



JEFFREY T. POLZER

JULIA KELLEY

People Analytics at Teach For America (A)

In summer 2016, Michael Metzger, a senior manager at national nonprofit Teach For America (TFA), was preparing for a meeting with his team, which was responsible for developing predictive models to help TFA decide which potential teachers to recruit and admit. The previous fall, Metzger—whose background was in computer science and mathematics—had spearheaded the launch of TFA's recruitment team/admissions team's (RT/AT) new strategy team, which was responsible for integrating strategy across the RT/AT continuum. They were now heading into a new season and needed to decide which predictive models to use and how to incorporate them into their decision process.

Headquartered in New York City, TFA recruited a diverse group of leaders from colleges, universities, and professional occupations to serve as teachers for two years, regardless of their undergraduate major. Selected individuals, known as corps members, were assigned to schools in low-income areas across the U.S. TFA's operations were divided into dozens of geographic regions, which ranged in size from a metropolitan area to an entire state. Regions included urban and rural communities and hosted varying numbers of corps members. The summer after being accepted, corps members participated in a five-week teacher training program before relocating to their assigned regions. Participating schools were responsible for paying corps members' salaries and also paid a placement fee to TFA. TFA corps members went on to join a collective force of many TFA alumni—educators, advocates, entrepreneurs, and policymakers—who were working to reduce educational inequity from every sector of society.

TFA had grown significantly since its founding in 1989, expanding to new regions across the U.S. and increasing its annual corps to more than 4,000 individuals.¹ But in recent years, applications to TFA had started to decline, driven in part by a strengthening economy that meant the two-year job security offered by TFA was less of a draw.² After peaking at about 57,000 in 2013, applications declined by 12% in 2014, 10% in 2015, and 16% in 2016.³ Given the selectivity of the program, declining application rates meant a shrinking corps and a smaller impact (see **Exhibit 1**).⁴ Josh Anderson, who became TFA's SVP of recruitment and admissions in early 2016, described the challenge: "There had been a pretty significant, sustained decline to the incoming corps. We knew we needed to step back, re-gear, and launch a fresh, strategic plan to get back on track and bring in more of the extraordinary, diverse corps members that we wanted." In the face of these challenges, TFA's senior management team began to re-examine their strategy, including the recruitment and selection processes.

Professor Jeffrey T. Polzer and Case Researcher Julia Kelley (Case Research & Writing Group) prepared this case. It was reviewed and approved before publication by a company designate. Funding for the development of this case was provided by Harvard Business School and not by the company. HBS cases are developed solely as the basis for class discussion. Cases are not intended to serve as endorsements, sources of primary data, or illustrations of effective or ineffective management.

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TFA recruiters made many decisions each day about how to allocate their time across a large number of potential applicants, making it challenging to optimize their recruiting activities. To understand where recruiters and other RT/AT staff should focus their attention, TFA needed to identify the most promising applicants. The senior management team had turned to Metzger and the RT/AT strategy team for input. Ever since Metzger had started in his new RT/AT strategy role a few months earlier, he had been working to develop new models that could be used to evaluate candidates at different steps of TFA's recruitment and admissions pipeline. Now, he knew it was time to put those models to the test, but a lot was on the line. From a data modeling standpoint, what variables and models should TFA use as it attempted to reverse the negative trends? More generally, how heavily should TFA rely on predictive models to improve their declining numbers?

Teach for America^a

While attending Princeton University in the late 1980s, Wendy Kopp wondered whether recruiting high-performing college seniors to serve as teachers in underprivileged schools could help address educational disparity in the U.S. In 1989, she outlined the concept in her senior thesis, and after graduation, she founded TFA to make the idea a reality. Even early on, TFA corps members engaged in a two-part mission to address educational inequity. First, corps members were encouraged to approach teaching as a leadership role, augmented by the leadership development programming they received from TFA during their two years of teaching in a low-income community. Second, at the end of two years they joined an alumni network of leaders working to address this injustice across many sectors.

