Why do researchers often focus on the question of charter schools and innovation?

How do researchers define and measure innovation in K–12 education?

Is there evidence that charter schools are more innovative than other types of schools?

In what ways do charter schools innovate?

What leads some charter schools to innovate?

What are the consequences of innovation in charter schools?

Do charter schools produce innovations that spread to traditional public schools?

How are online charter schools growing? Is there evidence for their effectiveness?
Why do researchers often focus on the question of charter schools and innovation?

A core component of the basic argument in support of charter schools is the idea that they are able to be more innovative than traditional public schools. Some charter advocates might contend that charter schools, by existing outside the traditional state regulatory structure (which they criticize for its “one size fits all” approach to K–12 education), will provide the space for new educational models and services to emerge and develop. Other charter advocates might argue that by introducing “market mechanisms” such as competition and consumer choice into the public school system, charter schools will drive traditional public schools to innovate in ways that will boost student achievement and will better satisfy the educational needs of diverse student populations.1 Advocates in both camps also maintain that successful innovations will spread from charter schools to traditional public schools or that traditional public schools will try to compete with charter schools by becoming more innovative, thereby improving the public education system as a whole.

On the other hand, opponents of charter schools and some skeptics might argue that charter schools are not more innovative than traditional public schools. Or opponents and skeptics might argue that new schools and new practices are not the solution to the current challenges facing K–12 public education. Rather than creating new charter schools to introduce innovative practices, they might prefer to see more resources and energy going toward improving traditional public schools so that they can better serve their students.

The research has focused on innovation in charter schools to determine if charter advocates are correct in their claims that charters foster innovation, both within charter schools and in the public school sector as a whole, and to determine if innovation produces positive outcomes in student achievement and other indicators of performance.

How do researchers define and measure innovation in K–12 education?

Many academic studies have analyzed innovation in charter schools, but these studies vary in how they define, characterize and measure innovation. There appears to be a lack of consensus among educators and education researchers about how to evaluate whether charter schools innovate, how they innovate and whether those innovations spread to traditional public schools or not.2

At the most basic level, charter schooling itself is an innovation, because charters operate outside of traditional public school systems. Charter schools are created by organizations independent of school districts and overseen by authorizers that may be school districts or that may be other types of entities, such as universities or independent state agencies. For more information on charter school authorizers, see the Governance and Regulation section. But beyond charters’ governance structure, many researchers have defined innovation in charter schools by their implementation of administrative or instructional practices that are not otherwise used at traditional public schools.3
For example, some charters use innovative administrative practices such as merit-based pay for teachers or direct community and parent involvement. Some use innovative educational practices such as more technology in classrooms or hands-on learning.4

A comprehensive review of the research on innovation notes that some studies in the literature define a charter school’s practices as innovative only if they are not in use in traditional public schools in the charter’s own district. Other studies define a practice as innovative if it is new relative to the entire public school sector nationwide. Some studies count practices as innovative even if they have been used traditionally in other public schools but are nonetheless being used in new ways in a charter school.5

Is there evidence that charter schools are more innovative than other types of schools?

In 2008, 72% of all state charter laws explicitly mentioned innovation. However innovation is defined, state policies explicitly expect charter schools to be innovative. A 2008 summary of charter innovation research reported that 29 state laws authorizing charter schools—which at the time represented 72 percent of all states charter laws—explicitly mention that charters should foster innovation or serve as “laboratories” of “research and development.”6 A large majority of the laws call for innovation in teaching and instructional approaches in particular.7

Much of the academic research that has been published so far indicates that charter schools overall have been generally successful in implementing innovations related to their administrative and organizational structure, and they have not been as successful in implementing innovative educational practices or curricula.8 Some charter schools have implemented certain practices that are innovative in their district because the nearby traditional public schools do not use those practices. However, there are fewer examples of charters implementing practices that are entirely new to the public education sector as a whole, such as instructional practices that have not yet been tried in traditional public schools.

