School Choice? Or is it Privatization?

MARTIN CARNOY

Educational Researcher, Vol. 29, No. 7, pp. 15–20

Dan Goldhaber’s interesting article on school choice (“School Choice: An Examination of the Empirical Evidence on Achievement, Parental Decision Making, and Equity,” December 1999 Educational Researcher) inadvertently poses the arguments for and against choice in a way that may obscure rather than illuminate policy. It is all well and good to define school choice as “any policy that is designed to reduce the constraints that current school configurations place on schools and students” (p. 16), but, as Goldhaber himself recognizes by the end of his article, “the bounds of the debate have shifted rather dramatically from whether to enhance choice within the public system to the question of public funding for vouchers that could be used at private schools” (p. 22). Given that fact, he should have considered whether the school choice arguments, including those that support charter schools, were ever about anything but increasing the role of publicly funded, privately delivered education. When choice is about privatization, we need to know much more about how such an educational system would look—particularly whether it would be dominated by religious or by for-profit schools, and how those schools would serve social as well as private goals.1

I argue, in this short response to Goldhaber, that we know much more about these questions than his analysis reveals, partly from U.S. social history, partly from what has occurred with vouchers and charter schools in the U.S., and partly from voucher plans in other countries.

Historical Lessons

Goldhaber points out, correctly, that school choice has always existed for those who could choose to live in one school district or another. Generally, property values and/or tax rates are higher in the “better” districts. He is also correct that magnet schools have served to provide a different kind of public choice. New York City has long had specialized, selective public high schools (entry by test or audition only), such as Bronx Science, Stuyvesant, and Music and Art (now called Laguardia). Such schools were accepted because they provided upward mobility for at least some talented low-income young people. In addition, certain groups have sent their children to private schools as a matter of course—upper-income Americans choose expensive prep schools, many Catholics, regardless of income, choose parochial schools, and more devout members of other religious groups are also committed to religious education.

This educational diversity was historically limited mainly to Whites. A high fraction of African Americans lived (and still live) in the South where schools were segregated until the early 1970s. Although funding for Black public schools began to improve significantly in the 1940s (Card & Krueger, 1992), they remained much poorer than White schools well into the 1980s. Choice was also limited for the vast majority of Blacks in the North because of segregated housing. Again, public schooling for African Americans in northern metropolitan areas has generally been marked by less funding and less attention concerning quality than public schooling for Whites. Much the same can be said about public schooling for Latinos in California, Texas, and New York City. Indeed, poor Whites in Appalachia have had the same problem: poorly funded schools and little accountability.

That unequal access to quality schooling and unequal choice are imbedded in a public educational system should have and has been the subject of intense criticism since the 19th century. Milton Friedman (1955, 1962), among others, blames bureaucracy for this state of affairs rather than consumers (voters) themselves. Chubb and Moe (1990) blame a bureaucracy that reflects political power relations in a democracy—interest groups, such as teachers’ unions, active parents, and textbook producers, that act on the public system to reduce its educational efficiency, particularly for those, such as low-income families, with little power. The only solution possible for Friedman and Chubb and Moe is to replace the current public education system, even though that would certainly not change the very power relations in American society that produced the current system.

The alternative they propose is an educational market. The alternative appeals based on the assumption that markets are far more efficient at allocating resources and distributing rewards than government bureaucracies—even when such bureaucracies are accountable to democratically elected officials. Milton Friedman’s argument for vouchers is that they would break government’s educational “monopoly,” would increase the number of options available to consumers, and would therefore increase consumer “well-being.” But, for Friedman, better schools are synonymous with more choice, not higher achievement. Friedman did not discuss improving educational quality for African Americans or Latinos or poor Whites in Appalachia. He did not even claim that private schools would be more academically effective than public schools. Rather, he focused on the superiority of markets over government bureaucracies in providing the greatest amount of consumer satisfaction and probably lower costs for a given amount of satisfaction. In other words, in a market you could get choice and the same

Martín Carnoy is Professor of Education and Economics at Stanford University, School of Education, Stanford, CA 94305-3096. He specializes in the economics of education, labor economics, and international education.
amount of education for fewer resources, but not necessarily better education for the same resources.\textsuperscript{2}

