



Scientific Method in the Real World: Experience Corps and the Johns Hopkins Study

By 2005, Experience Corps had been helping older people and schoolchildren for a decade. The public health program, operational in 13 cities, aimed at improving the wellbeing of older adults, especially in poor and minority communities. But instead of encouraging them to exercise and eat better, it promoted health through active community engagement. Specifically, Experience Corps placed retirees in elementary schools, where they worked with children to improve literacy and other academic skills. Although the program seemed intuitive, its design—from the number of hours volunteers worked, to the number of volunteers placed in each school, to the kind of tasks they performed—was carefully defined, and based on years of scientific research.

Preliminary evaluations of Experience Corps suggested it held considerable promise. Interviews, surveys and classroom visits documented that volunteers felt better both physically and mentally, and reported a renewed sense of purpose. They weren't the only ones to benefit. In classrooms with Experience Corps volunteers, children's literacy scores improved and behavioral problems decreased. Chronic absenteeism fell. Both teachers and principals credited the program with transforming the school environment.

Such observational and anecdotal evidence was encouraging. But gerontologist Linda Fried, co-designer and co-founder of Experience Corps, wanted a science-based evaluation of this scientifically designed program. A rigorous study would be necessary in order to get the Experience Corps model integrated into large-scale, federally funded public health initiatives.

In 2005, Fried, who headed the Center on Aging and Health (COAH) at Johns Hopkins University, planned to approach the National Institutes of Health (NIH) for a grant to fund a five-year, randomized controlled trial (RCT) of the Baltimore chapter of Experience Corps. She and her team of researchers envisioned two sets of control groups: one for the older volunteers and one for the schools. Schools would be randomly assigned to host volunteers, or not. Volunteers would likewise be randomly assigned to participate in the high-intensity school-based program, or not. This would allow researchers to isolate Experience Corps as a variable, and determine its impact on both the volunteers and the schools.

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But as the researchers assembled the grant application in 2005, they faced increasing dissent over methodology. Greater Homewood Community Corporation (GHCC), the community-based organization that operated Experience Corps in Baltimore and which had so far cooperated with the Johns Hopkins team, was adamantly against randomizing schools. GHCC was concerned that no school would want to be in the “control” group and that the study would harm relationships it had built over decades with individual schools and principals. What’s more, Baltimore’s mayor and City Council argued that schools with the greatest need should have priority in receiving volunteers. As the process advanced, it also became clear that locating at least one Experience Corps school in each councilmember’s district would ensure greater political support for the program and the study. These demands would preclude strict randomization.

Fried, as the grant’s principal investigator, had to weigh the options. The NIH required rigorous scientific method—would it accept COAH’s proposal if the schools were not randomized? Even if NIH accepted a different methodology, what would that methodology look like? Would the results be valid and convincing? If the researchers insisted on strict randomization, they risked losing political support, which could endanger the long-term survival of Experience Corps in Baltimore. Or GHCC could simply refuse to carry out the study altogether, and continue delivering Experience Corps without Johns Hopkins. In a series of internal meetings and in consultation with executives at GHCC, Fried and her team considered how best to proceed.

Origins: Gardner and Freedman

Experience Corps was the brainchild of several “parents.” John Gardner coined the name in 1988. Gardner, who held the post of secretary of Health, Education and Welfare (HEW) under President Lyndon Johnson, traveled the country in the 1960s visiting senior centers funded by HEW. (In 1979, HEW split into two entities, the Department of Education and the Department of Health and Human Services.) In his travels, Gardner observed that health and financial problems were not the only afflictions facing the elderly. As he later explained in an interview, “There was loneliness, boredom, a need to be needed—something to get up for in the morning.”¹

Gardner drew on his observations in a concept paper, drafted in 1988, in which he proposed creating “The Experience Corps” to revitalize civil society by finding ways for older Americans to serve their communities. He stressed that their roles should be meaningful and substantive, drawing on retirees’ ingenuity and capacity to lead and manage their own service program. Seniors would not only give back to society, but also have a “great adventure” and an opportunity to grow and learn. “We believe, without being immodest,” Gardner wrote in the draft

¹ Marc Freedman and Linda Fried, *Launching Experience Corps: Findings from a Two-Year Pilot Project Mobilizing Older Americans to Help Inner-City Elementary Schools* (Oakland: Civic Ventures, 1999), p.10.

paper, “that the large numbers of us over age 65 constitute a rich reservoir of talent, experience and commitment potentially available to the society.”²

The concept took a step toward becoming reality when Gardner met Marc Freedman at a conference in 1992. Freedman, founder of Civic Ventures (later renamed Encore.org), a non-profit that developed and piloted models for delivering social services, had been studying the role that older people might play in improving lives of the young, particularly through one-on-one mentoring. At the conference, Gardner, the keynote speaker, implored the audience to seek innovative ways to address society’s ills—broken families and splintered communities—rather than become mired in nostalgia for the past. “Stop lamenting the loss of old patterns, and ask what steps must be taken toward new patterns,” Gardner urged the audience.³ After the speech, Freedman approached Gardner to share his own ideas. Gardner pulled from his briefcase his treatise on Experience Corps. It closely resembled Freedman’s own thinking.

