

RESEARCH SCAN

Research Services' Quarterly Newsletter, Miami-Dade County Public Schools

Research Services will publish "Research Scan" in a Question and Answer format quarterly in an effort to bring findings from a broad spectrum of research to the staff of Miami-Dade County Schools. This is not intended to represent an exhaustive treatment of the research literature but rather only a scan of a small portion of the available research routinely reviewed by the department.

Q: Are small schools really more effective?

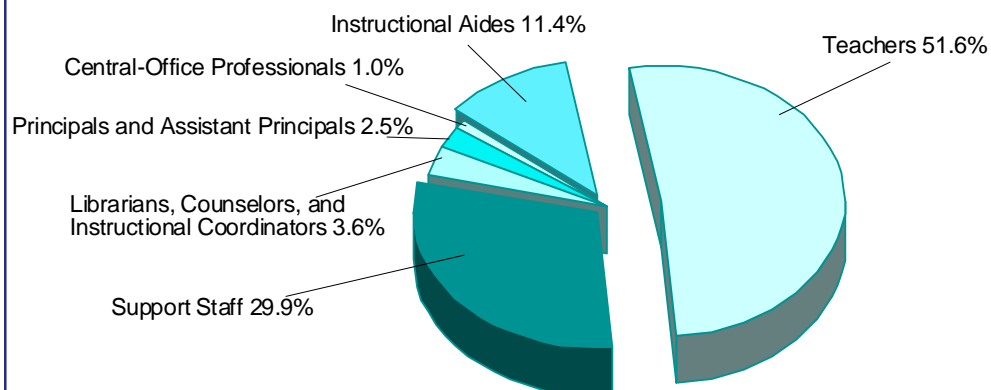
A: An article written for Education Research Service (ERS) by Kenneth Stevenson (2009) and dealing with school size makes the assertion that the results of schooling are significantly influenced by student, family, and community characteristics which are outside the direct control of educational institutions themselves. The findings that academic achievement is related to family socioeconomic and demographic factors such as level of parental education, family size and income, as well as age of mothers at the time of childbirth are not restricted to one state nor even to one country. Therefore, the answer to how well students learn may not be reliant on the size of the school but rather to a whole host of factors residing both in and outside of the school. The author suggests the issue is not the size of the school but "What are the things that promote learning in both small and large schools that can be embedded in the educational process, regardless of the number of students served in a facility?"

Source: Stevenson, K. R. (2009). School Size: Why "Smaller May Not Be the Answer," *ERS Spectrum*, Vol. 27, No. 2, Spring, Pgs. 1-10.

Q: How many staff currently work in public schools nationwide?

A: Using the most recent data available from the U.S. Department of Education, a report by the Educational Research Services (ERS) indicates that of the approximate six million people employed in U.S. public schools in 2006-07, approximately two-thirds were employed in instructional positions. The following pie chart illustrates that approximately 52% were teachers, 2.5% were principals and assistant principals, and only 1 percent were classified as central-office administrators.

PERSONNEL EMPLOYED IN U.S. PUBLIC SCHOOLS, 2006-07

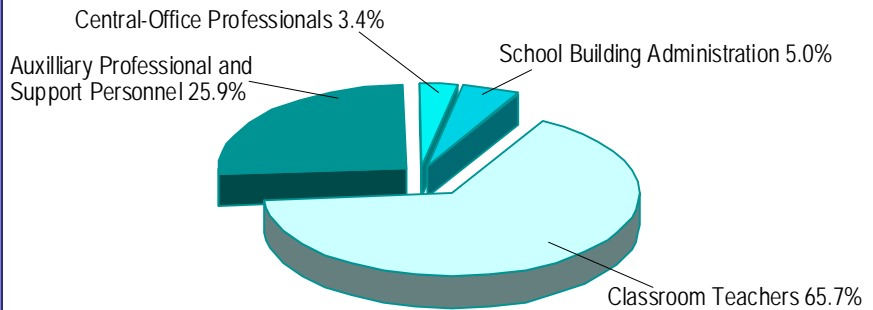


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Source: National Center for Education Statistics (2008). Public elementary and secondary school student enrollment and staff from the Common Core of Data. School year 2006-07. Retrieved from <http://nces.ed.gov/pubs/209305.pdf>.

ERS also found the largest portion of funds were allocated to salaries, retirement contributions, and fringe benefits for classroom teachers (65.7%) and the smallest portion went to central-office professionals (3.4%).