An historical perspective is important because the main political argument today for increased choice is based precisely on the lack of choice for low-income, inner-city ethnic minorities (or for that matter, low-income, small-town minorities). Much of the demand for educational alternatives is also coming from that same population. In applying the market “solution” to the “old” problem of minority (low-income group) education, critics of the public system implicitly claim that the market will do better than a century of political struggle and legal battles for equal access to better education. More choice is certainly a desirable goal in education. When parents get to choose a school for their children, they are likely not only to be more “satisfied” but also more committed and involved. Yet, when the “market” has entered into the struggle for equal education, it has mainly been on the side of Whites fleeing integration or majority minority inner-city schools. If anything, private choice has traditionally responded by ignoring or even exacerbating class, racial, and ethnic segregation and inequality.\textsuperscript{3}

Lessons From Current Experiences

With Vouchers and Charter Schools

What evidence from more current experiences do we have that markets can deliver on the promise of better education for the poor? Indeed, what evidence do we have that markets improve educational delivery at all? And what information do we have as to how an educational market, funded, say, by vouchers, would differ from the mainly public system we have now?

Goldhaber’s article covers some of this ground, but is limited in the answers it provides to these crucial questions. Because most U.S. private schools are religious schools, and most religious schools are Catholic, evidence regarding the academic “quality” of private versus public education is heavily weighted by Catholic-public school comparisons.\textsuperscript{1} Goldhaber does a good job of reviewing the studies on test-score comparisons. But even here there is some confusion. He often attributes test comparison results from studies of Catholic secondary schools (Bryk, Lee, & Holland, 1993; Coleman, Hoffer, & Kilgore, 1981) to all private education, including Catholic primary schools, for which there is currently no evidence showing higher test scores once social class background differences are accounted for. Although students in Catholic secondary schools hardly outperform public school students on achievement tests, they are more likely to finish high school and attend college. These are important outcomes, and public schools can learn from them. Catholic secondary schools focus much more on preparing their students for a college education and create an environment in which expectations are raised. However, as Goldhaber points out, we have little evidence on how selective these schools are compared with public schools. Neither do we know accurately how much Catholic secondary school education costs compared to public school education. Some guesstimates, such as Hoxby’s (1994), state that Catholic per-student costs are 40% less. But this is not based on actual cost studies that take account of subsidies, donated work, and administrative and imputed capital costs absorbed by the Church.

The more important questions to ask are whether under a voucher or charter school plan the typical alternatives to public education would be Catholic-like schools (or fundamentalist religious-type schools), and whether we even want the typical alternatives to be publicly subsidized religious schools. We cannot answer the first question until vouchers are actually offered on a more expanded scale. But we do have some evidence from Milwaukee and Cleveland of what happens when a voucher plan includes religious schools. In Milwaukee, the plan expanded beyond the initial experiment based on a cap of 1,500 vouchers offered to low-income students attending non-religious schools to a maximum of 15,000 vouchers offered to low-income students who can choose to attend any private school.\textsuperscript{5} The amount of the Milwaukee voucher is as large or larger than the cost per student in Milwaukee’s public schools. A significant percentage of the 8,000 students who have actually taken vouchers under the expanded plan are already attending existing Catholic schools, and few non-Catholic private schools have appeared on the scene in response to the expanded voucher. So expansion in Milwaukee is marked by serious supply constraints.

In Cleveland, the $2,500 voucher offered to almost 4,000 low-income pupils is only about one-half the spending per student in public schools and only 20% of the vouchers were offered to current private school students. Most of the vouchers were used in existing religious schools; but one-fifth of the voucher students attended two-for-profit private schools run by a wealthy entrepreneur, David Brennan, who was instrumental in getting the voucher legislation passed. It is telling that when Brennan failed to get the legislature to raise the amount of the voucher, he converted his Hope schools into charter schools, qualifying for the full public school per-pupil spending. This left virtually all pupils using vouchers studying in religious schools (Oplinger & Willard, 1999).

The shift by Hope from a voucher to a charter program raises the issue of trade-offs between (a) charter status, which usually entitles a school to about the same funding per pupil as for public schools but also financial and academic accountability to the public sector, and (b) a voucher, often lower than per-pupil cost in public schools, but usually requiring almost no accountability to the state issuing the voucher. For example, the voucher schools in Cleveland and in the expanded Milwaukee plan are not required to submit their students to state tests, and have generally refused to do so (for Cleveland, see Peterson, Howell, & Greene, 1999; for Milwaukee, see Legislative Audit Bureau, State of Wisconsin, 2000). Since the difference in Milwaukee between the value of a voucher and the amount charter schools receive per pupil is much smaller than in Cleveland, the incentive to shift to charter status for a private school is also much lower. Voucher plans could require considerable accountability (financial or academic) and state controls over what is taught, yet that would make vouchers of less interest to religious schools and of much less interest to voucher advocates, who, after all, are pushing vouchers (and charters) precisely to reduce or even eliminate public bureaucratic controls over schools.

