>2</sup>

However, in the same document, the Superintendent later notes:

*One alternative to closing small schools is to reduce the amount of standard support given to each school.*<sup>3</sup>

He then proceeds to recommend a new standard school support formula. Indeed, the Superintendent's recommendations appear to be informed by the Portland Public School's *Long Range Facilities Plan* of February 2002, which states that

*analysis done for this report does indicate that two-thirds of the savings from consolidating smaller schools into larger schools is in support personnel rather than facilities operation. As such, **Portland Public Schools will get more results from considering its support personnel formula and from relocating additional uses into underused schools than it will by closing currently operating schools.***<sup>4</sup>

**Consider the many creative, participatory, healthy alternatives to closure; encourage sustainable learning communities.** Smaller schools currently slated for closure could instead transition to a part-time principal or administrator. Clerical support could be reduced. Expenditures for supplies, communications, and record-keeping could be drastically reduced through more aggressive use of information technologies administered through grants or contributions from the private sector. Individual school communities (parents, teachers, students) could decide which standard support services to retain and which to do without, using their own creativity and resources to supplement what the school cannot provide.

But for any of this to happen, the schools need first to be given the opportunity to help solve the budget crisis that affects them, rather than having “solutions” imposed upon them from the top down.

Inform school administrators that they must cut their budget by a specific percent. Provide them with information and resources to make decisions about where and how to cut. Give them a reasonable deadline – but give them *time*. There is no evidence that the time and financial cost of closing and consolidating schools now is any less than giving these schools an opportunity to prepare a strategy for short-term cost savings and long-term survival.

Over the past month, Portland’s parent, business, and educator community have demonstrated that they can conduct research, undertake analyses, secure additional funding, slash individual operating budgets, and come up with strategic plans for increasing enrollment and improving efficiency.

There simply is no compelling evidence that between now and June, the community involved with the schools slated for closure could not come up with creative, sensible plans to cut their short-term costs and address their long-term funding and enrollment issues.

***Give these schools a chance to fight for their lives before pulling the plug.***

Closing schools now is a reactive short-term “fix,” not proactive policy-making for long-term success. The Superintendent’s rationale for closing small schools is predicated on two key factors:

- Demographic forecasts continue to show that elementary school populations will continue to decline, and
- Large, underutilized facilities are not filled to capacity, resulting in economic inefficiency

These two considerations are apparent in the Superintendent’s observation that

*in the long run, it makes the most economic sense to right-size our buildings to the desired size for instruction and locate them to best serve the geographic and social diversity of our students.<sup>5</sup>*

The Superintendent suggests a best-use facilities policy that does indeed make sense. However, as he notes, such a policy is one that should be directed toward the **long term**.

### **A Sound Closure Policy Must Be in Place Before Schools Are Closed and Consolidated**

Imposing school size minimums, closing schools, consolidating programs, or instituting “schools-within-schools” are controversial policies that require careful assessment, specific guidelines for implementation, procedures for waiver and exception, built-in periodic review and amendment processes, objective program evaluation, and ample opportunity for stakeholder input and participation. Making ill-informed,

irrevocable decisions with unknown but substantial human consequences is reactive crisis management, not proactive policy-making.

## **Closure Decisions Made At the Present Time May Be Politically Unwise**

### **There Is the Appearance of Racial and Economic Inequity**

The original list of four elementary schools proposed for closure included two with a fairly low socioeconomic status and relatively high percentage of students of color, while the other two have very high socioeconomic status and few students of color.

Brooklyn (140 students) and Meek (198 students) have minority populations of 31 and 64 percent, respectively. Their third-graders' socioeconomic rank is 162 and 210, respectively, on a statewide range of 1-756.

In contrast, Edwards (212 students) and Rieke (307 students) have minority populations of 12 and 16 percent, respectively. Their third-grade socioeconomic rank is 704 and 730, respectively – almost at the top of the statewide range.

In his March 3 memorandum, the Superintendent announced his recommendation that Edwards and Rieke – the two higher status, less ethnically diverse schools – not be closed at this time. *The two lower status, more ethnically diverse schools remain on the list of recommended closure and consolidation.*

**Higher socioeconomic status communities have greater resources with which to plead their case.** It is well known in the literature on grassroots activism that those communities whose members are more likely to have more years of education, professional jobs with greater flexibility and benefits, political and professional networks, and, at base, more discretionary time and money, are able to mobilize more quickly and

more effectively than members of communities with a lower socioeconomic status and fewer resources.

The Edwards and Rieke communities mobilized quickly and assertively, making convincing arguments against their closure. The facts they presented were cogent and effective enough to raise the possibility that closure of their schools would be a bad decision. In addition, coverage by the media and editorial endorsements made it nearly impossible for the Superintendent to continue to advocate for their closure.

His decision not to close those two schools was based on information that the parent communities were able to bring to his attention – information that was otherwise unavailable to him given the lack of resources and staff in his own offices. His decisions were based on important factors such as relatively large and stable enrollment, economic efficiency in operation accompanied by high academic achievement, questions about the practicality of consolidation, boundary and feeder issues, and others.