The degree to which charters innovate and the types of innovations they implement vary considerably across charter schools. This variation is based on several factors. For instance, the degree of charter school innovation differs across grade levels. Charter elementary schools and middle schools are more likely than charter high schools to be innovative when compared with traditional public schools in their districts—for instance, in providing merit pay for teachers or in the use of mixed-age student groupings.9 Other studies have suggested that charter school innovation might differ based on the type of operator that the school is run by—charters that were converted from traditional public schools and were

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run by the school district, for instance, were considered less likely to innovate in their administrative or instructional practices than charters run by mission-driven nonprofit operators.\textsuperscript{10}

Overall, the research on charter schools and innovation is for the most part limited to older studies, which were undertaken five to 10 years after the first charter schools were opened. A 2003 meta-analysis of these studies by researcher Christopher Lubienski is considered the most comprehensive summary of the literature to date. There is a need for more up-to-date research, and there is especially a need for studies that specifically assess if charter schools’ innovations are spreading to or affecting traditional public schools (see below).\textsuperscript{11}

**In what ways do charter schools innovate?**

Some researchers have categorized innovations in charter schools into two types: administrative practices and instructional practices. The categorization is not completely clean-cut, and there is some overlap between the types. There are also certain innovative practices that do not fit into either category.

**Administrative practices**

In 2003, researcher Christopher Lubienski analyzed and summarized 56 previous studies of innovation at charter schools in many states, including but not limited to Arizona, California, Colorado, Massachusetts, Michigan, Minnesota, Pennsylvania, Texas and Wisconsin.\textsuperscript{12} This type of comprehensive meta-analysis of the literature on innovation in charter schools has not been recently replicated. All of the studies Lubienski analyzed used different definitions of innovation and different methods to gather data and evaluate charter schools’ practices. These methodologies included interviews and surveys of teachers, school administrators, parents or students; classroom observations; and self-reported practices from charter school authorizers. Before including the studies in his summary, Lubienski vetted them for methodological rigor and for bias for or against charter schooling or specific innovations. After narrowing the sample from around 190 studies, he evaluated 56 studies to determine if the charter school practices reported in the studies were innovative or not. He assessed the presence of innovation by comparing the reported practices with those in the public school sector as a whole, with practices in place in the same state and with practices in other schools in the same districts as the charters. A practice was categorized as innovative if it existed nowhere else in the sector, state or district; or if it existed in other schools in the district but originated in the charter school.

According to the summary’s findings, there is evidence that many charters have implemented administrative and organizational innovations in the states studied, including the following:

- Pay raises based on teachers’ performance in the classroom
- Unique teacher licensure and hiring practices
- Marketing
- Advertising and targeting particular populations of students
Lubienksi credited these innovative administrative and organizational practices to the charter schools’ more autonomous governance structure and not to competition from other types of schools.\textsuperscript{13} Subsequent studies have largely corroborated Lubienksi’s analysis. Many researchers agree that charters are innovative in their administrative practices. A 2008 analysis of previous studies by a researcher with the Center on Reinventing Public Education—a research and analysis organization associated with the University of Washington Bothell that focuses on “innovative schools of choice” and that works to “develop, test, and support evidence-based solutions to create new possibilities for the parents, educators, and public officials who strive to improve America’s schools”—found evidence that charters were successfully innovating in organizational and administrative ways, with unique approaches to staffing, scheduling and accountability.\textsuperscript{14} Other recent studies have noted that charter schools are also innovating in their marketing practices. They are often very adept at targeting and attracting particular populations of students.\textsuperscript{15} However, another recent study has called into question the degree to which charter schools’ administrative practices are indeed innovative. A 2012 academic study authored by Vanderbilt University and Notre Dame University researchers drew data from the 2007–08 Schools and Staffing Survey, which is administered to charter and public school administrators and teachers by the U.S. Department of Education’s National Center for Education Statistics, to determine if charter schools across the nation were any more or less innovative in their practices than comparable traditional public schools in their own districts. The study looked at a total of 203 charter schools and 739 traditional public schools in 36 states. Overall, this 2012 study’s findings indicated that charters were not much more innovative than traditional public schools in the same district. These findings were consistent in the following areas:

- Academic support services, such as distance learning programs
- Staffing policies, such as merit pay
- Organizational structures, such as teacher “looping,” meaning that teachers stay with the same cohort of students through more than one grade level
- Governance, such as teacher or parent involvement in staff hiring