From the beginning, TFA recruited college seniors, including many from the nation's top colleges and universities, and accepted just a fraction of the students who applied – typically, one-fifth or less. Based on their preferences, accepted corps members were assigned to a specific region, grade level, and subject matter (which could be unrelated to their undergraduate studies). If they accepted the offer, matriculating corps members attended TFA's mandatory summer training program, which focused on teaching strategies, classroom management, and curriculum mastery. After training, corps members relocated to their assigned regions, where they received ongoing support from TFA's regional offices and from their placement schools. TFA corps members worked as full-time teachers while participating in TFA's leadership development programming. Teacher certification requirements varied widely by state, but most regions required corps members to work toward getting fully certified during their two-year commitment.⁵

The organization scaled quickly. By 2000, TFA had raised approximately \$76 million, accepted about 1,000 corps members per year, and operated in 15 regions across the U.S.⁶ In 2007, 18,200 people applied to TFA; by 2010, the number of applicants had risen to 46,400, due in part to job scarcity in the aftermath of the 2008-2009 financial crisis, yielding a corps of 4,500 new teachers in 39 regions.⁷ After peaking in 2013 with 57,000 applicants and 6,000 new corps members, applications began to decline.⁸ Based on the results of several internal studies, Anderson identified several contributing factors:

It was a perfect storm of different things happening. The recruitment environment was more challenging because we were competing with consulting firms, law firms, and tech firms to recruit from a particularly risk-averse generation. Our brand had become muddled; people thought we were a teacher pipeline rather than a leadership pipeline.

^a For more information on Teach for America's history and operations, refer to "Teach For America" (HBS No. 300-084) by John C. Sawhill and Sarah Thorp, "Teach for America 2005" (HBS No. 805-094) by Stacey Childress, and "Wendy Kopp and Teach for America (A) and (B)" (HBS Nos. 406-125 and 407-031) by William W. George, Diana Mayer, and Andrew N. McLean.

The timing of our recruiting process was misaligned; we didn't recruit until senior year, by which point many top seniors already had job plans. We also had a very leaky recruitment funnel. People didn't complete the application, or got offers and declined them, or confirmed the offer but then didn't matriculate.

Some critics also worried about corps members who left teaching immediately or soon after their two-year contract, though TFA tracked this metric and documented that approximately 69% stayed in the educational sector after their contracts ended.⁹ Others held the view that TFA's five-week summer training program—which, though intensive, provided significantly less training than was typically received by first-time teachers—was not enough to prepare young, inexperienced individuals to teach in the country's most challenged schools.¹⁰ However, TFA noted that an external survey conducted by Mathematica Policy Research found that TFA corps members were equally effective in high-poverty schools as other teachers; corps members were actually found to be more effective than other teachers at improving reading achievement for students in prekindergarten through grade 2, and improving math achievement for students in grades 1 and 2.¹¹ Given the need for effective teachers throughout the educational system, it was imperative that TFA select teachers who were primed to succeed in the classroom, where over 400,000 students in 36 states would be waiting to be taught by TFA corps members on the first day of school.¹²

Recruitment and Admissions at TFA

In line with TFA's mission of recruiting the nation's top recent graduates, the organization's admissions process was highly selective, with TFA typically accepting between 10% and 20% of all applicants.¹³ TFA employed around 100 recruitment managers (RMs) and 60 recruitment associates (RAs) who were responsible for identifying promising corps candidates in their regions and encouraging them to apply. RMs and RAs—many of whom were past corps members—were each assigned to handle outreach in a specific geographic region and often held on-campus recruiting events to tell prospective applicants about TFA. In some cases, RMs and RAs identified promising candidates through professional networking platform LinkedIn or other sources and arranged one-on-one meetings with these candidates to convince them to apply.

TFA's application and selection process occurred over several months. First, applicants filled out an online application, which required academic information, a resume, and a personal statement. The first online application deadline for the 2016 corps was August 22, 2015. Applicants who were selected to proceed to the next round were asked to provide three references and official transcripts. Next, applicants chosen to proceed attended an in-person interview, where they presented a short sample lesson plan. Based on the information gathered during the application process, TFA's admissions team decided which applicants would receive offers to join the corps.