Freedman began to research how the concept could work on the ground. He visited Foster Grandparent programs around the country in which, among other activities, adults over age 55 went into schools and worked with children with special needs. Foster Grandparents was run by the Corporation for National and Community Service (CNCS), a federal agency that also administered AmeriCorps and other service-oriented programs. Freedman spoke to Foster Grandparents directors and found some had developed their own ways of doing things that fell outside the established program guidelines. At one school in Maine, for example, 10 volunteers worked together, forming a critical mass that made a significant impact on the school while offering the volunteers a strong support network that reinforced their commitment to, and benefit from, the work. (Typically, Foster Grandparents were dispersed thinly across many schools in an effort to “share the wealth.”)

This gave Freedman what would become one of the tenets of the Experience Corps model: critical mass. Members would be deployed in sufficient concentration to be a presence wherever they were serving. Teams of volunteers would provide mutual support and friendship. In addition, Experience Corps would be open to everyone over age 50, not just low-income individuals (as was Foster Grandparents). It would also seek to recruit older men (only five percent of Foster Grandparents were men).⁴ Freedman set out his plan in a 1994 study for the Commonwealth Fund.⁵ He sums up his intentions at the time:

² John W. Gardner, “The Experience Corps,” concept paper, 1988. See Appendix 1.

³ John W. Gardner, “Reinventing Community,” speech to the Carnegie Council on Adolescent Development, December 11, 1992.

⁴ Marc Freedman, *Prime Time: How Baby Boomers will Revolutionize Retirement and Transform America* (New York: PublicAffairs, 1999), 183-184.

⁵ Marc Freedman, *Seniors in National and Community Service* (New York: The Commonwealth Fund, 1994).

From my perspective, what Experience Corps was really, at least the initial idea, was to take the best reforms that Foster Grandparents program directors were suggesting...and to combine them in a new program model that included a much more contemporary name: John Gardner's great "Experience Corps" moniker.⁶

Experience Corps Model: Fried

Concurrent with Gardner and Freedman's work, Dr. Linda Fried, then vice chair of the Department of Medicine at Johns Hopkins University, was developing a related theory and model. Through the 1980s, Fried had studied how health could be maintained into the oldest ages. Her scientific research showed that a major cause of ill health among the elderly was purposelessness. Also a practicing gerontologist, Fried found that many of her patients needed a substantive role in society as much as they needed medical care.⁷ Yet when she "prescribed" meaningful volunteer work to her older, depressed patients, they often reported back that they were unable to "fill" the prescription. If they could identify an organization they wanted to be part of, the role they were given—often licking stamps and sealing envelopes—did not feed their sense of purpose, nor take advantage of skills and talents acquired over a lifetime.

What would constitute a "meaningful" role for older adults? It wasn't a purely subjective matter to Fried. Research on human development pointed to one factor as being highly correlated with a sense of purpose among older adults: generativity. To be "generative" meant knowing that one was making a difference for future generations, and leaving the world a better place. But most roles for older adults did not satisfy this common yearning. Volunteer opportunities would have to include a generative aspect to be truly meaningful to most older adults, Fried reasoned.

Physical activity was another consideration. Fried had researched the connection between activity and health among the elderly. It was a challenge to keep retirees mentally and physically active. Many shunned exercise programs, and TV often became a way to fill the empty hours of retirement. Could a generative volunteer role provide the vehicle for physical activity? By pursuing "selfless" interests, could seniors help themselves? A positive feedback loop might keep them active—and healthy—much longer.

Another component of the volunteer role would be its level of intensity. Seniors would need to spend enough time each week—over an extended period—to get an adequate "dose" of prevention. A significant time commitment would also allow volunteers to make an impact on the

⁶ Author's telephone interview with Marc Freedman, on October 31, 2013. All further quotes from Freedman, unless otherwise attributed, are from this interview.

⁷ Fried *et al.*, "Building communities that promote successful aging," *Western Journal of Medicine* 167 (1997): 216-219.

intergenerational problem they were addressing. Moreover, it would let them build up a community of peers that would counter loneliness. High-intensity service opportunities would maximize physical, social and cognitive activity.

It was not just about helping individuals, from Fried's point of view, but also about addressing a larger societal issue. As baby boomers retired and people lived longer, the elderly would become a larger proportion of the population. These people had much to contribute to society. If they were not encouraged to stay active, however, their health would deteriorate and they would become an increasing economic burden. In the 1980s, some in government and academia were predicting a generational battle, as public funds shifted to the care of the elderly and away from education and other services for the young.

From these various strands of research, Fried wove a new model of senior service that would be an intergenerational "win-win." It would demonstrate that the untapped social capital of seniors could be harnessed to improve society and, at the same time, promote the health of older adults in an aging society. Fried organized a research team and looked for programs that would allow seniors to meet community needs.

