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Coleman Report set the standard for the study of public education

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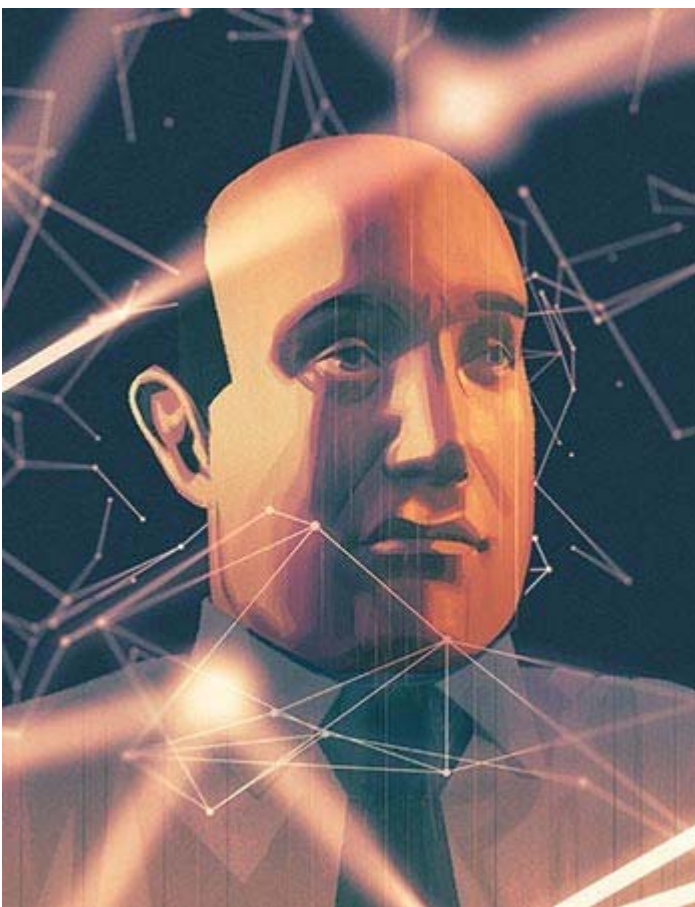


Image : Illustration by Corey Brickley

In the spring of 1966, James Coleman, a Johns Hopkins sociologist, checked into a motel in Washington, D.C., and shut himself off from the outside world. He did so because of a single paragraph in the Civil Rights Act of 1964. Section 402 required that the commissioner of education conduct a survey and report to the president and Congress "concerning the lack of availability of equal educational opportunities for individuals by reason of race, color, religion, or national origin in public educational institutions." The report had to be filed within two years of the law's enactment, so once President Lyndon Johnson made it official, in July of 1964, the clock had started ticking.

The Office of Education, then inside the U.S. Department of Health, Education, and Welfare, spent the next several months debating how to move forward. By the time the bureaucratic bickering had ended, the commissioner had reached out to Coleman and handed him an unprecedented task: to gather a team and survey the entire United States to determine whether public education was fair. Coleman had a little over a year to meet the congressional deadline.

In the fall of 1965, Coleman's team set about administering one of the largest social science surveys ever conducted, using questionnaires of his design. Very little was known at the time about America's schools. Funding and resource distribution were a mystery. Test scores of whites and blacks had never been compared because standardized tests, ubiquitous today, did not yet exist nationwide. And no one had conducted studies analyzing the elements necessary for successful learning. Coleman's questions were ones that no one had asked, let alone to such a wide degree. And from the beginning, he had taken this mammoth task and made it even harder by asking more questions. Rather than simply look at the resources and funds going into schools as directed by the government, Coleman wanted to understand outcomes. How well were kids learning? What might influence a child's capacity to learn? Was it teachers? Peers? Families? "One of the interesting things about Jim and the way he approached his work is that he didn't like being told what to do," says Karl Alexander, a professor emeritus of sociology at Johns Hopkins and a colleague of Coleman's. "He'd have a mandate, and he'd do it, but then he'd do what he wanted beyond that. The congressional intent [with the report] was to understand where we stood in terms of school desegregation. You didn't have to be a genius to realize we hadn't gotten far down that path. And the report did survey segregation. That was the first cut. But my goodness, it went so far beyond that."

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Several months later, it was time for Coleman to sequester himself in the D.C. motel and analyze the results with the help of a mainframe computer housed at Educational Testing Service in Princeton, New Jersey. Coleman, then 41, had one change of clothes. He slept little. Scattered about the room were printouts analyzing surveys that had been filled out by 600,000 students and 60,000 teachers from 4,000 of the nation's public schools. Every day, new computer printouts arrived. James McPartland was a young graduate student who studied under Coleman and worked on the report. "He was holed up in that motel—not quite a flophouse, but definitely not elegant—waiting for the pages of analysis that he'd requested to be crunched by the computers in Princeton," McPartland says.