PERCENTAGE OF COMPENSATION PORTION OF THE BUDGET ALLOCATED TO COST OF SALARIES, RETIREMENT CONTRIBUTIONS, AND FRINGE BENEFITS, 2006-07*



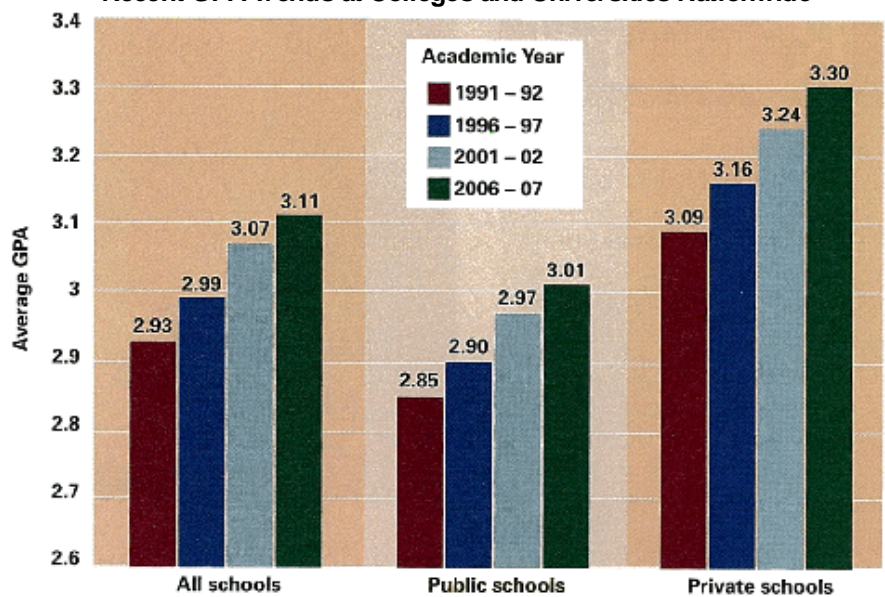
* Totals reflect average percentage, so may not sum exactly to 100%.

Source: Educational Research Service (2009). Staffing Patterns in Public School Systems: Current Status and Trends, Update 2009, ERS Research Snapshot, Alexandria, Virginia.

Q: How prevalent is “grade inflation?”

A: Rojstaczer (2009) reported from a six-year analysis of GPA trends at 180 public and private colleges and universities that there are more “A”s being handed out than ever before. In fact, “The more tuition you pay, the higher the average GPA.” The trend appears to be the opposite at community colleges with grades actually declining over time. No adequate explanation was given other than the improbable notion that grades may not be as important for students attending community colleges.

Recent GPA Trends at Colleges and Universities Nationwide



Source: www.gradeinflation.com

Q: Do infants exposed to anesthesia during surgery have a greater risk of developing learning disabilities?

Source: American Psychological Association (2009). Grade Inflation, *Monitor on Psychology*, Vol. 40. No. 6, June, Pg. 11.

A: Examining data from 5,000 children born during the six-year period from 1976 to 1982, researchers from the Mayo Clinic found that infants who received anesthesia three or more times before the age of three had double the chance of developing difficulty by age 19 in one of the cognitive skills including thinking, speaking, spelling or math calculations. This research did not address infants whose mothers' received some form of anesthesia during childbirth but rather children who received anesthesia directly as a result of surgery performed on them.

Q: Can "value added" methods be misleading when used to determine classroom teacher effectiveness?

Source: Wilder, R.T., Flick, R. P., Sprung, J., Katusic, S. K., Barbaresi, W. J., Mickelson, et al. (2009). Early Exposure to Anesthesia and Learning Disabilities in a Population-based Birth Cohort. *Anesthesiology*, 110(4), 796-804.

A: In a clever test of the assumptions of value-added models (VAMs) which can allegedly be used to determine the effectiveness of classroom teaching, Rothstein (2009) asks whether the same procedures can be applied to data in the reverse time order. The results defy logic – 5th grade teachers were found to have quantitatively important effects on 4th grade students' learning. The impossible findings from this carefully crafted research throw into question the entire legitimacy of inferences about teacher effects from conventional VAM studies. Rothstein interprets these results to mean that students are not randomly assigned to classrooms within schools, as is typically assumed in VAM research. The results indicate that "policies based on these VAMs will reward or punish teachers who do not deserve it and fail to reward or punish teachers who do" (Rothstein, 2009, p. 31).