She zeroed in on serving children as being well-suited to the interests and generative impulses of older adults. If a synergistic relationship could be created that benefitted both children and adult volunteers, there could be improved health, reduced healthcare spending, and the opportunity to improve the lives of the next generation—making their own future old age a brighter prospect. In that sense, it would be a virtuous cycle. Given the high needs of inner-city elementary schools, Fried felt these should be the focus of the program. She describes her thinking:

I had realized that people will not show up—and they won't stay—for a health promotion program. But they'll show up and stay for something that deeply matters to them.... I wanted to be able to show that older adults also could bring impact on our most important societal needs, and from my point of view, that need is that our kids stay in school. You can't have a successful democracy unless our children are succeeding. And it's everybody's responsibility. So I wanted a model that was inclusive of people of all backgrounds, all abilities. Everybody in.⁸

Fried and Freedman join forces

In 1994, Fried learned of Freedman's study for the Commonwealth Fund advocating volunteer opportunities for older adults. The two met and found that, from different disciplinary

⁸ Author's interview with Linda Friedman in New York City, on February 14, 2014. All further quotes from Fried, unless otherwise attributed, are from this interview.

backgrounds, they had arrived at a remarkably similar vision. They decided to collaborate on the design of what they named, in tribute to Gardner, Experience Corps. Bringing together their ideas, Fried and Freedman agreed upon 10 essential elements of the model:⁹

Elementary schools. The program would focus on grades K-3 in public elementary schools.

Intensive service. Volunteers would put in a minimum of 15 hours per week throughout the school year, to maximize the impact on both the children and the volunteers themselves.

Incentives. Like Foster Grandparents, Experience Corps would offer volunteers a modest stipend (up to \$200 per month) to offset transportation costs and encourage participation among those on fixed incomes. This would not be means-tested.

Diversity. Unlike Foster Grandparents, Experience Corps would include participants at all income levels and encourage “younger” volunteers (55-70 years old) as well as older ones. It aimed to have one-third of the Corps be men.

Meaningful roles. In addition to taking on meaningful classroom roles, identified by school principals, Experience Corps volunteers would be encouraged to contribute their individual talents to other projects within the schools.

Leadership. Experience Corps volunteers, drawing on their years of work experience, would take on much of the responsibility for managing the program.

Training. Volunteers would be trained to understand the needs of children and schools and deliver high-quality service.

Learning. In keeping with John Gardner’s view that Experience Corps should be a “great adventure,” volunteers would be given opportunities to continue learning and developing.

Critical mass. Experience Corps would concentrate volunteers both within an institution and within a neighborhood, to increase the chance of “turning the tide” on entrenched problems and producing measurable impact on health and academic indicators.

Team concept. Volunteers would be placed on teams of 6-10 to serve simultaneously in a given school. Team-building exercises and opportunities to congregate within their institution would help build bonds among the volunteers.

When they had completed the design, Freedman received a surprising proposal. Tom Endres, director of the National Senior Service Corps, the division of CNCS overseeing Foster Grandparents and RSVP (a sister program to Foster Grandparents), wanted to test the model. According to Freedman, Endres was a “relentless reformer,” open to new ways of running the programs within his purview. Moreover, Endres knew how to get money. In late 1994, he convinced Congress to appropriate \$1 million for Experience Corps through a line item in the federal budget that supported innovation through the use of “demonstration projects.” Nothing had been funded through this vehicle before. But now Experience Corps would be.

⁹ Freedman and Fried, *Launching Experience Corps*, pp.17-19.

First demonstrations

Experience Corps was to be “demonstrated” in five cities: Philadelphia; Minneapolis; Portland, Oregon; Port Arthur, Texas; and the Bronx in New York City. Under the joint leadership of Fried and Freedman, the demonstration took place over two years, 1995-1997, including a six-month planning period in each location followed by an 18-month pilot. Gardner served as chair of the project’s advisory group.

Recruitment of volunteers was difficult. Organizers could not rely on testimonials or word-of-mouth appeals from existing volunteers, as the program was new. Because the project was small and the budget tight, a mass marketing campaign did not fit the bill. It took time to find and persuade older adults to commit 15 hours per week to a program they had never heard of. Each city’s team of organizers developed a range of recruitment tactics.

One helpful approach came from the AARP (formerly the American Association of Retired Persons), a non-profit advocacy group that lobbied on behalf of older Americans, which offered to use its mailing lists to recruit volunteers living in the neighborhoods surrounding the target schools. This focused approach, coupled with the AARP’s imprimatur, was successful. In the Bronx, over 200 people applied for 30 posts. Another key to boosting recruitment was the offer of a monthly stipend. For older adults living on fixed and modest resources, these funds made it possible to serve by reimbursing out-of-pocket expenses (bus fare, classroom materials, lunch and the like).