The second question is a cultural/political/juridical one that reaches deep into our historical traditions. If religious schools are going to be the dominant form of private education to receive the benefits of public funding, this raises serious issues about whether in a secularized state we intend to directly subsidize religious training. For there is little doubt...
that religious schools provide a substantial amount of religious education. Greater emphasis on morality in education may be a good thing for improving academic performance, and so religious schools may possibly be an academically more desirable solution for low-income pupils than are private for-profit schools, but they are probably the least desirable from a constitutional perspective. In contrast, if for-profit schools were to be the main recipient of public funding, this may end up being less effective academically (they are even more likely to screen out high-cost students and reduce spending on personnel to make a profit), but would be more consistent with our “market” values.

Indeed, we would do well to ask why educational market advocates have gotten so involved with the Catholic Church in pushing for a market in education. It is true that the Church has competed with public and secular private schools for students. But it is hardly more “flexible” or “innovative” than public schools are in the product mix (curriculum) and teaching methods offered. Two recent studies have found as much variation among public school approaches to education as in Catholic schools (Chandler, 1999; Rothstein, Carnoy, & Benveniste, 1999). Catholic schools are also willing to run at a loss in order to attract students to their religious teachings—another “monopolist” on the block, but one whose pockets are not quite as deep as those of state governments.

Beyond the question of whether we, as a nation, should compromise on fundamental values of separation between church and state to stimulate school choice, we also need to pay particular attention to the equity effects of privatizing education at public expense. For the past 50 years, equity in the public system has been a major issue in our courts. Privatization advocates have also made lack of equity one of their major arguments against public education and for charters and vouchers. Goldhaber is well aware of equity’s importance in the choice debate, and he recognizes that school choice in the form of a voucher or charter plan runs the risk of increasing the disparity in education quality among social class groups. Yet, whether intended or not, he leaves the impression that choice’s impact on increased inequality is at least partially offset by the real prospect of increasing overall educational quality, and is therefore part of a potential trade-off between quality and equity. He also argues that, through certain safeguards, it is possible to reduce the inequality effect. In both instances his analysis bears careful scrutiny.

Goldhaber appears to accept two arguments made by choice proponents. One is that choice will lead parents to select more effective schools and leave less effective ones, improving overall educational efficiency. Consider Goldhaber’s statement that “parents are able to distinguish between schools of varying quality” (p. 23). What does this mean? The evidence cited by Goldhaber suggests that parents can identify schools with higher average test scores and students of higher social class. The point is well taken. Yet this hardly means that parents are choosing more “effective” schools, by either an economic or social definition of effectiveness. Parents have little information on how effectively school organization or personnel deliver higher student achievement once we correct for the social class of students and peer effects (the academic benefit students experience from being in school with more able and achievement-oriented students). It is perfectly rational behavior on parents’ part to seek out schools with higher scoring students regardless of the contribution of school personnel to those scores, since it probably does enhance their children’s educational outcomes. Nevertheless, parents’ (and schools’) ability to choose can have a corresponding negative effect on the children “left behind” and has important implications for private school profit-maximizing behavior. If, as Goldhaber argues, the evidence shows that upper-income and more educated families are clearly more likely to exercise choice, this implies that more educated families would not only be the ones to exit public schools, but would attempt to place their children in schools attended by higher scoring students with more educated parents, not necessarily those schools with more effective organization or more talented teachers. The likely result: greater social class and test score polarization among schools, without a corresponding improvement in educational quality (Manski, 1992). As Willms and Echols (1992) suggest, more educated parents may pull their children out of schools with high value added (net of peer effect) into less “effective” schools that do, nevertheless, provide a more positive peer effect through increased stratification.