***The Brooklyn and Meek communities did not have the same opportunity and resources to make similar cases before the Superintendent.*** For example, the Edwards community mobilized within two days of the February 3 announcement of potential school closures by establishing an active on-line presence in the form of web pages and an electronic mailing list that reached nearly all Edwards families.

Meek, on the other hand, was unable to create a web presence or even to establish an electronic mailing list; its families simply do not have access to technology to the degree that Edwards families do.

Rieke was able to arrange two meetings with the Superintendent very early on; Edwards soon followed, with meetings of its own. In contrast, the Superintendent did not meet with Meek until *after* the final closure recommendation on March 3.

### **Closure and Consolidation of Low Socioeconomic Status Schools is Not Sound Educational Policy**

In the interest of space, and under constraints of time, this section will focus only on the proposed closure of Meek and consolidation with Vernon.

### **Enrollment Forecasts and Transfer Issues Are Uncertain**

The Superintendent provides some enrollment data for Meek and Vernon for 2003-2004, although unfortunately no source for this data is provided in the memorandum. He makes two assumptions:

- Meek currently enrolls fewer than 110 students from within its neighborhood district; an additional 70 transfer in. Likewise, Vernon's neighborhood enrollment figures, without transfers, are 393. Thus, the Superintendent projects a total enrollment of 500 if both schools are consolidated.<sup>6</sup>
- Transfer processes can be controlled to ensure that enrollment at the consolidated Vernon does not exceed 500, the maximum elementary school size suggested in the District's 2001 *Best Use Facilities Study* (but above the 350 maximum that the Quality Educational Model [QEM] recommends).<sup>7</sup>

**Enrollment trends are predictions only.** In 2000, the Population Research Center (PRC) in the College of Urban and Public Affairs at Portland State University conducted enrollment forecasts for the District up through the year 2010. The researchers caution that

*In using the data provided in this study, readers should keep in mind that forecasts for smaller geographical areas are inherently less reliable than those for the District as a whole.*<sup>8</sup>



Thus, it is important to bear in mind when considering enrollment forecasts that they are based on very small census units and are subject to a great deal of variability. While there can be little doubt that Portland’s overall elementary-age population is declining, a forecast that predicts, for example, 150 students at a given school for a given year could vary by as much as 100 students. That school could in fact end up with 50 students; it could also end up with 250.

Therefore, at least two potential scenarios emerge.

- A consolidated Vernon may indeed end up with exactly 500 students, well exceeding the QEM recommendations, but just at the upper limit of the *Best Use Facilities* recommendation.

**OR**

- If current, *actual* enrollments are used (thereby keeping cohorts intact), a consolidated Vernon would end up with an enrollment of 219 (October 2002 figures for Meek) plus 405 (October 2002 figures for Vernon), for a total of 624, a figure the Superintendent refers to (with respect to Edwards) as “substantially larger than the size policy currently being considered by the Board.”<sup>9</sup> These data are illustrated in Figure 1.<sup>10</sup>

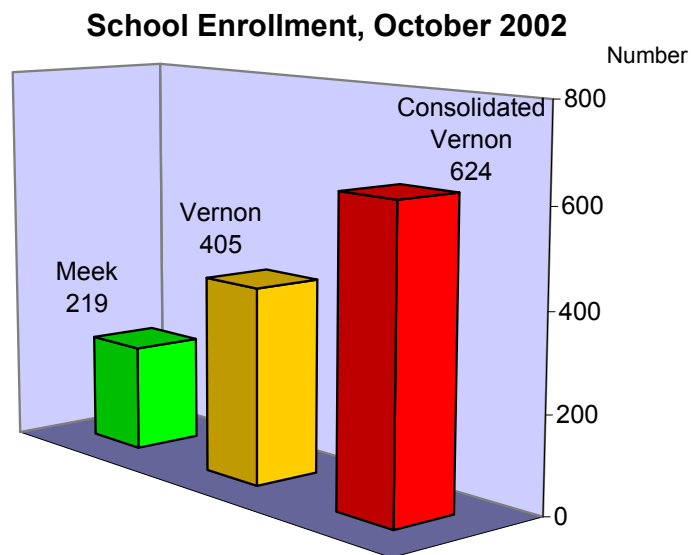


Figure 1. School Enrollment, Meek, Vernon, and Consolidated Vernon, 2002 data.

