



## K-8 Schools May Help School Districts Improve Student Performance

### *at a glance*

In recent years, some school districts in other states have reconfigured their schools. These districts have moved away from using separate middle schools for students in grades six to eight to schools serving children in kindergarten through grade eight. The primary reason cited by these districts for switching to a K-8 configuration has been low performance of students in middle grades. Other reasons include parental dissatisfaction, and efforts to reduce school size, high absenteeism, discipline problems, and dropout rates.

Available data show that students in K-8 schools score higher on standardized tests than their middle school counterparts. However, these studies do not control for other factors that could affect student performance, and more research is needed on the success of K-8 grade configurations.

Moving middle school students into K-8 schools may help address lagging student performance but does not alleviate the need for high quality teachers and administrators, a rigorous curriculum, and appropriate educational practices. Switching to K-8 schools would present districts with several challenges, including the need to retrofit buildings, revise attendance zones and transportation routes, and modify curriculum, teacher training, and collective bargaining agreements.

### Scope

---

In response to a legislative information request, this report provides information on middle grade configurations. Specifically, we addressed the questions below.

- To what extent have school districts in other states shifted from the traditional middle school configuration to K-8 schools?
- Why have school districts changed their grade configurations?
- What evidence of success exists for K-8 schools?
- What can Florida learn from the experiences of other states?

### Background

---

Historically, most schools in the U.S. were divided between elementary schools that provided the first eight years of instruction and high schools that served students in grades 9 to 12. Junior high schools, serving 7th- and 8th-grade students, were introduced early in the 1900s and grew in number until around 1970, when they began to be replaced with middle schools that served grades 6-8. The shift toward separating out middle grades students was intended to focus on the unique characteristics and needs of early adolescents,

separate them from both elementary and high school students, and better prepare them for secondary education.

As shown in Exhibit 1, over half of the Florida schools serving grades six, seven, and eight are traditional middle schools (see Exhibit 1). However, districts also use a variety of grade configurations for these students. For instance, some districts combine middle grades with some elementary grades such as K-6 and 3-7 schools. Notably, charter schools account for almost half (30 of 69) of the schools that combine middle grades with younger elementary students in K-8 schools. In general, these charter schools are smaller and serve fewer students than traditional public schools.

**Exhibit 1  
In Florida, Grades Six, Seven, and Eight  
Most Often Are Served by Middle Schools**

Grade Configuration	Number of Schools	Percentage of Schools
Middle School	480	56%
Middle Grades with Elementary Grades	161	19%
Middle Grades with Secondary Grades	81	10%
K-8 or K-9 <sup>1</sup>	69	8%
K-12 <sup>1</sup>	27	3%
Other Configurations <sup>2</sup>	36	4%
<b>Total</b>	<b>854</b>	<b>100%</b>

<sup>1</sup> K-8, K-9, and K-12 may also include prekindergarten.

<sup>2</sup> Includes configurations such as 6, 6-7, 7-8, 6-9, and 7-9 (junior high).

Source: OPPAGA analysis of 2003-04 DOE Master School ID List. Does not include schools classified as DJJ or Other.

Debate over middle school education. There is considerable national debate over how to improve the quality of education provided to middle grade students. Recent national studies have raised concern regarding poor academic performance of 8th-graders. For example, the 1999 Trends in Mathematics and Science Study found that while U.S. 4th-graders perform at or above the international average in science and math, they fall to the

international average or below by the 8th grade. Similarly, a 2001 study found the majority of 8th-graders nationwide have failed to reach proficiency on the National Assessment of Education Progress test.

In Florida, about 50% of middle school students meet grade level expectations for reading and math as measured by performance on the Florida Comprehensive Assessment Test (FCAT). In comparison, 63% of 3rd-grade elementary students meet grade level expectations. <sup>1</sup> In addition, the skill level gains of students in middle school have not been as large as gains made at Florida’s elementary schools. Student achievement and mastery of middle school grade level expectations is particularly important because it prepares students to be successful in high school.