Selected applicants submitted information about their preferred regions and teaching subjects; using these preferences, TFA assigned corps members to regions and provided tentative subjects and grade assignments. After receiving their assignments, applicants decided whether to accept or decline TFA's offer to join the corps. Through fall 2015 and spring 2016, TFA ran four additional overlapping selection rounds, with staggered application deadlines, the last of which ended in May.¹⁴ (See **Exhibit 2** for a schedule of TFA's 2016 corps selection rounds.) TFA announced its final corps size in late May, and new corps members then attended one of TFA's five-week summer institutes, held in cities across the country.¹⁵

A Data-Driven Organization

TFA had historically placed a high level of importance on data, particularly in the recruitment and admissions team. In 1999, when Elissa Kim^b joined TFA, the organization had fewer than 10 full-time recruitment team members who were responsible for recruiting on hundreds of college campuses. The team had already started to painstakingly track data in an Excel spreadsheet and “it was a nightmare,” Kim recalled. Yet Kim knew that with the sheer size of TFA’s operation that the organization had to pay attention to data. Kim explained, “Before, we had no way to track day-to-day operations—knowing who you emailed, who you called, what happens after. But the real data problem went beyond that. How many people are we trying to go after? Who are they? Are they interested? How do we know? And what does that mean for our actions?”

Although Kim did not have a technical background, she recognized the importance of tracking information: “A recruiter’s day is crazy, and data helps us figure out how to allocate our time.” Initially unfamiliar with Excel, Kim learned quickly and soon guided her team through TFA’s transition to a digital customer relationship management (CRM) system, which allowed the recruitment team to more easily track its progress with individual candidates. TFA’s employees were extremely busy, but on Kim’s team, there were no excuses for not updating the CRM. “The recruitment and admissions team was famous for being uptight about data cleanliness. If the data was dirty—meaning that there was incomplete or incorrect information—then we couldn’t trust it,” Kim said. That attitude paid off: “As time went on, because the recruitment and admissions team had always been so uptight about data, we could trust it and weren’t afraid to use it to make decisions.”

Data continued to be an integral component of the recruitment and admissions team’s culture after Matt Kramer—a former McKinsey & Company partner whose wife and brother were TFA alums—joined TFA in 2005. The analytically-minded Kramer encouraged Kim’s team to structure data collection and analysis around the different steps of the recruitment and admissions funnel: Which candidates became applicants? Which applicants became admitted corps members? Which admitted corps members accepted or rejected TFA’s offer to join the corps? Early on, the models were based on education research but were not linked directly to corps members’ outcomes with students. To tailor their process, the admissions team began to build regression models using data about previous corps members to identify strong applicants. The team continued to refine the selection models as more data became available.

At the other end of TFA’s funnel, Susan Asiyanbi and Jeff Wetzler,^c then co-heads of teacher leadership development, looked for ways to assess corps members’ ultimate success in the classroom. They knew that finding a reliable outcome measure would be invaluable to TFA’s recruitment and admissions team, which could use it to model the applicant characteristics most likely to lead to success. Figuring out how to measure teacher effectiveness was notoriously challenging, however, and TFA had taken a number of approaches that were considered cutting-edge at the time. For example, TFA invested significant resources to administer an externally validated measure, the MAP Growth^d exam, to corps members’ students three times per year, but some school administrators were against the

^b Elissa Kim was TFA’s head of recruitment and admissions from 1999 to 2015.

^c Jeff Wetzler was TFA’s EVP of teacher preparation, support, and development from 2005 to 2013. He was then EVP of strategy, innovation, and organization development from 2013 to 2015.

^d Published by the Northwest Evaluation Association (NWEA), the MAP Growth exam tested students in math, science, and language. The MAP Growth exam was designed to measure student performance over time and assess whether a student was performing below, at, or above grade level. Source: NWEA, MAP Growth, <https://www.nwea.org/map-growth/>, accessed December 2017.

notion of more student testing. TFA also tried using students' state test scores, but these scores were sometimes not available and other times became available too late to be helpful. TFA tried different approaches, such as collecting student surveys, but found that no single assessment made sense across states, grades, and school districts. TFA continued to strive to learn and integrate cutting-edge approaches to understand its corps members' impact on students.