This may already be happening in California’s charter schools. According to a study of 17 charter schools by Amy Stuart Wells and her colleagues (1998), charters are more likely to be formed in low-income areas but to draw higher educated parents from among the low-income. Hence, even though they are not “the elite organizations that many feared they would be” (Goldhaber, p. 19), they seem to be elite relative to the overall student populations in their school districts. This suggests both that the demand for alternatives to public schools is greater in low-income neighborhoods than in affluent suburbs, and that increased stratification will likely result even within such neighborhoods, given choice. If this were the cost of a significant overall improvement in urban education, it might be an acceptable way to approach educational reform. However, there is little evidence that such improvement would obtain even if those parents exercising choice tended to be more satisfied.

Goldhaber also appears to accept the argument that the beneficial effects (increased school effectiveness in delivering achievement) from privatization or competition among schools would offset part of the negative effects of greater stratification. Would parents’ tendency to select schools on the basis of potential peer effects lead to beneficial effects from competition? If parents chose schools on the basis of the school’s effectiveness in contributing to students’ achievement, schools would tend to compete by attempting to increase productivity of school personnel. But if parents chose schools on the basis of potential peer effects, schools would compete by trying to attract higher scoring pupils and more educated parents. Selectivity would be a positive attribute of a school and admission to all comers (characteristic of public schools) would be a negative attribute, no matter how “effective” a school might be. That would also increase the pressure for any schools with waiting lists to be selective. How would public schools in low-income neighborhoods compete in this kind of market? They would not really be able to. As they lost higher scoring students with higher educated parents, they would automatically be in less demand from more motivated parents, even if they were more “productive” schools.6
Lessons From Other Countries

When we move beyond the United States to other countries where voucher plans are national, such as Chile, we can learn more about what a privatized education system does and does not do. Combined with the information we have on smaller voucher plans and charter school expansion in the U.S., the Chilean data provide us with a fairly clear picture of a privatized choice reality. About 43% of Chilian children attend private primary schools, and all but 8% of those attend private voucher schools. Private voucher schools are both religious (almost all Catholic) and, approximately two-thirds, for-profit. The for-profit schools account for much of the 23 percentage-point growth of private enrollment after 1980. Fifty-seven percent of primary pupils attend municipally run public schools also largely financed by vouchers.

Our estimates show that when we correct for students’ socioeconomic background differences, average test scores in for-profit private voucher schools are slightly lower than those in municipal schools, and the scores in Catholic voucher schools, somewhat higher. For-profit schools spend less per pupil, mainly because they pay their teachers somewhat less than do public schools, and can do so because they are more likely to employ moonlighting, part-time teachers. This makes such schools more cost effective than public schools, not because they are more effective (their achievement is lower), but because they spend less per pupil. Catholic schools spend more per pupil than public schools (they charge higher tuition, on average, and have more expensive, largely donated facilities), but because they apparently “add” more academic value, they are about as cost-effective (McEwan & Carnoy, 1999a).

We were also able to estimate choice functions for families in Santiago, Chile’s capital. Parents with higher education and income tend to choose private schools, and do so because these schools have higher test scores and children with higher educated parents on average. This occurs even though most of these schools are actually less effective than public schools and, from parents’ perspective, are more expensive because they may charge tuition over and above the voucher (McEwan & Carnoy, 2000).

The most interesting aspect of these results is what they tell us about how private schools operate. Catholic schools in Chile—most pre-dating the 1981 voucher reform—are able to achieve higher test scores than public schools, even when we account for pupil social class differences, and do so by spending more per pupil. For-profit schools, which sprang up like mushrooms in Chilean cities when vouchers were made available, are no better at producing high achievement scores for a child of a given socioeconomic background than are public schools. They are better at attracting higher scoring students. They do that by locating themselves, on average, in higher income neighborhoods and tending to be selective (Parry, 1996). For-profit schools are also better at reducing costs per pupil than are public schools (public schools in Chile are more constrained in their hiring practices), and they do this by paying their personnel less. This implies that the line of least resistance for private for-profit voucher schools in competition with public schools is to attract higher scoring students by establishing themselves as somewhat higher socially than the public schools in their area, and then hold down costs. This can be interpreted as a positive effect of markets, but it hardly fulfills the promise of raising a community’s pupil performance.