Dissatisfaction with low middle school student achievement prompted the 2004 Legislature to pass the Middle Grades Reform Act (Ch. 2004-255, *Laws of Florida*) to revise the middle school curriculum and improve middle school learning. This law requires the Department of Education to review current middle grade reading and language arts programs. The Commissioner of Education will make recommendations regarding changes to the reading and language art curricula to the State Board of Education, which will adopt rules based on the commissioner’s recommendations by March 1, 2005. The act also requires that a rigorous reading requirement be implemented in any public school serving middle grade students that has fewer than 75% of its students reading at or above grade level in grades 6, 7, or 8. In addition, it requires a middle school

<sup>1</sup> Specifically, the percentage of 6th, 7th, and 8th grade students scoring at level 3 or above on the FCAT reading test in 2003 was 53%, 52%, and 49%, respectively, while 63% of 3rd graders scored at level 3 or above. In math, the percentage of 6th, 7th, and 8th grade students scoring at level 3 or above on the FCAT math test in 2003 was 47%, 47%, and 56% respectively while 63% of 3rd graders scored at level 3 or above.

success plan for each entering 6th-grade student who scored below a Level 3 in reading on the most recently administered FCAT.

In addition to changing the culture and instructional practices of poorly performing middle schools, some critics argue that the middle school configuration itself should be changed. These critics hold that serving middle grade students in separate schools contributes to poor education quality, and point to research that shows that middle grade students in K-8 schools tend to outperform students in middle schools. Some school districts in other states have opted to alter grade configurations as a means to address their concerns with middle grades education.

## Questions and Answers –

### *To what extent have school districts in other states shifted from the traditional middle school configuration to K-8 schools?*

While there is limited nationwide data on middle grade configurations, over the past 10 years several major school districts across the country have begun to change their middle grade configurations in favor of K-8 schools. These districts include those serving Baltimore, Cincinnati, Cleveland, Milwaukee, Oklahoma City, and Philadelphia, each of which has at least 40,000 students. These districts have not abandoned middle schools entirely, but have moved to a mixture of K-8 and traditional middle schools. For example, in the 2003-04 school year, Milwaukee operated 54 K-8 schools and 16 middle schools, while Cincinnati had 43 K-8 schools and only one traditional middle school.

### ***Why have school districts changed their grade configurations?***

While districts have cited several reasons for switching middle grade configurations (see Exhibit 2), the primary reason has been a desire to improve student performance. For example, Milwaukee Public Schools examined student test scores and found that middle grade students who attended K-8 schools performed better than their counterparts in traditional middle schools in five subject areas (language arts, mathematics, reading, science, and social studies). As a result, the district decided to expand the number of K-8 schools it operated.

#### **Exhibit 2 Districts Have Cited Several Reasons for Changing Middle Grade Configuration**

School District	
Baltimore	Student performance, parental dissatisfaction
Cincinnati	Student performance, parental dissatisfaction, large school/class size, high absenteeism, high dropout rate
Cleveland	Student performance, school /class size, high absenteeism, high suspension rates
Milwaukee	Student performance, parental dissatisfaction, high transportation costs
Oklahoma City	Student performance, parental dissatisfaction, large school size
Philadelphia	Student performance

Source: OPPAGA analysis.

Districts also identified secondary reasons for shifting to K-8 schools, including parental dissatisfaction with middle schools. Four districts we contacted reported that parental dissatisfaction contributed to their move to K-8 schools. For example, the Baltimore school district indicated that parents of

children attending K-8 schools had more positive perceptions of the schools and were more likely to agree that their children's schools had clear and high expectations for student learning and student behavior than were parents of children in traditional middle schools. Parental dissatisfaction was also a factor that contributed to the decisions of Cincinnati Public Schools, Milwaukee Public Schools and Oklahoma City Public Schools to shift to K-8 schools.

Efforts to reduce large school and class sizes were also cited as reasons for shifting to K-8 schools. For example, as part of its current initiative to improve middle grades education, the Oklahoma City Public Schools plans to decrease school size. The district expects the middle grade student population of its new K-8 schools to average around 300 students, compared with an average of between 900 and 1,100 students in its current middle schools. The Cincinnati and Cleveland school districts similarly cited efforts to reduce school or class size as a factor in their decisions to increase the number of K-8 schools.