Further, Figure 2 reveals that if the PRC’s enrollment forecast data are analyzed, the predicted consolidated enrollment figures at Vernon would be around 644 for the year 2003, 593 for 2004, 559 for 2005, and so on. Although the PRC’s forecasts have proven to overestimate enrollment thus far, the fact remains that the *Best Use Facilities* recommended number of 500 may not be attained within several years, and the QEM number of 350 will not be reached until the following decade.<sup>11</sup>

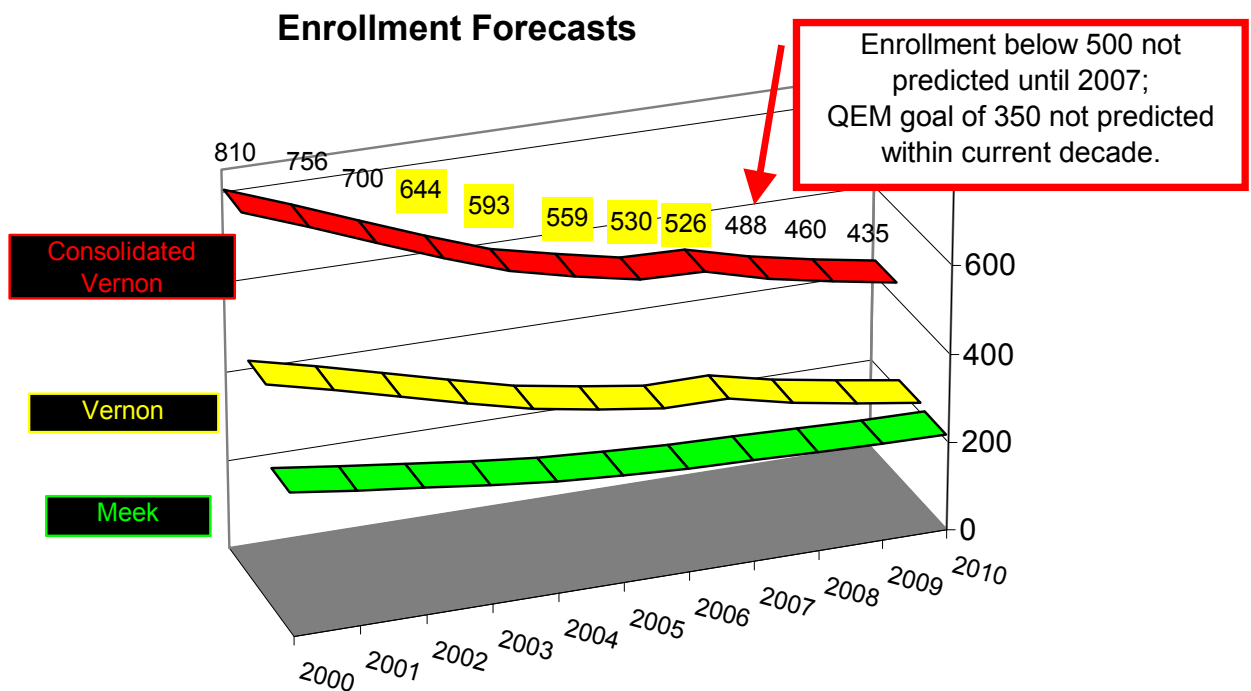


Figure 2. Enrollment forecasts for Meek, Vernon, and Consolidated Vernon, 2000-2010.

**Transfer issues are problematic.** The Superintendent’s memorandum indicates that there are only 110 students in the formal neighborhood boundary of Meek; the additional 70 (or so) have transferred in. That means that 39 percent of Meek’s students are out-of-neighborhood transfers.

Again, the equity issue arises when one considers that nearly 80 percent of Edwards’ students are out-of-neighborhood transfers. Without those students, the

Edwards facility would house only about 40 students. Admittedly, Edwards' boundaries are antiquated and poorly drawn, but using actual neighborhood numbers as a justification for closure could become problematic if enrollment figures for *all* schools were calculated in the same way. An explanation should be provided for applying one calculus to Edwards and a different calculus to Meek.

A further problem with the transfer question is that the Superintendent's memorandum assumes that transfers would be "controlled," so that students who actually live in the Rigler or Faubion neighborhood boundaries would transfer to those schools, which they presumably chose not to attend in the first place. Thus, not only would students be asked to attend a school they had not selected for whatever reason, but the Meek cohorts would be disrupted, as well. Friendships and familiar relationships would be destroyed. The same would hold for Vernon students whose transfers would be "controlled."

### **Consolidating Two Low-SES Schools into a Larger Program Is Contraindicated**

**Low socioeconomic students should be in small schools.** The literature regarding the positive relationship between small school size and academic achievement among low socioeconomic status students is well known and undisputed.<sup>12</sup> A brief review of some of this literature will be provided here, followed by specific suggestions regarding the implications of a consolidation of Meek with Vernon.

Kathleen Cotton of the Northwest Regional Educational Laboratory is foremost among those who conclude that

*whereas the research finds that small schools produce equal or superior achievement for students in general, the effects of small schools on the achievement of ethnic minority students and students of low socioeconomic status are the most positive of all. . . . To put*

*this a little differently, these researchers have found that **large schools have a more negative impact on minority and low-SES students than on students in general.***<sup>13</sup>

R.S. Jewell notes that

*if minority students must struggle more to achieve a solid public education and if large districts and large schools find it increasingly difficult to achieve solid educational results for their students, we may be acting contrary to the interests of all concerned by organizing our public education system in a manner which assigns **high proportions of minority youngsters to large schools** within very large school districts.*<sup>14</sup>

Research conducted by Craig Howley and Robert Bickel concludes that

*as schools become larger, the negative effect of poverty on student achievement increases. The less affluent the community served, the smaller a school should be to maximize the school's performance as measured by standardized tests. . . . The well-documented correlation between poverty and low achievement is much stronger – **as much as ten times stronger** – in the larger schools than in smaller ones . . .*<sup>15</sup>

**Consolidating Meek and Vernon is a perfect example of what *not* to do.**

Based on the information presented thus far, there is every reason to believe that consolidating Meek with Vernon would be disadvantageous educationally for the students, poor policy made under pressure in a time of crisis, and potentially politically volatile.