By summer 1995, Experience Corps was slated for a total of 12 schools in the five pilot cities, and by early 1996 volunteers were at work. At that point, evaluation became a priority for Fried and Freedman. Researchers from Johns Hopkins and Civic Ventures, joined by an independent evaluator, made 30 site visits to the demonstration schools. They interviewed program staff, volunteers, children, principals, teachers and other school staff, conducted focus groups, and observed volunteers in the classroom. Using a questionnaire, researchers assessed teachers’ attitudes about having older people help in the classroom, both before and after the pilot. To assess the impact of intensive service, another questionnaire collected self-reported health and wellness indicators from the volunteers.

The results were promising. Teachers noted that kids who had been far behind in reading and math skills were catching up, thanks to the one-on-one attention. The children also benefited from the warm attentions of grandparent figures; many lacked adult affection in their lives. Behavior and attendance improved. Moreover, the senior volunteers were thriving. They reported feeling more purposeful and connected. Indeed, many were so satisfied that they said they were “getting” more than they were “giving.” Their health seemed to improve also. For example, after their service, 56 percent agreed with the statement “I have a lot of energy,” compared to just 14

percent beforehand. In interviews with the researchers, volunteers expressed the selflessness that motivated their work. One volunteer, nicknamed by the kids “Grandpa Irv,” told evaluators:

I really believe that I’ve made a difference in a lot of little kids’ lives. I give a lot of those little kids love that they don’t get. You know, there’s a lot of these little children that don’t get the love that they need. And you can tell. I try to be a role model for them. That’s the main thing. And I believe it helps them become better students.¹⁰

Despite the positive evaluation results, the two-year demonstration of the Experience Corps model did not parlay, as Freedman had hoped, into reforms in the Foster Grandparents or RSVP programs. Nor was it accepted as a new program under CNCS. As Freedman sees it, intense lobbying from vested interests in the older, established programs turned Congress against further funding of the Experience Corps model.

But the response from the schools and volunteers had been so positive that ending the program in the five demonstration cities was out of the question. So Experience Corps organizers in each city sought funding from a variety of sources, including foundations, individual donors, local departments of education and the discretionary budgets of principals. Over the following years, Experience Corps continued to grow in these cities, while Freedman and Civic Ventures helped launch additional affiliates in other locales. Meanwhile, Fried decided to try to bring the program to Baltimore, home of Johns Hopkins University, where she was now director of COAH, an interdisciplinary center that brought together the university’s schools of medicine, public health and nursing.

Experience Corps to Baltimore

Fried chose Baltimore as an affiliate city because she saw another strong rationale for continuing Experience Corps past the two-year demonstration period: deeper evaluation. The initial results of the five-city demonstration project were positive and encouraging—but were they sufficient? Many funders were swayed. However, the results provided only initial evidence of the validity of the program; it did not assess the full impact of a mature program. To attract significant federal support, both political and financial, and to get long-term funding from large foundations would require an evaluation that went beyond focus groups and questionnaires. Fried knew a randomized controlled trial was needed to establish the value of the Experience Corps model.

Properly done, an RCT would establish two sets of treatment and control groups: for the older adult volunteers, and for the schools in which they were placed. Volunteers would be randomly assigned to the treatment group (i.e. be placed in an Experience Corps school) or the

¹⁰ Freedman and Fried, *Launching Experience Corps*, p.21.

control group. Those randomized to the control group would be directed to another agency that offered traditional low-impact volunteer opportunities for seniors. Schools likewise would be randomly assigned to the treatment group and receive a cohort of volunteers, or to the control group and go without. This would allow researchers to isolate Experience Corps as a variable, and determine its impact on both the volunteers and the schools in which they worked.

Unfortunately, except for tracking the children's academic progress, resistance had emerged to conducting any further evaluation at the original demonstration sites. Fried cites a cultural stigma against the elderly that was prevalent in the 1980s and 1990s. Many favored helping children achieve academically; fewer supported the aged, who were often perceived as soaking up resources needed for the young and "selfishly" opposing the allocation of property tax revenues to schools. According to Fried, the initial backers of Experience Corps "didn't want to have any evaluation of the older adults, because it shouldn't be ever understood, be perceived, as being designed to be good for older people. 'It's just for the kids.' And so they wouldn't actually let us do a full and formal evaluation."

So in 1998, Fried decided to establish Experience Corps in Baltimore, where she and her colleagues at COAH could evaluate it. In addition, Fried wanted older residents and schoolchildren in her home city to benefit from what she considered a powerful program. "It was my judgment that it was going to work, and I wanted it in my own city, too," says Fried.

GHCC. The first step for Fried and her team of researchers at COAH was to recruit as partner a community organization with access to public schools. They found Greater Homewood Community Corporation (GHCC), a nonprofit that had been serving North Central Baltimore City since 1969. GHCC had a number of programs focused on community building and strengthening schools. It was already operating in six elementary schools in its immediate area and had strong relationships with the principals. This level of integration into the neighborhood would make it easier—or possible—for COAH to recruit schools and volunteers to Experience Corps and the RCT.