The federal government had already formed a hunch about what Coleman would find: A decade after *Brown v. Board of Education*, segregation was still the norm in most schools, and some districts were likely underfunding schools with predominantly minority students. The Equality of Educational Opportunity report, the formal name of Coleman's study, would determine whether this was true. McPartland, who went on to become a professor of sociology at Johns Hopkins, was hired by the Office of Education to help administer and co-author the EEO with Coleman. "What the government really expected was that the South was discriminating by having lousy schools for poor and minority kids," he says. The government, armed with this new data, planned to strong-arm discriminatory school districts by threatening to withhold federal funding.

But Coleman was not a man who worked under assumptions, and he refused to let the government's hypotheses bias his survey. His interest was not in supporting a presumption but in amassing evidence and subjecting it to rigorous analysis to learn what was happening inside the nation's schools. When Coleman and his team were done, they had a 737-page report filled with complex data sets, analyses, graphs, and charts that upended many assumptions about integration, education, and funding. Yes, segregation still existed, but what the survey unearthed about the nation's educational system surprised most everyone, including some of the researchers. The physical amenities of a school weren't the most important factor in a child's educational success, and neither was funding, which, it turned out, was relatively equal within regions. Instead, a student's family background, coupled with a diverse socioeconomic mix in the classroom, appeared to be the biggest determinant of how well a child would learn. No one had said this before, backing it up with data. What's more, Coleman was the first to

document what came to be known as the achievement gap—African-American children were several grade levels behind their white counterparts in school.

As McPartland recalls, "I think it was Christopher Jencks writing for *The New Republic* who said: 'This reads like an obscure agriculture department report, but there's dynamite in the results.'" Soon, influential public figures, such as sociologist and politician Daniel Patrick Moynihan, were convening national conferences to review the results. The EEO, quickly dubbed the Coleman Report, exploded into one of the most contentious and talked about studies of education in America, one that 50 years on is still being parsed by academics, policymakers, and educators alike. "It is pertinent to today's political debates about class and social mobility," George F. Will [wrote in *The Washington Post* about the report's 50th anniversary in July of 2016](#). "So, let us now praise an insufficiently famous man, sociologist James Coleman."

Born in Bedford, Indiana, in 1926, Coleman didn't set out to be a sociologist. He first studied chemical engineering at Purdue University. But he started taking evening classes in social psychology while working as a chemist. He switched focus and went back to school to study social sciences, earning a PhD in sociology from Columbia University in 1955. When he arrived at Johns Hopkins four years later, Coleman founded what would become the university's first sociology department, though back then it was called Social Relations.

Coleman concerned himself with a broad range of inquiry—theory, research, modeling, methodology, and policy research. At heart, he was interested in social organization, and he once said he identified with the French sociologist Émile Durkheim, who studied the relationship between individual freedom and collective social responsibility. Coleman believed that the social sciences could both demonstrate and influence how society organized itself.

Something of Coleman's chemical engineering mind informed his work. Sociology was still a burgeoning field when Coleman joined its ranks. Officially coined as such in 1838, "sociology" wouldn't be formalized within institutions of higher learning until the late 1800s. It had its roots in philosophy and social theory, and the application of quantitative and qualitative methods capable of analyzing complex data was still nascent in the 1960s.

Coleman earned a reputation for applying scientific method to social problems and attracted a group of rigorous students in the 1960s. Among them was McPartland, who had earned a master's degree in statistics. He found a mentor in Coleman. "He was known for a mathematical approach," McPartland says. "He wanted to make sociology a more rigorous discipline."





Image : Illustration by Corey Brickley

Coleman used this scientific approach in service of brave questions. With the EEO, his team wouldn't simply study schools, it would study what was happening to the students inside those schools. Drafting the questionnaires, they effectively created the first national assessment test to determine how children were faring and what might be contributing to their performance. They asked such questions as how students felt about their performance and what they believed influenced their success. The report also studied teachers, who took self-administered tests as a part of the survey in order to determine their baseline knowledge and what they brought to the classroom.

Getting the questionnaires distributed throughout the country was no small feat. "Large data sets were rare. No one knew how to handle 600,000 questionnaires," McPartland says. "There was no technology back then to do this kind of thing." Educational Testing Service was tasked with distributing and administering the questionnaires, and McPartland was responsible for overseeing the process. Less than a month before the survey had to be out in the field, however, not one school had responded to the invitation to participate. "We had a study without a sample," McPartland says. McPartland, desperate for administrators to respond, went to the Princeton Western Union office and sent an urgent note to impel schools around the country to reply: "This is an act of Congress, please call ETS this week." McPartland went back to ETS and explained what he had done. "You'd better get a bank of phones ready," he told them. Coleman didn't know about the response problem when McPartland picked him up from the Newark airport. "I told him the story of what I'd done, and he was deadly silent. Finally he said, 'This phone thing better work.'" It did. Schools began signing up.