Figure 3 illustrates that Meek, whose minority population is currently 64 percent of its total student body, is already far more ethnically diverse than the District as a whole (38 percent). Vernon's minority population is 85 percent. So, combining these two high-minority schools would yield one large school of anywhere between 500 and 624 students (depending on the data source and enrollment methods) with a minority

population of 79 percent.<sup>16</sup> Recall that Edwards, with around 200 students, has a minority population of just 12 percent.

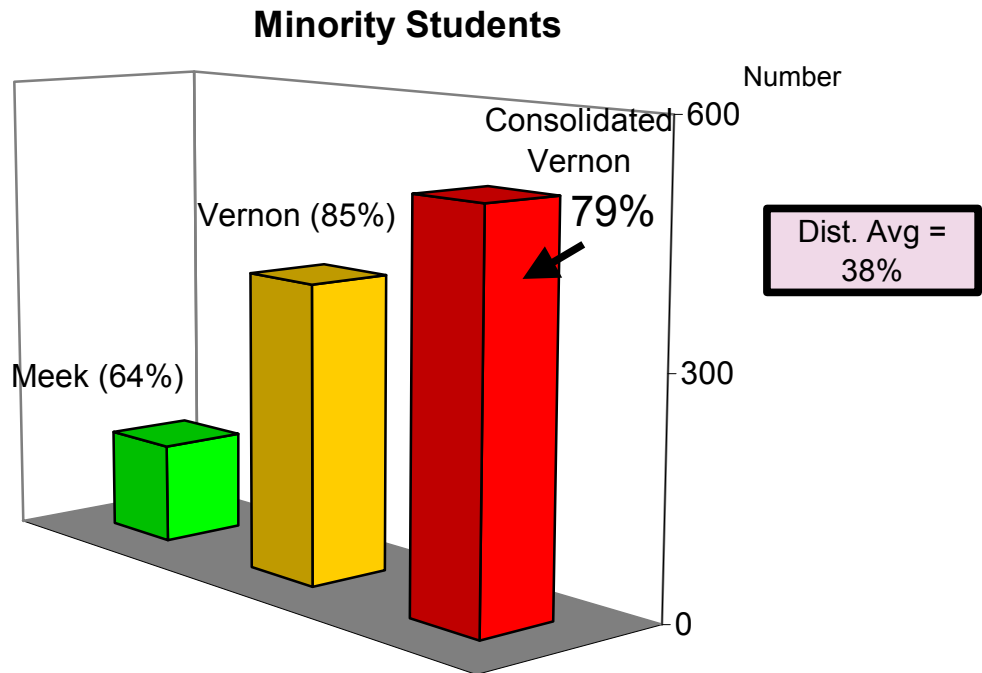


Figure 3. Minority enrollment at Meek, Vernon, and a Consolidated Vernon.

While there is not universal agreement that minorities benefit from smaller school size, there is little disagreement that low-income students benefit from the smaller school. One measure of poverty among school children is the percent who are eligible for free or reduced lunch. Figure 4 illustrates the large percentage of such students at Meek and Vernon, and the proposed consolidated school.<sup>17</sup>