GHCC could also benefit from a partnership with Johns Hopkins. It would allow the organization to offer the community a high-quality, effective program, with most of the initial funding responsibility placed on the academic partner. Sylvia McGill, then director of public education programs at GHCC, describes how the two came together:

[GHCC was] operating under the theory that you can't turn neighborhoods around if you don't have schools for people to send their kids to. I was out in the community trolling for programs we could bring into our schools that would improve the quality of education. Somebody knew Linda [Fried] was trying to get [Experience Corps] into Baltimore City schools and that I was looking for these programs—they connected

us. You couldn't get into Baltimore schools unless you knew somebody, and I was already working with six principals. We had a ready-made situation.¹¹

The two organizations agreed to join forces in 1998. As the partnership developed, the relationship between Fried at COAH and McGill at GHCC became the core of the joint venture. Each was attuned to the other's world. Fried been a social worker and community-based health provider before becoming a physician and academic. McGill understood the exigencies of an academic study. Her husband was an administrator at Johns Hopkins and her father had been a professor. Mutual understanding and personal affinity would be critical throughout the course of the partnership, especially as each organization, and its constituents, measured success differently. Tensions would soon arise.

Baltimore pilot (1999-2000)

From the start, Fried envisioned a major, multi-year evaluation of Baltimore Experience Corps, with large sample sizes of both volunteers and schools and with both groups randomized. Such a study would cost a lot of money to execute—well over \$1 million a year. The National Institutes of Health was the place to seek funding. But any NIH grant application would have to show strong preliminary evidence that Experience Corps—and a long-term evaluation of the program—were feasible in Baltimore. Results from the earlier demonstration projects would not be enough. Those evaluations did not meet strict scientific standards and they did not include Baltimore.

Pilot. The first step was to conduct a two-year pilot study in Baltimore. During this period, COAH and GHCC could test methods for recruiting volunteers, see whether they could attract and keep schools involved, and pilot methods of evaluation. The results would have to convince the NIH that both the program and the study were doable, and that Experience Corps was promising enough to warrant a costly RCT.

It was unclear whether older people would be willing to volunteer for Experience Corps *and* take part in the study. Some in inner-Baltimore's predominantly African-American community mistrusted Johns Hopkins. The university's reputation had been tarnished by rumors that it had performed unethical research on black residents in the past. Other charges related to the Henrietta Lacks case, when the university collected cells from a black woman and used them for research without informing her family.¹² According to McGill, negative perceptions took some effort to

¹¹ Author's interview with Sylvia McGill in Baltimore, on November 14, 2013. All further quotes from McGill, unless otherwise attributed, are from this interview.

¹² In 1950, Henrietta Lacks, a poor African-American woman, died of cancer at Johns Hopkins Hospital. During treatment, researchers had collected cells from her body; after her death, they bred the cells in vitro, creating the

dispel. “It took a while for people to understand that this [study] didn’t have the potential to be damaging,” says McGill.

Another, potentially larger, obstacle to recruitment would be persuading volunteers to agree to random placement in either the “treatment” group or the “control” group. In other words, potential volunteers would have to accept that there was a 50 percent chance of *not* being able to do what they really wanted: work with vulnerable kids at schools in need. If placed in the control group, they would not be eligible for the stipend, either—and results from the five-city demonstration showed that this was a significant incentive for people of modest means. Moreover, those in the control group would still have to submit to regular interviews and physical check-ups, just like those in the treatment group, so that their health data could be later compared.

McGill recalls that recruitment of volunteers was arduous. She and Fried held scores of information sessions at community centers, churches and retirement homes. It wasn’t clear that they would be able to attract enough volunteers ahead of the intended start of the pilot in early 1999. They didn’t want to let down the principals of the six schools that GHCC had signed on (three would be controls). If it proved impossible to get volunteers to agree to be randomized, there would be no hope for a larger RCT; the NIH grant would be moot. But Fried was optimistic. “If I had acceded to what I was being told by everybody, which is that nobody would ever accept randomization, we never would have had the pilot, and we would have no evaluation data,” she says.

In the end, McGill and Fried were able to meet the quota. McGill cites the fact that COAH, when pressured by McGill and executives at GHCC, was eventually persuaded to reduce the commitment for control-group volunteers from two years to one; after that, they could join the treatment group and work in the classroom. Fried credits their success to an honest and respectful approach:

What I said to potential volunteers was, ‘We think this program could really matter. But the only way we can see if it really matters, and that we’re not wasting your time and the kids’ time, is if... we evaluate it honestly. And the only way to do that is to ask you to accept a lottery.’ Which is another way to say we’re going to randomize.

With this, subjects tended to understand and agree with the purpose of the study. Nevertheless, Fried recalls with fondness one recruitment meeting that ended in a prayer session, in which the leader of the prayer beseeched the Almighty to randomize her into the treatment group. Fried notes that the common wisdom at the time was that African-Americans and people of

world’s first “immortal cell line.” The cells were used in thousands of medical experiments over the years, including work by Jonah Salk leading to his cure for polio. But Lacks’ family remained unaware of the use of her cells until the 1970s. Some have criticized Johns Hopkins for failing to inform or compensate the family.

lower income would not volunteer, and would certainly not agree to be part of an RCT. That view was disproven. "People are fussy—as they should be—that if they're going to volunteer, they want it to be in a program that they think is making a difference. They want their time well used," she says.