Once the surveys were in, McPartland kept them close and carried sample sets of the study around in boxes. One evening, after a particularly grueling week, McPartland and a colleague took the train back from a meeting in D.C. to ETS in New Jersey. They decided to relax over a cocktail and walked to the café car. After food and a martini or two, they walked back to their railcar to discover it gone. Unbeknownst to them, it had split off to go to another city, with the box of survey samples still inside. Coleman spent the better part of the night hunting the boxes down.

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With the questionnaires in, the difficulty became how best to analyze the responses.

Coleman needed to rank the results for the government and provide an answer as to the foremost challenges facing education. Was it school facilities, funding, teacher quality, social networks? Was it segregation or geography or curriculum? The question was how to weight myriad variables, considering they were all tangled up with one another. "There's this problem called multicollinearity, and it means that all of the variables are related to one another," McPartland says. "No one knew back then how to separate one variable from another when they're all intertwined. Regression analysis [statistical modeling to estimate the relationships between variables] wasn't new, but this whole way of figuring out and ranking the importance of variables—that are not only related to the outcome but are also related to one another—how do you do that?"

Coleman invented the technology and methodology as he went, McPartland says. "He allowed the data to reveal what was unique and to come to conclusions that ranked the facilities, the teachers, the climate, etc."

One of the foremost things Coleman succeeded in doing with the EEO was using scientific evidence to parse

whether existing education policies were working. "He was a vanguard in that regard because that was not common back in 1966," says Eric A. Hanushek, an economist at Stanford University who specializes in the economics of education. "The Coleman Report helped introduce the scientific study of major areas of U.S. life and government policy and put the focus on whether we were getting anything out of these efforts, as opposed to simply asking, What are we putting in?"

As it turned out, the government had been right about segregation still existing but wrong about the funding implications. Regional resources between black and white schools were, by and large, even. But the research led the team to conclude that the most important predictor of a child's performance in school wasn't the school building or resources. It was home life. It was family. Coleman explained it this way in 1972: "All factors considered, the most important variable—in or out of school—in a child's performance remains his family's education background."

The other important revelation in the report was the pivotal importance of the social and economic composition of the student body.

Other kids strongly influenced a child's achievement. "The research results indicate that a child's performance, especially a working-class child's performance, is greatly benefited by his going to school with children who come from different backgrounds," Coleman said. "If you integrate children of different backgrounds and socioeconomics, kids perform better." This didn't necessarily mean children from more affluent families; it could also mean kids whose parents placed more value on college, regardless of income.

The report also illuminated what would later become known as the achievement gap. The survey results found that while resources may be relatively equal within regions, educational outcomes were not. Black students were testing several grade levels below their white counterparts in math and reading. "It was understood that the performance of poor children [both black and white] lagged behind that of the majority of whites, and the thinking was that this was due to deficiencies in the schools they attended," Alexander says. "Coleman used test score disparities as indicative of unequal opportunity and then sought to find the sources, looking beyond indicators of school quality. They introduced that idea as a way to understand educational inequality, and it was radical in its framing."

The report revealed student sentiments as well, McPartland says. It showed that black kids more than white kids felt that their future was not something they could influence, or as McPartland put it, "When asked, 'What's more important in school, good luck or hard work?' the black kids would say, 'Good luck, because it's not in my hands.'" The report explained it this way: "It appears that children from advantaged groups assume that the environment will respond if they are able enough to affect it; children from disadvantaged groups do not make this assumption but in many cases assume that nothing they will do can affect the environment—it will give benefits or withhold them but not as a consequence of their own action."

Finally, Coleman dispelled the idea that responsibility for education rested solely on teachers. A child's learning is a "function more of the characteristics of his classmates than of those of the teacher," he said.

The findings weren't what people had anticipated. The Office of Education quickly determined the report to be incendiary. It tried to divert attention from the findings with a tepid summary, according to McPartland, and also set out to minimize publicity. If the Office of Education wanted to make sure the press and the public overlooked the breadth of the report's findings, they picked the perfect day to publish it. The introduction, written by Commissioner Harold Howe to the president and Congress, is dated July 2, 1966—the Saturday of Fourth of July weekend.

The EEO was a particular disappointment to those who wanted to use it as justification for more money for schools. "The report found disparities across the country, but within regions the disparity of resources given to blacks and whites was not that large. It wasn't what people expected," Alexander says.