### No. of Students Eligible for Free or Reduced Lunch

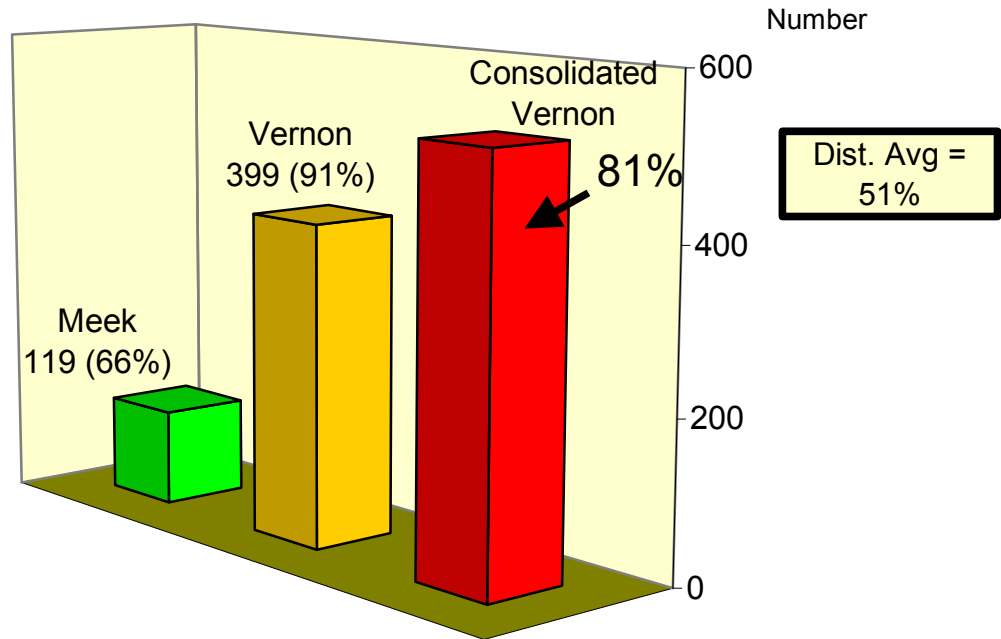


Figure 4. No. of Students Eligible for Free or Reduced Lunch at Meek, Vernon, and a Consolidated Vernon.

### SES Rank Among 3rd Graders

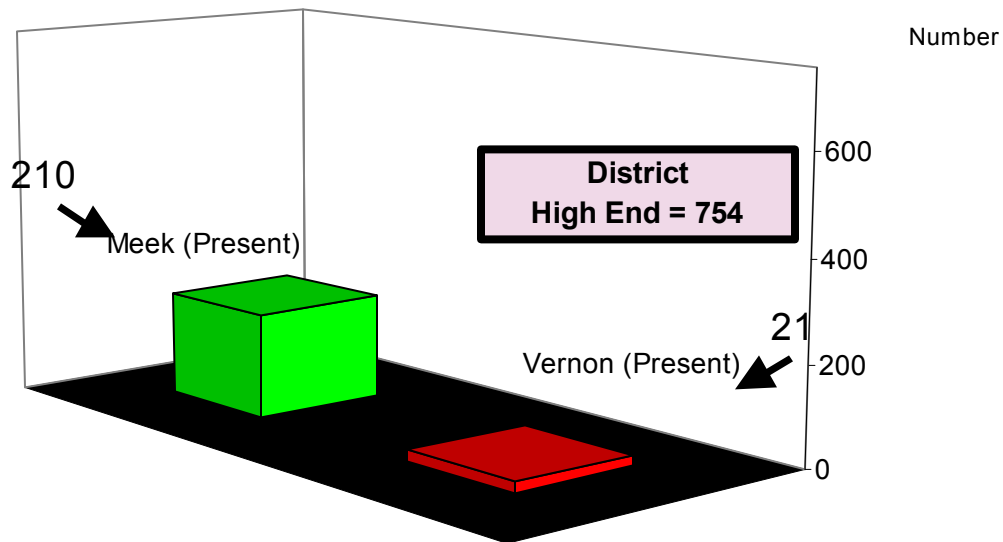


Figure 5. SES Rank Among Third Graders at Meek and Vernon, 2001-2002.

Similarly, Figure 5 shows the concentration of poverty in terms of low socioeconomic status (SES) rank for these schools.<sup>18</sup> Oregon's SES range for third-grade

students is 1 through 754, with 754 representing the highest socioeconomic status.

Meek’s third graders’ SES rank is 210 out of 754, while Vernon’s rank is near the very bottom, at 21. **Consolidating these two schools together would have little effect other than concentrating children in poverty in a large school.**

### **The Negatives of Consolidating Meek and Vernon Outweigh the Positives**

The Superintendent’s memorandum provides a list of positives and negatives (“issues for transition”) regarding the consolidation; these require careful examination. This section will address only the most noteworthy of the points listed.

#### **PURPORTED POSITIVES<sup>19</sup>**

**Assertion:** Many remedial programs, such as Success for All Tutoring, SMART, OASIS, Title I, and others will be available for both Meek and Vernon students.

**Fact:** Both Meek and Vernon have high levels of students participating in Special Education, English as a Second Language, and Title I programs (see, for example, Figure 6). Their combined needs are high. Unless these programs receive additional funding and personnel, their resources will be stretched and their effect diluted.

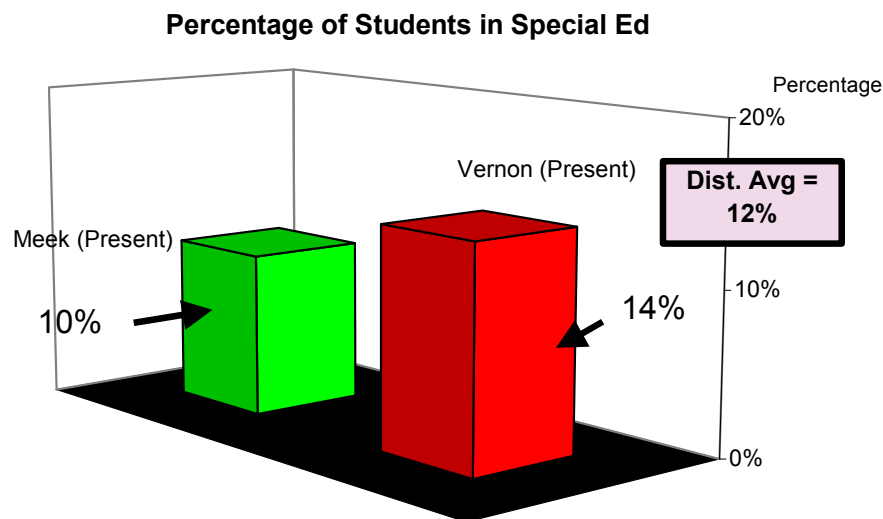


Figure 6. Percentage of Students in Special Education at Meek and Vernon.