Program changes. In addition to changing the commitment of control group volunteers from two years to one, McGill recalls other ways that COAH adjusted its methods to accommodate the reality on the ground. For example, program delivery underwent changes. Principals insisted that volunteers help implement the schools' curriculum, not just the curriculum that Experience Corps Baltimore had developed. As a former teacher in the community, McGill was not surprised by this demand, and COAH agreed to modify the curriculum that volunteers were trained to deliver.

From early 1999 to June 2000, COAH and GHCC conducted the pilot. As with the earlier five-city demonstration, the Baltimore experiment showed that Experience Corps held promise. Volunteers' health indicators improved. Children's scores on state tests were up. Teachers and principals alike praised the program. In fact, the results were even more compelling than for the demonstration, because the schools and volunteers had been randomized and many more measures were assessed. The challenge now would be to convince the NIH, through the grant application, to support a definitive evaluation—a large-scale, long-term, rigorous and expensive RCT.

Over the following four years, COAH researchers pored over data from the pilot and prepared their case for the NIH. At the same time, COAH and GHCC continued to operate and expand Experience Corps in Baltimore, bringing on board more volunteers and schools every year. Fried and McGill met regularly, along with researchers from COAH and executives from GHCC, to handle issues regarding operations, funding and research.

Seeking NIH grant

In 2004, COAH submitted a grant application to NIH to fund a five-year RCT of Experience Corps. COAH asked for funds to cover the costs of recruitment, training, stipends and data collection and analysis. There would still be additional operational costs not covered by NIH funds. Apart from the research, it cost about \$75,000 per school per year to operate Experience Corps, according to William Miller, then-GHCC director and McGill's supervisor. This came from a variety of funding sources: foundations, donors and principals' discretionary budgets. (The fact that principals willingly allocated the required \$25,000 from their own budgets spoke to their belief in the effectiveness of Experience Corps.)

In the application, COAH proposed recruiting 700 volunteers, age 60 and older, who were willing to be randomized: half to the intervention and half to the control group. Those in the treatment group would commit to attend a one-week, 30-hour training program and work a

minimum of 15 hours per week for at least one school year. They would form teams of 7-10; each school would get a critical mass of 15-20 volunteers (i.e. one or two teams).

For final eligibility, treatment group participants also had to be functionally literate (at or above the 6th grade level), pass a mental health exam and a criminal background check, submit to an alcohol breathalyzer and be behaviorally acceptable to the principal of the assigned school. (Those who did not pass these requirements would be barred from the classroom but kept in the study, using “intention-to-treat” methodology.¹³ It was assumed there would be about the same proportion of “ineligible” volunteers in both the control and the treatment groups.) The volunteers would work only with grades K-3. Volunteers in the treatment group would receive a stipend of approximately \$250 per month (taxable), to cover out-of-pocket expenses. For participating in evaluations, volunteers in both groups would receive a \$10 gift card for evaluations by phone and a \$25 gift card for in-person interviews. Evaluations would take place every four months.

COAH proposed that 20 schools take part in the RCT. As with the volunteers, interested principals would have to agree beforehand to random placement into the control or the treatment group. Control group schools would play no active role in the study because all the evaluation data, such as children’s literacy scores and behavior records, would be supplied to COAH by the Baltimore City Public School System (BCPSS). The grant application stated the researchers’ hypotheses:¹⁴

- Well-trained, older volunteers engaged in a high-intensity service program and placed in a critical mass in public elementary schools, could have significant impact on the academic success of children in K-3rd grade, as measured by improvements in children's reading, by standardized achievement tests and school record data, as well as improvements in classroom behavior.
- A critical mass of volunteers serving with a high-intensity time commitment would positively affect school climate, teacher retention, and teacher absenteeism.
- Such a program, carefully designed to deliver a clinically significant prevention “dose” of physical, social, and cognitive activities to the older volunteers, would decrease disability, falls, frailty and depression, and reduce declines in memory and executive function. It would improve social supports, and generate a sense of self-efficacy and purpose in life.

¹³ Definition: method of analyzing results of a randomized controlled trial that includes in the analysis all those cases that should have received a treatment regimen but for whatever reason did not. All cases allocated to each arm of the trial are analyzed together as representing that treatment arm, regardless of whether they received or completed the prescribed regimen. (MediLexicon)

¹⁴ Linda Fried *et al.*, “Experience Corps: A dual trial to promote the health of older adults and children's academic success,” *Contemporary Clinical Trials* 36 (2013): 1-13.

- Outcomes for both volunteers and students would create a positive feedback loop, with children's improvements positively affecting retention and program satisfaction of volunteers.