Then there were the complex truths regarding family influence and socioeconomics. When asked why there was

an initial reluctance to accept the report, Coleman later speculated that the solutions suggested by the findings would be extremely difficult to achieve. "They imply that persons in the community can no longer take the easy way out by sending their children to a homogeneous school"—that is, flee to the suburbs and all-white schools—"and at the same time pay for other children, lower-class children, also to attend a homogeneous school," Coleman said. What America needed were schools "where children of all different social classes intermingled," he contended.

In the ensuing years, the EEO would be wielded by conservatives and liberals alike to argue differing agendas for education. Conservatives reasoned that if resources didn't matter and it was all about families, then there was no reason to spend more money on schools. "People said, 'Look! Money doesn't matter!'" McPartland says. "But we didn't really measure where the money was being spent, and we've learned since then that money does matter if it's spent well. Money well invested can make a big difference in student outcomes." Liberals used the results to advocate for more busing and integration of schools, and to argue that schools were important in closing socioeconomic gaps.

While the 737-page report contained a wealth of information that changed the way education was studied and evaluated, it did not contain prescriptions, nor did it advocate specific programs. But after President Richard M. Nixon made statements to Congress supporting integration and busing, the debate that ensued led Coleman to write a flurry of editorials for newspapers and magazines around the country, affirming that though the report advocated integration, it had never argued for busing. In fact, when liberals pushed for busing, Coleman surprised them by saying it was a bad idea because it only increased white flight and the rise of segregated suburbs. "Let me not underemphasize that class desegregation can cause serious problems when implemented in an unstable way, where a set of persons who have not been together comes together without preparation in a new setting," he said about forced busing.

Coleman was not a man who allowed political ideology to sway him, and his politics were inscrutable. His ideology was data. "Coleman wanted to talk about the evidence," Hanushek says. "Over all the years I knew him, I never knew if he was a conservative or a liberal in a political sense." And while the EEO never advocated specific solutions, Coleman became, over the years, a strong proponent of various policies. "He was out front talking about vouchers, he got embroiled in a controversy about white flight and busing," Alexander says. "Not only was the report itself a powerful and influential document, it helped to establish Jim Coleman as a leading authority on education and policy reform."

The EEO report didn't just influence the debate around education policy; it also greatly influenced the field of sociology. "The report was the epitome of what was possible at that time," says Joyce L. Epstein, director of the Johns Hopkins Center on School, Family, and Community Partnerships and a research professor of education and sociology. She took classes from Coleman and received her PhD in 1974. The report "paved the way for researchers and young scholars coming up, like me and my colleagues, to ask: How can we improve on this, now that we have a better way to think about the questions that need to be asked? And this allowed us to build the field of sociology of education research."

Coleman understood the research and report to be a momentous opportunity for his field. Sociology was a young science with something to prove. Congress, he told his team, had thrown down the gauntlet. Could they use research to better inform public policy? "We had a historic opportunity," McPartland says. "We all felt from the very beginning this sense of importance, but also this sense of great urgency."

The Coleman Report succeeded in starting a debate about educational policy and interventions that has yet to run its course. People are still in dialogue with the findings from 1966, still questioning how interventions might improve student outcomes. In October of 2016, Stephen Morgan, Bloomberg Distinguished Professor of Sociology and Education at Johns Hopkins, along with Alexander, convened a national gathering of scholars and educational policymakers, including Secretary of Education John King. The new research presented at the conference, *The Coleman Report at 50: Its Legacy and Enduring Value*, was then published in a special online

edition of *RSF: The Russell Sage Foundation Journal of the Social Sciences*.

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Stephen Morgan

Morgan says many of the findings still hold water after five decades. Yet this has not always succeeded in shaping effective educational policies around the report's most central discovery. "The conclusion that family background is far more important than people realized has remained a solid empirical finding for 50 years, and Coleman and his colleagues were the first to show the power of that relationship," Morgan says. "But that insight has not done enough to shape policy. Too many proposals for innovative educational reforms fail to recognize how important family is. Policymakers have dropped the ball on that insight."

In 2016, Hanushek also delved back into the report to understand where we've come as a country in the half-century since the EEO. Have we succeeded in creating policies to redress concerns first identified by Coleman, such as the achievement gap? "The Coleman Report was the first time that we ever had any evidence about achievement differences between blacks and whites on a broad scale. We know how large the achievement gaps were in 1965, and we know what they are today, so how much have they changed?" Hanushek asks. "At this rate of improvement, and if we continue at the pace we've been going on, it will take two and a half centuries to close the achievement gap between blacks and whites in our public schools."

For sociologists of education who picked up Coleman's mantle of using evidence to positively shape policy, it means there is still much to be done. "The point of that report was to paint the picture and tell us what is. And by telling what is, it opened up the questions for so many more researchers, up until today, to ask: What might be?" Epstein says. "Researchers are still having a conversation with Coleman. He gave us the beginning of the story, and now we must carry on from there."

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