**Assertion:** Facilities at Vernon include two computer labs and a half-time technology coordinator, not currently available at Meek.

**Fact:** The labs and the half-time coordinator would have to accommodate an additional 100 to 200 students, unless resources and FTE are increased.

**Assertion:** Vernon has an instructional specialist whose work with curriculum development for teachers would be extended to Meek staff.

**Fact:** The specialist would have more work with fewer resources.

**Assertion:** Meek has a strong PTA that would enhance parental involvement at Vernon.

**Fact:** Meek does not have a PTA (it has a Booster Club).

#### **PURPORTED CHALLENGES<sup>20</sup>**

**Assertion:** The two schools have different literacy programs and would need to develop a common reading program that would meet the needs of all the students.

**Fact:** Meek and Vernon students vary considerably in the area of reading. Figure 7 illustrates that the percentage of Vernon students who meet or exceed state standards in reading falls below the District average, while Meek students exceed the average. Coordinating a literacy program in light of this variation, particularly without additional resources, would be challenging and possibly doomed to fail.

**Assertion:** More students at Vernon will increase traffic congestion and add busing costs in order to transport the Meek students.

**Fact:** Map 1 shows that Vernon is just over one mile away from Meek, clearly out of walking distance for many of its students. Aerial photos of Meek and Vernon show markedly different urban infrastructure, amenities, and pedestrian-friendly



environments. See Photos 1 and 2. These factors together compromise the role of the neighborhood school as a safe, easily accessible common public area, with ample green space.

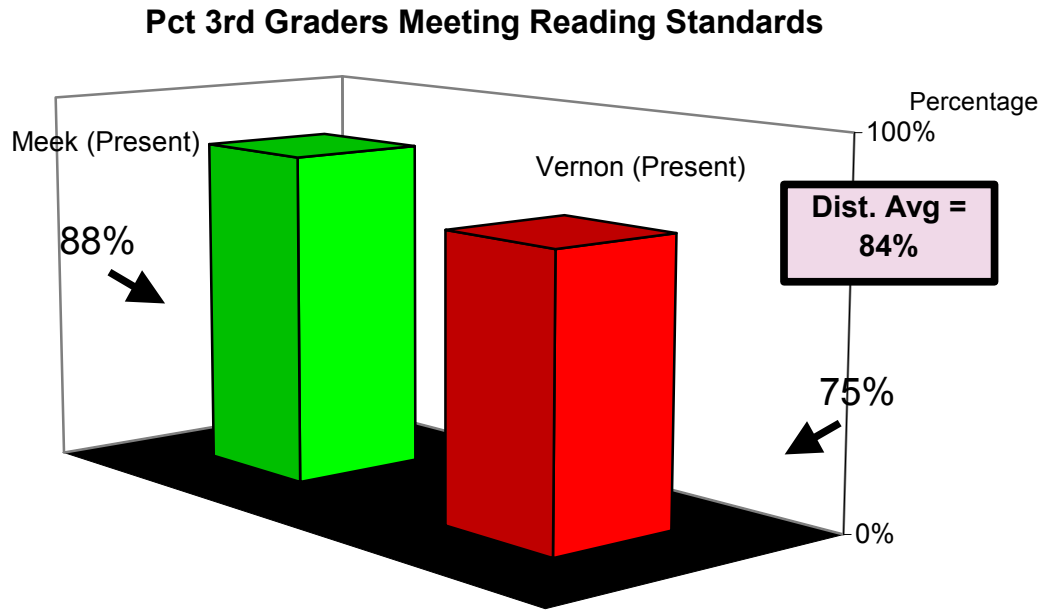
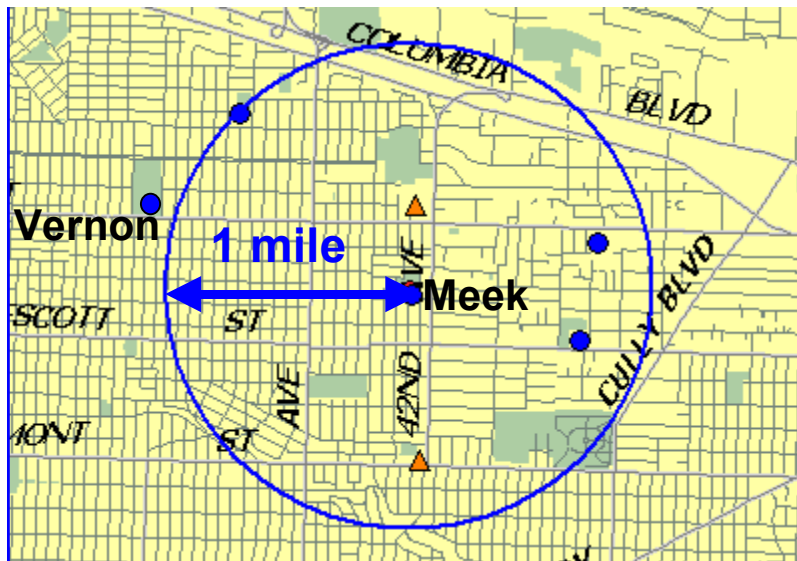


Figure 7. Percentage of Meek and Vernon Third Graders Meeting or Exceeding State Reading Standards.