Although the NIH rejected the 2004 application, Fried was undaunted, and prepared to re-submit in 2005. Based on NIH parameters, however, COAH could request only some \$750,000 per year in the 2005 application, about half what it had requested the year before. That would not be nearly enough to cover the costs of the RCT. COAH would have to piece together other funding sources and, even then, the researchers would undoubtedly have to put in a lot of pro bono work. Still, without a sizeable annual contribution from NIH, a long-term study would be impossible. The grant was essential to Fried's goals of conducting a definitive evaluation of the program's impact on both children and older adults. Making the 2005 application more fraught, tensions were flaring between COAH and GHCC over the study's methodology.

Second attempt (2005)

On the surface, the rejected 2004 proposal had laid out a methodology very similar to that used in the 1999-2000 pilot study in Baltimore. It called for many more volunteers—700 instead of the fewer than 150 that took part in the pilot. But after five years in the community, it had become easier to recruit based on word-of-mouth. By that time, says GHCC director Miller, “the *esprit de corps* among members became so strong that they just brought people in. [Participants] were the best recruiters.”¹⁵

The 2004 proposal for an RCT had also called for more schools: 20 in the treatment group and 20 in the control group, compared to only three each in the pilot. This seemed feasible to Fried and her team. In the years since the pilot, Experience Corps had been implemented in 12 schools; GHCC and COAH could hardly keep up with demand from interested principals.

Doubts. But the 2004 grant application had in fact masked growing tensions between COAH and GHCC over methodology. McGill and Miller—while convinced of the value of a large-scale study—were increasingly concerned about the way it was to be carried out. Recruitment of 700 volunteers was not a sure thing from their perspective. Since the 1999-2001 pilot, it had become easier to recruit based on word-of-mouth—but volunteers in the intervening years did not have to agree to be randomized.

Similarly, it had been relatively straightforward to get the six schools within GHCC's neighborhood to agree to be randomized for the pilot, but GHCC had been working with those principals for years. By 2004, the program had expanded well outside GHCC's home turf; the RCT

¹⁵ Author's telephone interview with William Miller, on December 13, 2013. All further quotes from Miller, unless otherwise attributed, are from this interview.

would take in schools even further afield. Would these principals agree to randomization? “How do you explain to somebody that really wants to go into the schools and do good, and to principals who are dying for the program to happen, that you have half the people sitting outside?” McGill asks. She believed it would not be an easy sell.

Another factor was politics. Miller cites four “constituencies” that had vested interests in shaping the RCT: in addition to COAH and GHCC, there was also the school system (BCPSS) and the city government, including the mayor and members of the City Council. BCPSS was in a period of turmoil, with frequent turnover of school superintendents. In the early years, Fried and McGill and their organizations had worked directly with school principals, instead of going through a formal approval process with BCPSS.

But as the program spread, and with the prospect of a long-term research study on the horizon, BCPSS wanted to assert some authority. One of its demands was that Experience Corps be introduced to schools with the greatest need—not randomly selected ones. The mayor and City Council, meanwhile, wanted the treatment schools to be allocated geographically, with each member’s district hosting at least one. Again, this precluded a randomized sample. McGill and Miller felt these demands had to be acknowledged. Political support would be important to the long-term viability of Experience Corps. The politicians and bureaucrats could not simply be ignored.

Finally, there was the matter of funding. Although the cost of recruiting volunteers would be covered by the NIH grant, the burden of raising money for implementing the much-expanded program would fall on GHCC. “The NIH money provided a great deal of resources for the research, but provided almost no resources for the implementation,” says Miller. Yet what most GHCC funders wanted to see was immediate impact. They didn’t want to wait years to learn the result of an academic study. The same was true of principals, the school system and the mayor’s office. Quick data would be more persuasive than robust data. “Everybody talks about the need for measurable data and quantifiable data and all of that,” says Miller. “But as much as they all say that, my experience with foundations is, they make their decisions based on anecdotal information.”

If they won an NIH grant, the COAH researchers could afford to operate on a longer timeframe and fully analyze the data for scientific publication. “So there was a real conflict in priorities based on their need for analysis and withholding the data until it could be published, and our need to use that data,” says McGill. Because of GHCC’s immediate needs, it had steadily collected its own performance data. True, that did not carry the same validity as a randomized study. But, as she points out, “one of our big supporters was the mayor, and you don’t tell the mayor you don’t have any idea whether this is working.”

These latent disagreements came to a head as Fried prepared to resubmit for 2005. McGill, Miller, and the GHCC board were increasingly concerned that the future of Experience Corps in Baltimore would be jeopardized by the strictures of the RTC. Recruitment, political support and funding were at risk. In most matters related to the study, they had been willing to defer to the researchers. They supported Fried's mission and believed in the value of the academic research. But the methodology for randomizing the schools, they felt, required compromise. "I had to get my director [Miller] to back me up saying, 'No, we aren't going to give up'," recalls McGill. As Miller describes it: "We had a little bit of a different agenda. Both agendas I felt were valid. But they were different agendas."