It is difficult to isolate the effects of private school competition on the performance of students in public schools. The usual measure of competition is the density of private schools in a district (in Chile, a municipality). If competition has a positive effect on public school performance, public school students should do better in those districts with a higher proportion of private schools. But we need to correct for the possibility that private schools move into districts where public school performance is especially poor. Private schools also tend to “cream-skim”—that is, to take the best students from public schools. This would bias downward the impact of competition. Using data over a 15-year period, we attempted to correct for these biases and found that increased competition from private schools did have a small positive effect on the average test scores of one large group of public schools in Santiago catering to lower middle-class students. For the rest of Santiago’s schools, the effect of increased competition was statistically insignificant, and for the rest of Chile, where the vast majority of students attend school, the effect of increased competition on students in public education was slightly, but significantly, negative. Moreover, we found no significant effects on overall test scores (public and private schools together) in those municipalities where private school density increased more rapidly (McEwan & Carnoy, 1999b).

Thus, there is no evidence from Chile that a national voucher plan now operating for almost 20 years has had a positive effect on the achievement outcomes of the millions of students who went through the system during that time. The plan may have saved some tax money in the 1980s and early 1990s but it did so mainly because private for-profit schools were able to pay teachers less than public schools, not because of greater efficiencies in using resources. On the other side of the ledger, there is some evidence that privatization increased stratification in the 1980s, as private schools cream-skimmed better (higher social class, more able) students from public schools and tended to locate in higher income municipalities (of Chile’s 330 municipalities, 90 still have no private schools—as expected these are the most rural and lowest-income). Studies in other countries with voucher plans, such as New Zealand, also argue that they increase stratification among students (Lauder & Hughes, 1999).

Conclusions

Goldhaber is no advocate of vouchers or other forms of educational privatization. Nevertheless, his analysis unintentionally obscures the politics of choice and leaves us with far less insight into the implications of the school choice movement than the empirical data allow. In the current political context, choice means privatization, and privatization means, in effect, public subsidies for religious education. Further, much of the privatization debate emphasizes the need to help those with relatively little school choice—low-income families—get access to “better” schooling, namely, privately run inner-city alternatives to public education. Yet despite current focus on voucher experiments in inner cities, privatization advocates have little interest in limiting such reforms to the poor, and with good reason. Reform efforts that focus mainly on the poor have not fared well historically. The current ballot initiative in California for a voucher plan (a $4,000 voucher for all of California’s stu-
Goldhaber is therefore correct to “sound a note of caution” regarding the equity consequences of choice (p. 23). He is also correct in concluding that politics are at the base of the push for subsidizing private schools. But he has not attended to the interaction of these two fundamental conclusions. If the politics of privatization are focused on privatization per se, why would equity considerations be any more than a tactic aimed at achieving the larger goal? From this perspective, Goldhaber’s suggestion that “several steps might be taken to mitigate these potential negative demographic consequences” (p. 23) seems a bit naïve. Publicizing choice programs could, for example, have negative effects for students if the private schools available have lower value added than public schools or if relatively few places are available and most parents do not get their first choice of schools. If schools operate for profit, or even as non-profit private organizations, it would be almost impossible to prevent them from selecting students. Even in the allegedly strictly controlled Milwaukee experiment, the private schools involved managed to turn away students with “special problems.”

The most plausible of Goldhaber’s “regulations” intended to maintain equity is that vouchers be limited to low-income families, as they are now in Milwaukee, Cleveland, and other cities. By limiting vouchers, it is more likely that some high-quality private for-profit or non-profit providers would enter the inner-city market. To achieve that goal, the amount of the voucher would have to be as high or perhaps higher than current public school costs per student, especially if the number of vouchers is larger than existing Catholic school excess capacity. The original Friedman idea that private schools would deliver education equal in quality to current public education at one-half the price has never been realized in practice. Private providers would demand at least as much as per-student costs in local public schools and would avoid taking special education students. This is even more likely to be true for new private school entrants into the market. These are likely to be less efficient, on average, than current providers that have an established clientele and a track record. Witness the rise in voucher values in Milwaukee, and Cleveland’s Hope Schools (the only for-profit provider in the Cleveland voucher plan) shifting toward much higher “vouchers” associated with charter status. The political question then becomes whether legislators will pass voucher plans that provide large vouchers to low-income families but not to middle-class families. Goldhaber is correct that limiting vouchers to the poor (or giving them much larger vouchers than those given to families with higher incomes) would reduce the impact of choice and privatization on stratification. Yet, to understand the implications of choice reforms, it is also important to analyze the political probability of such a policy.