Map 1. Map of Meek neighborhood, showing Vernon as located outside the one-mile radius of Meek.<sup>21</sup>



Photo 1. Aerial photo of Meek, showing ample green space and playing field, located in a neighborhood with tree-lined grid-pattern, low-traffic streets and on-street parking. Closest major thoroughfare is one block away.<sup>22</sup>





Photo 2: Aerial photo of Vernon, showing larger edifice and less on-site green space, more on-site concrete. Adjacent streets, while in a grid pattern, appear to have greater congestion, and there is a major thoroughfare directly abutting the school property.<sup>23</sup>

## **Conclusions**

During the 2002-2003 academic year, the Portland Public School District has encountered challenge after challenge. It may make sense to attribute many of the current problems to decreasing enrollment trends, the size of teachers' compensation packages, and unanticipated budget shortfalls. But these are facile explanations that do

not begin to address the systemic factors that are at the root of the District's current dilemmas.

### **First, Do No Harm**

The District has three tasks ahead of it:

1. Achieve financial adequacy and stability for the current biennium
2. Enact educational reform that is about *children learning*, not accountability (i.e., testing) and efficiency (i.e., economic optimality)
3. Forge a radically different funding and policy-making structure for implementing public education in the future

The first task must be dealt with immediately, *but not at the cost of the second and third tasks. **The District must first do no harm.***

- Encourage local school administrators and communities to come up with ways to implement cost savings so that their schools can remain open and functional.
- Delay implementation of size, closure, and consolidation decisions until policies are in place that result from sound academic research and stakeholder participation.
- Make sure policy-based decisions are consistent: Don't follow QEM guidelines for one case and *Best Use Facilities* recommendations in another. Don't include transfer students in the enrollment counts for one school, but not for another.
- Avoid making hasty cost-cutting decisions that are irrevocable, yet have a potentially profound impact on the community.
- Avoid making cost-cutting decisions that fly in the face of best-practice educational research that advocates small learning communities.
- Avoid even the *appearance* of favoring high socioeconomic status, predominantly white schools over low socioeconomic, minority schools.
- Avoid charges of "warehousing" low-income children of color in "educational ghettos."
- Put the welfare and education of our children *before* demands for accountability through costly, misleading, testing processes with questionable validity, and *before* demands for economic efficiency that translates to reduced teacher compensation.

- Instead of focusing on how to “right-size” buildings to accommodate predicted declines in enrollment, consider broader policies that *attract* young, bright families to the Portland metropolitan areas. They come here for our high-quality urban transit system, our investment in sports facilities, our commitment to a sustainable environment: shouldn’t a good school system be part of their decision, as well?

### **Do the Right Thing**

**Take a stand about who we are and what we value.** Consider this: Are these the messages that this District wants to send to parents, taxpayers, students, teachers, and the rest of the nation, whose eyes are focused expectantly upon us?

- We are closing down neighborhood schools and moving children into larger school settings so that we can increase student-teacher ratios from an average of 18:1 to the arbitrary, and pedagogically questionable, ratio of 30:1.
- Further, we are closing down small schools that have a high percentage of low-income minority students and moving them to larger schools with even *more* low-income, minority students, even though virtually all academic research indicates that we should be doing just the opposite – that we should be facilitating smaller learning communities for all populations, particularly low-income minorities.
- Our primary goal is to “right-size our buildings” – not to provide the right size of learning environment for our children. In Portland, this means that we want to fill our largest and oldest school buildings to capacity and empty out the newer smaller buildings to sell, lease, or fill with administration or special services.
- But, make no mistake: we value education in Portland, and we believe our children come first. It’s just that our resources are so limited that we have to decide *which* children come first and which ones come last. Our triage method is not based on the students’ needs as much as it is on the extent to which we can assure voters of accountability and economic efficiency. Contrary to best-practice educational research, we think economic efficiency means economies of scale – in other words, larger, consolidated schools.
- We know our school system is in trouble. We know we need to institute academic reform. We’re aware we must reassess statewide legislation regarding funding, local-level taxation ability, and equalization formulas. We’re aware of the rifts between urban and rural populations; we know the public perception of teachers’ compensation packages is negative. We understand we must meet federal mandates to leave no child behind. And, we promise, we’ll get to all that. But, first, we may have to cause some harm. And, then, after that harm is done, we’ll start afresh. For this generation of children, it will be too late. But we sure hope things will be better for the future. We promise; we’ll get to all that.