Further, some districts cited efforts to reduce attendance and discipline problems as reasons to shift to K-8 schools. These districts cited high absenteeism, dropout rates, and student suspension rates in current middle schools and the belief that these problems would be reduced in K-8 schools. Students who attend K-8 schools make fewer transitions from one school level to the next. This continuity provides greater stability during what is considered a particularly challenging time for adolescents and may help improve student behavior and performance. Finally, one district also cited a desire to reduce transportation costs through neighborhood K-8 schools.

### ***What evidence of success exists for K-8 schools?***

Limited evidence suggests that students perform better in K-8 settings than in traditional middle schools. Studies have shown that students in K-8 schools score higher on standardized tests than their middle school counterparts. However, these studies did not examine other factors that could have contributed to the increased student performance.

Available data indicates that K-8 schools have been successful, but more evaluation is needed. Research comparing performance of K-8 students with middle school students shows that students in K-8 schools outperform students in middle schools. Most of these studies indicate a statistically significant difference in the performance of K-8 students compared to middle school students. Baltimore, Milwaukee, and Philadelphia found that 8th-graders attending K-8 schools outperformed their counterparts in middle schools on standardized tests (Exhibit 3). For example, an evaluation in Milwaukee for the 1999-2000 school year found that 59% of 8th graders in K-8 schools were at or above proficiency in reading on the Wisconsin Knowledge and Concepts Exam compared to 45% of 8th-graders served in middle schools. In addition, research conducted in Connecticut, Louisiana, and Maine has found that middle grade students performed better when those grades were included with elementary grades rather than with middle or higher grades. For example, the Maine study found that 8th-grade student performance was higher in schools in which the 8th grade was located in an elementary setting (such as a K-8 school) than in a middle school or secondary setting (such as a 7-12 school).

**Exhibit 3  
District-Specific Research Suggests Students Perform Better in K-8 Schools**

Location	Results
Cleveland, OH	6th-graders in K-8 schools posted greater learning gains in reading and mathematics than students attending middle schools (6-8) as measured by the Ohio Proficiency Test.
Milwaukee, WI	8th-graders in K-8 schools had higher achievement in reading, language arts, mathematics, science, and social studies than middle school students as measured by the Wisconsin Knowledge and Concepts Exam.
Philadelphia, PA	8th-graders in K-8 schools performed better than those in middle schools as measured by the Stanford Achievement Tests (SAT-9); K-8 school alumni had a GPA one-tenth of a letter grade higher than middle school alumni in the 9th grade.
Baltimore, MD	8th-graders attending K-8 schools performed better in reading, language arts, and math than students attending middle schools as measured by the CTB TerraNova.

Note: School districts in Cincinnati and Oklahoma City did not provide student performance data.  
Source: OPPAGA analysis.

More information is needed to make definitive conclusions on the success of K-8 grade configurations. While encouraging, the evaluations of middle grade students in K-8 schools did not take into consideration other factors that influence student success. Research has shown that improved student performance is affected by several critical factors other than grade configuration, including the quality of teachers and school leadership, instructional practices, facility quality, school and grade size, and community and parental involvement. The studies we identified did not control for such factors. Furthermore, none of the studies comparing K-8 and middle schools assessed middle grades performance over time to assess the impact of changing school configuration. Without such analysis, it is difficult to determine whether the improved performance was due to the grade configuration or other factors such as changes in the population of students served.

***What lessons can Florida learn from the experience of other states regarding middle grades configurations?***

If Florida’s school districts adopt K-8 schools to improve performance, they likely will need to address several issues, some of which could substantially increase educational costs.