This still does not solve the problem of improving the quality of education even for those low-income students able to get into private schools. When the available information is assembled in the U.S. and abroad, the evidence suggests that “marketizing” education increases school choice for a certain fraction of parents but most likely does little or nothing to improve overall student achievement. Our data from Chile suggest that even in the best of cases, 15 years of intense competition improved achievement in public schools by only a small amount. “Value added” in U.S. private schools is by the most optimistic accounts only slightly higher than that in public schools. Studies comparing voucher or private schools with public schools find no differences or only small differences in achievement. So privatization will solve neither the gap in achievement between low-income children and higher income children nor the gap in access to high-quality schools. Low-income Americans will still get less than adequate education, even though some will switch schools. It is not just that “enhanced school choice is unlikely to be a panacea,” as Goldhaber puts it (p. 24). Available evidence suggests something more: A privatization reform would likely increase educational inequality without improving educational effectiveness. In terms of our core values of social equity and separation of church and state, privatization could also leave the educational system worse off than it actually is, despite all its flaws.

Notes

1 Those interested in these issues should read Levin (1998).

2 Goldhaber’s statement that “market efficiency refers to the maximization of utility, not the efficiency of educational delivery” (p. 23) is ambiguous as it reads. Market efficiency does refer to efficient allocation of resources in schools in order to produce the maximum amount of education. Goldhaber may be defining educational delivery as academic output, and he probably means that parents’ utility functions may not coincide with producing the maximum test score or other measures of academic output. Instead, parents may want more security, moral education, and so forth. But given current trends, it is likely that higher test scores are important to parents, as he claims.

3 In the late 1960s, others less interested in markets per se and more interested in equalizing educational opportunity proposed voucher plans that would be limited to low-income families and would provide a voucher worth more than the average amount of educational spending allocated to low-income schools (Coons & Sugarman, 1978; Jencks, 1966). It is telling that those ideas did not get far in an era much more favorable to equalizing access to good education.

4 The proportion of private school enrollment that consists of enrollment in Catholic parochial schools has declined considerably since the mid-1960s. At that time, enrollment in Catholic schools represented about 87% of private school enrollment, while total enrollment in religious schools represented 92% of private enrollment. Today, enrollment in religious schools comprises 85% of total private school enrollment, but less than 60% of enrollment in religious schools (50% of total private school enrollment) is in Catholic schools, with the rest in a variety of other religious schools. Nevertheless, in inner cities the proportion of private school students enrolled in Catholic schools is higher than the national average (see National Center for Education Statistics, 1970, 1998).

5 The number of students actually taking advantage of the initial plan varied from year to year, but remained near the cap. In the new plan, the actual number of students covered under the plan in 1999–2000 was 8,000. In addition to the citations in Goldhaber’s piece, the reader should refer to the recent report of the Wisconsin legislature on voucherers in Milwaukee (Legislative Audit Bureau, State of Wisconsin, 2000). In a recent article, William Sanders (1999) finds no significant competition effect in Illinois private school density on student achievement in public schools.

6 To some extent, private schools in urban areas, particularly in Santiago, are able to “free ride” on the public education system, which provides the main employment draw for individuals into the teaching profession and an employment and pay “base.”

7 Beginning in 1990, the newly democratic Chilean government began a successful program to offset the effects of stratification by investing in new materials, teacher training, and physical upgrading in the lowest performing of Chile’s schools. We estimate that this P-900 program, as it was called, had a positive effect on achievement that was as large as the positive effect we estimated for competition in one group of Santiago municipalities (McEwan & Carnoy, 1999b).
Catholic schools will accept smaller vouchers because they are currently operating at less than capacity. Vouchers can also be used to subsidize current Catholic school students. Once capacity is filled, however, it is unlikely that the parish or archdiocese will open more schools to provide more seats at the same low price.

References


Manuscript received February 23, 2000
Accepted July 28, 2000

Looking for an easy to use but really high-power Qualitative Data Analysis program? Want to stay close to the data even with the biggest projects? N5 delivers, and keeps on delivering, no matter what your demands.

Following QSR’s famous and most widely used N4, the new N5 incorporates all the facilities of N4 (including Merge) plus many new benefits and controls for accessing and exploring your data:

- One step document import
- Save time - fast, simple coding
- Enhanced closeness to data
- Intuitive management & search tools
- Power features for large projects

Wherever you are: visit www.qsrinternational.com for details on free demo’s, inquiries and support

Showing the way in qualitative software