Source: Rothstein, J. (2007). Teacher Quality in Educational Production: Tracking, Delay, and Student Achievement, Princeton Industrial Relations Section and Center for Economic Policy Studies, Princeton, NJ.

Q: Who should be included in pay-for-performance plans?

A. A survey conducted by the American Association of School Administrators indicated the majority (62%) of the 533 school administrators responding in 45 states indicated all staff should be included in performance pay plans (e.g., teachers, principals, and administrators). In addition, 44% responded they would be interested in using a pay-for-performance initiative that would reward only teachers while 20 percent reported they had no interest in such plans.

Source: American Association of School Administrators (2009). "Exploring the Possibility and Potential for Pay for Performance in America's Public Schools." Retrieved from www.edweek.org/links.

Q: Can effective teachers improve the performance of their peers?

A: According to a new study conducted by Jackson and Bruegmann (2009) social facilitation can work to enhance the performance of teachers; therefore, teachers can learn from their peers. This is important for a variety of reasons but it is particularly relevant to pay-for-performance plans. If

individual teachers receive the rewards from such plans rather than rewarding entire schools, teachers view each other as adversaries as opposed to teammates. The collegial relationship where teachers learn from each other is all but eliminated.

Source: Jackson, C. K. & Bruegmann, E. (2009). "Teaching Students and Teaching Each Other: The Importance of Peer Learning for Teachers." Retrieved from www.edweek.org/links.

Q: True or False: Fewer than 25 percent of ACT test-takers nationwide score at the college-ready level in all four academic areas.

A: True. The percentage of "college-ready" test-takers increased from 22% to 23% in 2009. In addition, minimal narrowing of the achievement gap was evident between racial/ethnic minorities and their white counterparts. In fact, ACT scores showed that only 4 percent of Black students and 10 percent of Hispanic students met college-readiness criteria in all four subject areas tested. This compares to a success rate of approximately 28 percent for white students and 36 percent for Asian students. However, the number and the diversity of test-takers increased considerably in 2009. Five states required all 11th-grade students to sit for the ACT. The inclusion of a large number of non college-bound students encouraged or coerced to participate surely accounts for a portion of the results depicting students ill-prepared to meet the demands of a college-level curriculum.

Source: Gewertz, C. (2009). Scores on ACT Show Majority of Students Not College-Ready, Education Week, Vol. 29, No. 1, August 26.

Q: Are Internet social networking web sites useful for educators?

A: Yes. According to a recent online survey of educational professionals with email addresses conducted by edWeb.net (2009), itself a social networking web site, 62% of the educators surveyed nationally reported they were members of such web sites. The two social networking sites with the highest membership included Facebook (86%) and MySpace (22%). Librarians reported membership most frequently (71%), followed by teachers (61%), and principals (51%). The observation was made that educators recognize the need for professional development in this area since their students already communicate using social networking and content-sharing tools and they need to catch up.

Source: MMS Education (2009). Preliminary Findings: A Survey of K-12 Educators on Social Networking and Content-Sharing Tools. Retrieved from www.edWeb.net.