- Ensure appropriate and challenging middle grades curriculum. K-8 schools, particularly if they are smaller than current middle schools, may not be able to offer the variety of courses generally provided by larger middle schools. It would be important for the schools to have a rigorous academic curriculum in place, including prerequisite courses such as Algebra I and foreign languages, which students need to take advanced coursework in high school. Smaller K-8 schools may also lack the economy of scale to offer additional career-oriented courses such as exploratory or specialty classes typically offered by middle schools.

- Upgrade facilities to accommodate older students. Elementary schools that convert to K-8 schools may need to remodel facilities to provide restrooms and furniture needed for older, taller students. Converted schools may also need to equip science labs and appropriate athletic facilities for students in grades six to eight.
- Revise attendance zones and transportation routes. School districts would likely need to amend their school zones and transportation routes to reflect the new school configurations. For instance, a district converting K-5 schools to K-8 configurations will need to determine which middle grade students will attend which newly configured schools
- Review collective bargaining agreements. School districts may also need to amend collective bargaining agreements when moving to K-8 schools. The responsibilities of both elementary and middle grade teachers may need to be standardized for issues such as working hours, planning time, and professional development obligations, since middle grade teachers would be housed in the same setting as elementary teachers.
- Revise professional development programs. School districts may need to revise professional development offerings to ensure that teachers and administrators are equipped to interact with students across the various grade levels. For example, elementary teachers may require training to deal with the different disciplinary needs of older students such as increased incidents of violence and a higher propensity to use drugs and alcohol.
- Continue other initiatives to improve performance. While the experience of other states suggests that shifting to K-8 schools may help address lagging middle grade student performance, changing grade configurations alone does not alleviate the need for districts to take other steps to improve student performance. These include initiatives to recruit and train high quality teachers and administrators and implement rigorous curricula and high educational standards. In addition, districts should assess educational practices found by researchers to be effective in promoting middle grade learning, such as interdisciplinary team teaching, shared planning, flexible scheduling, and accelerated instruction.

# *The Florida Legislature*

## *Office of Program Policy Analysis and Government Accountability*

---



Visit the [Florida Monitor](http://www.floridamonitor.com), OPPAGA's online service. See [www.oppaga.state.fl.us](http://www.oppaga.state.fl.us). This site monitors the performance and accountability of Florida government by making OPPAGA's four primary products available online.

- [OPPAGA publications and contracted reviews](#), such as policy analyses and performance reviews, assess the efficiency and effectiveness of state policies and programs and recommend improvements for Florida government.
- [Performance-based program budgeting \(PB<sup>2</sup>\) reports and information](#) offer a variety of tools. Program evaluation and justification reviews assess state programs operating under performance-based program budgeting. Also offered are performance measures information and our assessments of measures.
- [Florida Government Accountability Report \(FGAR\)](#) is an Internet encyclopedia of Florida state government. FGAR offers concise information about state programs, policy issues, and performance.
- [Best Financial Management Practices Reviews of Florida school districts](#). In accordance with the *Sharpening the Pencil Act*, OPPAGA and the Auditor General jointly conduct reviews to determine if a school district is using best financial management practices to help school districts meet the challenge of educating their students in a cost-efficient manner.

Subscribe to OPPAGA's electronic newsletter, [Florida Monitor Weekly](#), a free source for brief e-mail announcements of research reports, conferences, and other resources of interest for Florida's policy research and program evaluation community.

---

OPPAGA supports the Florida Legislature by providing evaluative research and objective analyses to promote government accountability and the efficient and effective use of public resources. This project was conducted in accordance with applicable evaluation standards. Copies of this report in print or alternate accessible format may be obtained by telephone (850/488-0021 or 800/531-2477), by FAX (850/487-3804), in person, or by mail (OPPAGA Report Production, Claude Pepper Building, Room 312, 111 W. Madison St., Tallahassee, FL 32399-1475). Cover photo by Mark Foley.

**Florida Monitor:** [www.oppaga.state.fl.us](http://www.oppaga.state.fl.us)

Project supervised by David D. Summers (850/487-9257)

Project conducted by Kathleen Del Monte and David Sikes  
Jane Fletcher, Education Staff Director (850/487-9255)

Gary R. VanLandingham, OPPAGA Interim Director