In each of these three areas of focus, only between 3.3 percent and 17.3 percent of the sample of charters had implemented a practice that was not being used at other traditional public schools within their same district. The one exception was tenure practices, where 92 percent of charters were considered innovative in their districts, because charters do not tend to offer tenure to their teachers.\textsuperscript{16} In addition, the authors found that innovation in charter schools was differentiated...
across grade levels: Charter elementary and middle schools were found to be, on the whole, more innovative in the context of their local school district than charter high schools.\textsuperscript{17}

However, unlike Lubienski’s 2003 summary, which accounted for innovative practices originating in charter schools that were later disseminated to traditional public schools in the same district,\textsuperscript{18} this 2012 study did not investigate the source of a practice when it was found to be present in both charter and traditional public schools in the same district.\textsuperscript{19} In this way, it is unclear if the study’s findings are evidence of charters’ lack of innovation, or of increased dissemination of charter practices into traditional public schools (see below), or of other possible outcomes. This discrepancy reflects another aspect of the lack of consensus about innovation in charter schools and in K–12 public education in general—that is, where innovations originate.

**Instructional practices**

Despite the evidence that charters are innovating in their administrative practices, studies have found little evidence that charter schools have implemented innovative instructional practices or curricular approaches in the classroom, either at a district level, at a state level or across the entire public school sector. However, researchers acknowledge that there is overlap between the two categories of innovations that are typically used. For instance, some charter school innovations at the administrative level—such as extended scheduling, smaller class size and teacher “looping”—could be considered innovative at the classroom level as well, given that they impact instructional practices.\textsuperscript{20}

Lubienski in his 2003 summary cited one clear example of a new classroom innovation in charter schools: online technology in the classroom and virtual learning, which he found to be used more frequently and to a greater extent in charter schools than in traditional public schools (see below). Overall, however, he found that “rather than developing new educational practices, charter schools are embracing curricular and instructional approaches already in use in other public schools. Indeed, a substantial plurality of charter schools employ a traditional ‘basics’ approach to instruction.”\textsuperscript{21}

**Charters are, on the whole, not particularly innovative in their instructional practices.**

Recent research largely confirms the analysis that charters are, on the whole, not particularly innovative in their instructional practices. The 2008 analysis of previous studies by a researcher with the Center on Reinventing Public Education at the University of Washington Bothell did mention some innovative curricular approaches that were not mentioned in Lubienski’s summary, such as schools with thematic focuses on subjects such as the arts, entrepreneurship or environmental education.\textsuperscript{22} Overall, however, that study concluded that charters are not completely fulfilling the calls for innovation, given the lack of evidence of broader instructional innovations.

In addition, the 2012 study by Vanderbilt University and Notre Dame University researchers, based on 2007–08 data from the Schools and Staffing Survey, also found that charter schools were not much more innovative than traditional public schools in their same district in terms of certain instructional practices. For instance, the study found that only 13.6 percent of the charter schools in their study, or a total of 22 charter schools, were innovative in their district for offering
a distance learning program. However, the study found that a higher percentage of total charter schools than total traditional public schools offered distance learning at all (17.9 percent of the sample of charters versus 12 percent of the sample of traditional public schools), which confirms Lubienski’s finding that charter schools were leading the public school sector in offering virtual education (see below). The 2012 study did not find charter schools to be significantly more innovative in their implementation of other instructional practices, such as work-based learning through internship programs or language immersion programs.

In general, contrary to expectations, the research has shown that charter schools have tended to replicate traditional instructional and curricular practices, as opposed to innovating and developing new ones.

Other innovative practices

There are some examples, however, of certain practices or groups of practices that are also considered innovative in their approach, or of charter schools that have been considered “highly innovative.” Neither is easily categorized as administrative or instructional practices.