They met with Fried and her research team to raise their concerns. Fried was attuned to the challenges of conducting research in the community. She understood the perspectives that militated against randomization. At the same time, there was a place for robust research. That was what policymakers and major foundations required if they were to support the model embedded in Experience Corps. Quick data would not be enough to truly understand the benefits of the program. McGill summarizes the standoff:

The researchers, appropriately enough, felt under the gun with NIH funding the study, that it had to be done right, so they couldn't let me foul that up. On the other hand, I was responsible to my community and to my funders, and I couldn't let them foul that up, either.

Fried considered how to develop the 2005 NIH grant application, and whether there was a way to alter the methodology from the previous year's submission. The NIH required the strictest scientific methods, and had already rejected an application that observed those. Would it accept the proposal if the schools were not randomized? On the other hand, the NIH also wanted proof that the community-at-large was on board for the duration of the study, and that was now in doubt. If the researchers could develop an alternative to randomizing schools, would the NIH accept it as the price of winning buy-in? What would the methodology be, exactly? Implementing the program only in the worst-off schools was risky; Experience Corps might not produce a measurable impact in a school with overwhelming needs. Moreover, even small adjustments to the methodology up front could lead to difficulties—anticipated and unanticipated—when it came time to analyzing and making sense of the data later on. How might the validity of the results be affected? Would they be convincing?

If COAH insisted on strict randomization, it risked losing political support, which could endanger the long-term survival of Experience Corps in Baltimore. Was it worth jeopardizing the program in one city to prove its value more generally? Or GHCC might simply refuse to carry out the study altogether, and continue delivering Experience Corps without COAH's involvement; the researchers would lose the opportunity to see if it really worked. In a series of internal meetings, and in consultation with executives at GHCC, Fried and her team considered how best to proceed.

APPENDIX 1

Draft

September 14, 1988

THE EXPERIENCE CORPS

John W. Gardner

The Experience Corps will be a nationwide volunteer group run by senior citizens and enrolling senior citizens as volunteers. We will undertake to be of assistance in a great variety of areas, working with children, the disabled, older people, volunteering in hospitals and nursing homes, tutoring, providing home care and so on. None of the community and social service activities for which citizens volunteer will be off bounds for the Corps.

We believe, without being immodest, that the large number of us over age 65 constitute a rich reservoir of talent, experience and commitment potentially available to the society. We intend to place that talent, experience and commitment at the disposal of our fellow Americans. It is no secret that conventional views of aging have tended to push older people aside, but it is partly our fault that we have accepted that approach to the later years.

We have an active feeling of obligation to our society and our communities. We know the conventional view is that society owes its older citizens something, and we would be foolish to quarrel with that. But we owe something too, and this is in one sense our "operation give-back."

It isn't just altruism and a sense of duty however: We believe that this will be a great adventure – good for us psychically and in every other way. If one lists the problems of older people, health would perhaps top the list, with economic problems perhaps second. After that, very high on the list is a cluster of problems: boredom and need to be needed. We believe that our plan hits directly at that cluster. And current opinion in medical circles is that if one can deal with those problems, many of our problems of physical health will be more easily solved.

The members of the Experience Corps will, for the most part, do their volunteering in their home communities. Great latitude will be given to local units of the Corps to determine the focus of their efforts. We visualize sub-units of the Corps that might wish to focus entirely on care of the disabled – or child care – or the terminally ill, or any number of other areas.

The headquarters will not constitute a top heavy bureaucracy. It will undertake to educate the public concerning the purposes of the Corps. It will set standards for the operation of local units and affiliates. It will offer technical assistance in the setting up of local programs, training of volunteers and quality control.

A word about affiliation: There are already in existence many volunteer programs involving older people, some of them outstanding in quality. In the private sector there is the Volunteer Connection, the various Executive Service Corps programs, the AARP volunteer activities, and many church-sponsored projects. Government-supported programs include the Foster Grandparent Program, the Senior Companion Program, and the Retired Senior Volunteer Program.

The Experience Corps will hope to develop arrangements for affiliation that will link it to these already-existing groups in a mutually acceptable way. Even for groups that are brought into existence as a result of Experience Corps' encouragement, a pattern of affiliation or co-sponsorship might be desirable. For example, a religious denomination might be very pleased to come into the Experience Corps program yet want to carry on the work under its own sponsorship, preserving its own style and values. We believe that such arrangements need not dilute the Experience Corps and might reduce the somewhat impersonal standardization that so often creeps into nationally organized groups. Standards would have to be set, of course, so that no group would carry on inappropriate, e.g. political activities under the banner of the Corps.

One of the problems for those of us beyond the age of 65 is that we are apt to need a certain amount of encouragement to get into activities that we would surely enjoy once in them. Some of us have accepted the conventional but mistaken view that older people are not really needed and should stand out of the way. Some of us would gladly volunteer but don't know of any attractive opportunities to do so. For all of us who fall in those categories, the Experience Corps will offer a widely publicized opportunity – a program with the cachet and drawing power to pull the more hesitant of us out of our hideaways.

Courtesy of Marc Freedman; retyped from the original; never published.