



Thank you for your request to our REL Reference Desk regarding information specific to student achievement in full-time virtual schools as compared to traditional brick and mortar schools. Ask A REL is a collaborative reference desk service provided by the ten regional educational laboratories (REL) that, by design, functions much in the same way as a technical reference library.

Question: *How do full-time virtual schools perform in terms of student achievement relative to other public brick and mortar schools?*

Search Process

Key words and search strings used in the search: *virtual schools* AND student achievement AND *traditional school*

Search databases and websites:

1. ERIC: <http://www.eric.ed.gov/>
2. JSTOR: <http://www.jstor.org/action/showAdvancedSearch>
3. Google Scholar: www.google.com/scholar
4. Institute of Education Sciences (IES) Resources: <http://ies.ed.gov>
5. What Works Clearinghouse: <http://ies.ed.gov/ncee/wwc/>

Results:

Based on the database searches described above, there were no results that reflected rigorous research as defined by the US Department of Education-Institute of Education Sciences. There are studies that address virtual schools. However, these studies do not attempt to answer the question of student achievement in comparison with traditional brick and mortar schools. Below are some resources to guide your search for information pertinent to your question.

Sample Citations Retrieved: (NOTE: Abstracts and executive summaries are copied directly from the reports when possible to ensure accuracy):

Barbour, M.K., & Reeves, T.C. (2009). The reality of virtual schools: A review of the literature. *Computers & Education*, 52(2), 402-416. doi: 10.1016/j.compedu.2008.09.009

Abstract/Summary: Virtual schooling was first employed in the mid-1990s and has become a common method of distance education used in K-12 jurisdictions. The most accepted definition of a virtual school is an entity approved by a state or governing body that offers courses through distance delivery – most commonly using the Internet. While virtual schools can be classified in different ways, the three common methods of delivery are by independent, asynchronous or synchronous means. Presently, the vast majority of virtual school students tended to be a select group of academically capable, motivated, independent learners. The benefits associated with



virtual schooling are expanding educational access, providing high-quality learning opportunities, improving student outcomes and skills, allowing for educational choice, and achieving administrative efficiency. However, the research to support these conjectures is limited at best. The challenges associated with virtual schooling include the conclusion that the only students typically successful in online learning environments are those who have independent orientations towards learning, highly motivated by intrinsic sources, and have strong time management, literacy, and technology skills. These characteristics are typically associated with adult learners. This stems from the fact that research into and practice of distance education has typically been targeted to adult learners. The problem with this focus is that adults learn differently than younger learners. Researchers are calling for more research into the factors that account for K-12 student success in distance education and virtual school environments and more design research approaches than traditional comparisons of student achievement in traditional and virtual schools.

Cavanaugh, Cathy S., Barbour, Michael K., & Clark, Tom (2009). Research and Practice in K-12 Online Learning: A review of Open Access Literature. *International Review of Research In Open and Distance Learning*, 10(1).

Abstract/Summary: The literature related to online learning programs for K-12 students dates to the mid-1990s and builds upon a century of research and practice from K-12 distance education. While K-12 online learning programs have evolved and grown over the past decade, the amount of published research on virtual schooling practice and policy is limited. The current literature includes practitioner reports and experimental and quasi-experimental studies, both published and unpublished. This paper reviews open access literature in K-12 online learning and reports on a structured content analysis of the documents. Themes in the literature include steady growth and a focus on the benefits, challenges, and broad effectiveness of K-12 online learning. In addition, newly developed standards for K-12 online learning are emerging in descriptions of effective practices.

Miron, Gary, & Urschel, Jessica L. (2012). Understanding and Improving Full-Time Virtual Schools: A Study of Student Characteristics, School Finance, and School Performance in Schools Operated by K12 Inc. Boulder, CO: National Education Policy Center. Retrieved from <http://nepc.colorado.edu/publication/understanding-improving-virtual>.

Abstract/Summary: K12 Inc. enrolls more public school students than any other private education management organization in the U.S. Much has been written about K12 Inc. (referred to in this report simply as "K12") by financial analysts and investigative journalists because it is a large, publicly traded company and is the dominant player in the operation and expansion of full-time virtual schools. This report provides a new perspective on the nation's largest virtual school provider through a systematic review and analysis of student characteristics, school finance, and school performance of K12-operated schools. Using federal and state data, this



report provides a description of the students served by K12 and the public revenues received and spent by the company at the school level. Further, the report presents evidence from a range of school performance measures and strives to understand and explain the overall weak performance of these virtual schools. While the authors share the excitement of new technologies and the potential these have to improve communication, teacher effectiveness, and learning, they recommend that policymakers move forward cautiously and only after piloting and thoroughly vetting new ideas. The authors express hope that their findings will help inform policymakers and motivate researchers to carefully study various aspects of full-time virtual schools. They conclude that a better understanding of virtual schools can serve to improve this new model and help ensure that full-time virtual schools can better serve students and the public as a whole. Appended are: (1) Demographic Characteristics of Students Enrolled in K12 Schools, 2010-11; (2) Details on Publicly Reported Revenues and Expenditures for Schools Operated by K12 Inc., 2008-09; (3) State Performance Ratings, Adequate Yearly Progress Status, and Reasons for Not Meeting AYP; (4) Performance of K12 Schools on State Reading Assessments, 2010-11; (5) Performance of K12 Schools on State Math Assessments, 2010-11; and (6) Questions about Online Learning for Policymakers and School Leaders from the Center for Public Education Study. (Contains 14 figures, 6 tables, 83 notes and references, and 1 footnote.)

Quillen, Ian (2011). Virtual Ed. Faces Sharp Criticism. *Education Week*, 31(13), 1-2.

Abstract/Summary: It's been a rough time for the image of K-12 virtual education. Studies in Colorado and Minnesota have suggested that full-time online students are struggling to match the achievement levels of their peers in brick-and-mortar schools. Articles in "The New York Times" questioned not only the academic results for students in virtual schools, but also the propriety of business practices surrounding the use of public dollars for such programs. Meanwhile, two left-leaning magazines, "The Nation" and "Mother Jones," contended last month that policies pushed by former Florida Gov. Jeb Bush in the name of digital opportunities for students have the ulterior motive of funneling money to big technology companies. And the move into education by Rupert Murdoch, with his News Corp. conglomerate's purchase of the educational technology company Wireless Generation, has drawn protests from some teacher advocates at public appearances by the right-leaning media tycoon. Against this backdrop, educators who gathered at the Virtual School Symposium held early last month in Indianapolis appeared eager to strike a balance between working to address what they see as valid criticisms of their field and rebutting others they see as misconceptions. They also seemed to agree the burden is on them to tell their own story and prove their effectiveness.

Referrals

Organizations:

- Center for Educational Reform, <http://edreform.com>;



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- International Association for K-12 Online Learning: <http://www.inacol.org/>
 - Center on Building State Capacity and Productivity, <http://www.bscpcenter.org/default.aspx>

Federally Funded Resources:

- US Department of Education, Institute of Education Sciences (IES) Resources <http://ies.ed.gov>
 - Publication search engine available at: <http://ies.ed.gov/pubsearch/>
- What Works Clearinghouse, <http://ies.ed.gov/ncee/wwc/>.

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