For instance, Doug Lemov of the charter school network Uncommon Schools recently undertook a lot of firsthand research in order to develop a common vocabulary among teachers in a particular subset of charter schools that use a “no excuses” approach to learning—that is, a group of charter schools with innovative curricula that are centered around strong behavioral expectations. The common vocabulary of teacher practices—which Lemov thought all charter teachers, no matter their skill, education or “excellence” level (that is, how good they are at teaching), could implement in their classroom to get the best out of their students and get through lessons most effectively—is an innovative approach to curricular cohesion.

Finally, the U.S. Department of Education’s Office of Innovation and Improvement released a report in 2004 detailing their visits to eight top-performing—and innovative—charter schools. The eight schools were located across the country and were representative of a variety of grade levels, student demographics, curricular approaches and types of authorizers and operators. All of the schools had one unifying aspect: Each had a clearly defined mission that drove all aspects of the school’s curriculum, which in turn hinged on the school’s freedom to experiment with practices that weren’t offered within the school district’s traditional public schools. In addition to administrative and curricular innovations that have been noted in the research, other innovative practices that many of the schools shared—and that are not easily categorized—included the following, among others:

- Professional development
- Hiring additional staff (part-time teachers, staff specialists) that met the schools’ needs
- Personalized education plans
- Parent involvement, especially in governance
- Strong behavioral expectations
- Use of their flexible structure to adapt to changing circumstances or particular needs of students

The study highlighted what other researchers have also suggested, that charters that are mission-driven might also be more likely to be innovative.
What leads some charter schools to innovate?

Some research indicates that school choice and competition have reduced innovation.

There is no solid evidence showing that competition from other schools leads to innovation in charter schools—indeed, some research indicates that school choice and competition have reduced innovation. For instance, a researcher with the University of Tennessee, Knoxville argued in his 2009 study that competition creates a strong incentive for charters to stick to proven curriculum and instruction practices, rather than to try new and risky practices that may not pay off. This aversion to risk could explain Lubienski’s conclusion that many charters have implemented back-to-basics instructional approaches, or traditional and long-established educational practices.

Rather than competition driving innovation in charters, further research has argued that the innovations found in charter schools are probably a result of the schools’ different governance structure.

What are the consequences of innovation in charter schools?

There is not much evidence that innovation in charter schools has led to increases in student achievement, which was what many charter advocates expected. Indeed, some studies have found that innovative practices might negatively impact efforts to improve student achievement. A 2010 academic study, authored by Vanderbilt University and Notre Dame University researchers, used 2005–06 testing data and surveys of teachers and school administrators to find out if there was a relationship between instructional conditions—such as time spent on tasks and the use of innovative practices—and student achievement gains on annual math exams that were administered in more than 2,000 districts in 40 states. Gains in student achievement were measured by comparing students’ scores on the math exam administered in spring 2005 with their scores on the math exam administered in spring 2006. The authors measured innovation in instructional practices by surveying teachers in charter and traditional public schools about whether or not their school used practices that they considered innovative or unique or that were based on research evidence.

Overall, the study found no statistically significant difference between charter and traditional public school students and their achievement gains on the standardized math exam from one year to the next. However, the study did find that the use of innovative instructional practices at both types of schools had a significant negative correlation with student gains—the researchers’ measure of innovative classroom practices was associated with lesser increases in students’ scores from the 2005 math exam to the 2006 math exam.

Do charter schools produce innovations that spread to traditional public schools?

The evidence is mixed and inconclusive about whether or not charter school innovations have spilled over to or motivated innovations in traditional public schools. Researchers have speculated that these inconclusive results have stemmed from a lack of consensus regarding how to measure...
competitive effects, as well as from the difficulty of comparing results across distinct local and state contexts. In terms of the potential for competitive effects driving innovations in traditional public schools, the research has shown that there is a lot of variation depending on a district’s size, if the district is also the charter school operator, and more.

However, two recent studies that surveyed traditional public school principals in charter districts found similar perceived effects of charter school competition on traditional public schools in those states. The first, a 2009 study from a University of Michigan researcher and a RAND Corporation researcher, surveyed principals in California charter and traditional public schools. The study found that in six districts with charter schools, about 40 percent of traditional public school principals reported implementing at least one change to their administrative operations. About 25 percent reported changes in instructional practices, and 11.8 percent reported changes in curricular practices. The second, a 2014 academic study published by researchers at Boston College, surveyed Massachusetts traditional public school superintendents with charters in their district. Respondents in that study similarly said that they did feel a push to innovate in their schools, but mostly in administrative practices. The study found that nearly half of the superintendents said they were pursuing innovations in marketing and communications as a result of pressure from charter schools, while only 21 percent said charters had led them to implement new curricula and instruction.