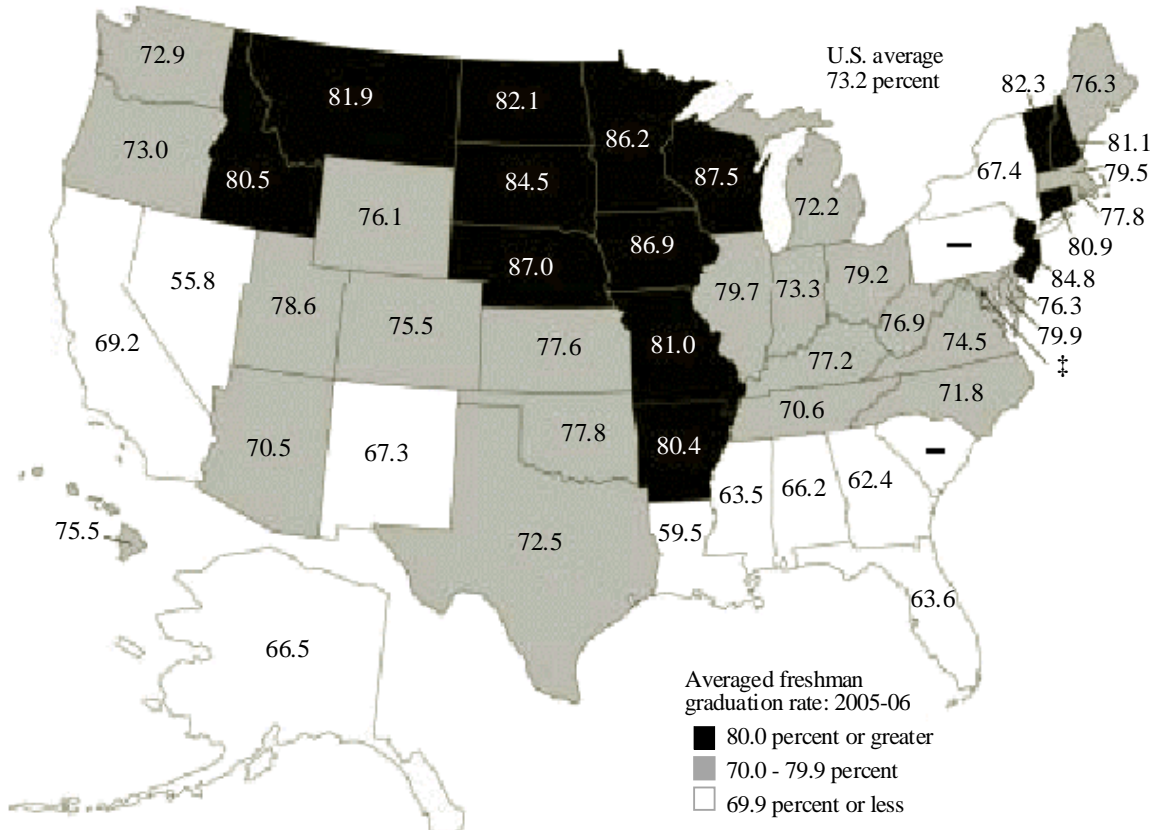
Additional resource on this topic: Blazer, C. & Romanik, D. (2009). Information Capsule: Are Social Networking Websites Educational? Research Services, Miami-Dade County Public Schools. Available at drs.dadeschools.net/InformationCapsules/IC0909.pdf.

Q: How likely is it for low income students to drop out of school compared to their higher-income counterparts?

A: Ten times more likely. A recent report from the National Center for Education Statistics (NCES) (2009) provides dropout and high school completion rates for the past three decades. The report also examines the characteristics of high school dropouts and high school completers for 2007. The following map displays the averaged freshman graduation rates

(AFGR) for the country. The AFGR estimates the proportion of public high school freshmen who graduate with a regular diploma in four years after beginning ninth grade and therefore provides an estimate of “on-time graduation from high school.” In 2005-06, the AFGR ranged from 56% in Nevada to 87% in Wisconsin. Florida was unfortunately one of ten states with an AFGR below 70% in 2005-06, as calculated by NCES.

**Averaged freshman graduation rates of public high school students, by state:
School year 2005-06**



— Not available.

‡ Reporting standards not met. (Too few cases for a reliable estimate.)

NOTE: The averaged freshman graduation rate (AFGR) is an estimate of the percentage of an entering freshman class graduating in 4 years. For 2005-06, it equals the total number of diploma recipients in 2005-06 divided by the average membership of the 8th-grade class in 2001-02, the 9th-grade class in 2002-03, and the 10th-grade class in 2003-04.

Source: Cataldi, E.F., Laird, J., and KewalRamani, A. (2009). *High School Dropout and Completion Rates in the United States: 2007* (NCES 2009-064). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC. Retrieved from <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2009064>.

Q: What can parents do to have a positive effect on adolescents' achievement?

A: Nancy Hill (2009) of Harvard University studied 50,000 students over a 26-year period to determine what kinds of parent involvement helped children's academic achievement. What she found was not revolutionary. In fact, it is what some parents have been doing for a long time, and that is emphasizing to their middle school-aged children how important academic performance is to their specific future job plans. Relating educational goals to occupational aspirations and discussing learning strategies to make those aspirations actually happen is what was found to be the most effective parent involvement strategy with this age group. Some students felt parents were interfering when they helped with homework, were putting pressure on them, or provided confusing and inaccurate assistance. Hill explained, "Lack of guidance is the chief reason that academically able students do not go to college. So communicating the value of education and offering curriculum advice about what to focus on helps these students plan their long-term goals."

Source: Hill, N. E. & Tyson, D. F. (2009). Parental Involvement in Middle School: A Meta-Analytic Assessment of the Strategies that Promote Achievement, *Developmental Psychology*, Vo. 45, No. 3, Pgs. 740-763.

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