**These are not the messages this District wants to send.** Be cautious. Consider the Superintendent's recommendations carefully. Deliberate with your conscience and your commitment to our children and to the civic polity you represent. Do not allow the current budgetary crisis or the Superintendent's emphasis on economic efficiency to lead you to drastic measures that cannot be undone and whose ultimate impacts on our community are at best unknown and at worst catastrophic.

## REFERENCES

- <sup>1</sup> Jim Scherzinger, Memorandum to Board of Education, Portland Public Schools (Portland, OR, March 3, 2003), p. 2.
- <sup>2</sup> Ibid.
- <sup>3</sup> Ibid., p. 6.
- <sup>4</sup> Portland Public Schools, *Long Range Facilities Plan* (Portland, OR: Portland Public Schools, February 2002) [http://www.pps.k12.or.us/news-c/long\\_range\\_facilities\\_plan.pdf](http://www.pps.k12.or.us/news-c/long_range_facilities_plan.pdf), p. 105. Emphasis added.
- <sup>5</sup> Scherzinger, Memorandum, p. 3.
- <sup>6</sup> Ibid., p. 8.
- <sup>7</sup> Portland Public Schools, *Long Range Facilities Plan, Report to the Board*, (Portland, OR: Portland Public Schools, 2001) [http://www.pps.k12.or.us/depts-c/fam/long\\_range\\_report/quality\\_schools.php](http://www.pps.k12.or.us/depts-c/fam/long_range_report/quality_schools.php).
- <sup>8</sup> Population Research Center (PRC), College of Urban and Public Affairs, Portland State University, Elementary, Middle, and High School Enrollment Forecasts by Attendance Area Residing and School Attending Portland Public Schools for 2000-2010 (Portland, OR: PSU, 2000) <http://www.pps.k12.or.us/projects-c/facilities/pdf/area-forecasts.pdf>, p. 2. Emphasis added.
- <sup>9</sup> Scherzinger, Memorandum, p. 5.
- <sup>10</sup> Data from Oregon Department of Education, *School Profiles, 2002-2003*.
- <sup>11</sup> PRC, Enrollment Forecasts, p. 33 and 36.
- <sup>12</sup> For example, Cotton cites Eberts, R. W.; Kehoe, E.; and Stone, J. A. *The Effect of School Size on Student Outcomes*. Final Report. Eugene, OR: Center for Educational Policy and Management, University of Oregon, June 1982 (ED 245 382); Fowler, W. J., Jr. "School Size and Student Outcomes." *Advances in Educational Productivity* 5 (1995): 3-26; Fowler, W. J., Jr. *What Do We Know about School Size? What Should We Know?* Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA, April 1992 (ED 347 675); Friedkin, N. E., and Necochea, J. "School System Size and Performance: A Contingency Perspective." *Educational Evaluation and Policy Analysis* 10/3 (Fall 1988): 237-249; Howley, C. *The Academic Effectiveness of Small-Scale Schooling (An Update)*. ERIC Digest. Charleston, WV: Clearinghouse on Rural Education and Small Schools, June 1994 (ED 372 897); Huang, G., and Howley, C. "Mitigating Disadvantage: Effects of Small-Scale Schooling on Student Achievement in Alaska." *Journal of Research in Rural Education* 9/3 (Winter 1993): 137-149; Jewell, R. S. "School and School District Size Relationships: Costs, Results, Minorities, and Private School Enrollments." *Education and Urban Society* 21/2 (February 1989): 140-153; Miller, J. W.; Ellsworth, R.; and Howell, J. "Public Elementary Schools Which Deviate from the Traditional SES-Achievement Relationship." *Educational Research Quarterly* 10/3 (1986): 31-50; Rutter, R. A. *Effects of School as a Community*. Madison, WI: National Center on Effective Secondary Schools, 1988 (ED 313 470); and Stockard, J., and Mayberry, M. "Resources and School and Classroom Size." Chapter 3 in *Effective Educational Environments*. Newbury Park, CA: Corwin Press, Inc., 1992, 40-58.
- <sup>13</sup> Kathleen Cotton, *School Size, School Climate, and Student Performance*, Northwest Research Educational Laboratory, 1996, <http://www.nwrel.org/scpd/sirs/10/c020.html>. Emphasis added.
- <sup>14</sup> Jewell, "Schools," p. 152, cited in Cotton, *School Size*. Emphasis added.
- <sup>15</sup> Craig Howley and Robert Bickel, *School Size, Poverty, and Achievement: National Results*, [http://www.ruraledu.org/nat\\_sum.html](http://www.ruraledu.org/nat_sum.html).
- <sup>16</sup> Data from Oregon Department of Education, *School Profile Comparisons, 2001-2002 and PPS Elementary School Profiles*, Portland, OR: Portland Public Schools, 2002.
- <sup>17</sup> Ibid.
- <sup>18</sup> Ibid.
- <sup>19</sup> Scherzinger, Memorandum, p. 9.
- <sup>20</sup> Ibid., p. 10.
- <sup>21</sup> Source: Portland Maps at <http://www.portlandmaps.com>.
- <sup>22</sup> Ibid.
- <sup>23</sup> Ibid.