While there is mixed evidence that competition from charter schools spurs traditional public schools to innovate, there is evidence that charters and traditional public schools are collaborating more often. Currently, traditional public and charter schools are entering into “compacts” to collaborate and share successful practices—such as teacher training, school culture and student success measures—in more than 20 school districts across the nation, including Boston, Chicago, Los Angeles and Philadelphia. Many of these compacts have been spurred or expanded by grants that the Bill & Melinda Gates Foundation, which “seeks to ensure that all people—especially those with the fewest resources—have access to the opportunities they need to succeed in school and life,” has awarded to compact cities and districts since 2010.

These compacts fulfill needs on both sides: Charters share practices that have worked for them, or that are unique to them, with struggling traditional public schools; and traditional public schools often provide buildings for charters to move or expand into. In addition, compacts allow charter and traditional public schools to discuss and work together on areas of shared concern, such as funding from their districts and inclusion of special needs students. For more information on these areas of concern, see our sections, Finances and Diversity and Inclusion. However, despite promising examples, these collaborations thus far remain rare.

How are online charter schools growing? Is there evidence for their effectiveness?

In the past decade, there has been significant growth in the number of students enrolled in virtual programs across the K–12 public school sector as a whole, not just in charter schools. In 2011, more than 1 million public school students—which includes charter and traditional public
school students—took at least some of their courses online. A 2013 report from the Evergreen Education Group—a private consulting group that “provides a range of education market advisory, research and analysis services to non-profits, government agencies and companies that are leading educational innovation through digital learning”—stated that 75 percent of the nation’s districts have at least some within-district online offerings for their students; at least 24 states and Washington, D.C., now have “blended” schools, which are full-time but incorporate online instruction; and 30 states and Washington, D.C., have fully online, multidistrict schools, which serve a total of 310,000 students nationwide. Florida has by far the most enrollments and most offerings in the online sector of any other state: In the 2012–13 school year, 240,000 Florida K–12 students took at least one course online.

The majority of the nation’s blended and fully online schools are charter schools. One of the largest charter school operators in the country offers exclusively fully-online schooling: K12 Inc. is the largest for-profit education management organization by number of students and serves more than 87,000 students in 26 states at 44 charter schools and 13 district schools. For more on K12 Inc., see our section, Charter School Operators. While charter schools are considered the “early adopters” of online and virtual educational offerings, traditional public school districts are rapidly expanding their online offerings as well.

Few rigorous studies have assessed the quality of online and virtual schooling, and there is little data available on the student outcomes of online learning in K–12 education. Advocates of online and virtual charter schools argue that the online learning framework allows for the delivery of high-quality, interactive and personalized education and increases access for disadvantaged students, in particular to high-level or specialized courses that might not be otherwise available to them. Opponents, skeptics and some researchers, on the other hand, are concerned that the complexity and rapid growth of the online and virtual school sector will result in problems of accountability and oversight. As a 2011 feature in the journal Education Next noted, the federal and state accountability systems that are in place to monitor brick-and-mortar charter or traditional public schools are able to extend their oversight only to fully online charter or traditional public schools—meaning that “there’s little data and few mechanisms for evaluating supplemental and blended programs.” Further, the feature noted that there was little consensus within the sector on standards to assess the quality of online and virtual schooling.

Few rigorous studies have assessed the quality of online and virtual schooling, and there is little data available on the student outcomes of online learning in K–12 education. Some virtual charter schools have come under scrutiny, however. For instance, in 2013, K12 Inc. reached a settlement out of court with a group of investors who alleged that the for-profit management company had misled them by exaggerating their students’ academic performance and withholding accurate information about student-teacher ratios. K12 Inc. denied any wrongdoing. School districts in Florida and California have raised questions about K12 Inc. as well.