Wetzler recalled that some corps members felt uneasy about TFA's focus on data collection: "There was a sentiment among some of the corps members: 'Do you care about the data, or do you care about me?' With an increased emphasis on data had to come an increased emphasis on values and culture." Some TFA employees wondered whether performance during the two-year teaching commitment was even the best measure of corps members' success. Wetzler explained, "TFA's mission isn't just to place effective teachers in classrooms, but to create transformational leaders. A corps member's performance over two years was only a small subset of their total impact as an alum over a lifetime. There was a very active debate around what we should be measuring." Another internal debate centered on the expenses and logistics of collecting teacher performance data. "Was the juice worth the squeeze?" Wetzler wondered. "Was it worth collecting data from every corps member, or was it better to focus on one or two regions and assume that was a representative sample size?" Even as they debated the details, however, TFA employees generally supported collecting and analyzing data to make more informed decisions. Wetzler explained, "Analyzing data is in the DNA of the organization."

Michael Metzger: From MIT to TFA

Michael Metzger was a natural fit for an organization that valued teaching and data, two of his passions. Throughout his high school and college years, Metzger became increasingly interested in improving the educational system. As a high school student, he volunteered at a nearby urban school, where he witnessed education disparities firsthand. Then, while finishing his undergraduate degree in computer science and management science at the Massachusetts Institute of Technology (MIT), he led a program that placed MIT students into teaching roles. After wrapping up his graduate studies in electrical engineering and computer science, he finally acted on a long-standing desire to apply for TFA and was accepted into the 2010 corps. Metzger soon relocated to Phoenix, where he taught math and physics at a large public high school known for being the worst in its district.^e

Metzger was determined to improve student performance at his placement school. Partnering with a fellow corps member, he instituted an after-school program to teach students pre-algebra competencies that they needed to succeed in high school math classes. For high-achieving students who were not being challenged enough, Metzger helped organize a competitive math team, a science fair, and an AP physics program. He also spearheaded a weekend preparation program for students planning to take the ACT college entrance exam, and arranged for the ACT to be offered on the high school's campus to make it more convenient for students who could not easily get to a test center. On his TFA experience, Metzger said, "I had a great experience working with others and becoming ingrained in the community. We could see the impact we were having." The number of students enrolled in calculus increased; student test scores improved; and for the first time ever, four graduating seniors went to Ivy League schools.

Metzger's achievements did not go unnoticed. In 2012, he won the Susan Lehmann Award for Excellence in Teaching, the top honor for TFA corps members. TFA often tried to recruit Susan Lehmann winners to work for the organization after their two-year teaching commitment. Near the

^e Refer to <https://vimeo.com/43622844> to view Metzger teaching a class as a TFA corps member.

end of Metzger's second year of teaching, CEO Wendy Kopp called him to ask if he would be willing to visit TFA's headquarters in New York City to discuss job opportunities. Metzger ended up joining TFA in the summer of 2012, initially working with the CEO on various special projects and then moving into a role in which he used data to analyze TFA's methods for training its math teachers.

Meanwhile, Kim had taken notice of Metzger's talent and passion and hoped to convince him to switch over to her recruitment and admissions team, which had been struggling with the recent admissions declines. Kim recalled, "In 2015, I saw my chance. I explained to Mike that as far as data went, my team was probably the most sophisticated at TFA, but we had a lot of room to improve. I didn't have a clear role for him at the time, but I was hoping he could poke around, identify missed opportunities—basically figure out what to do and then do it." Metzger was intrigued by the opportunity: "At that point, I didn't know what my job title or salary would be, but I decided to take it on."

Innovating and Iterating

In 2015, Metzger officially joined the recruitment and admissions team, where he was given a wide berth to explore different challenges and decide where to focus his attention. His first direct report was Carey Leigh Evans, another former corps member who had joined TFA in a strategy role after her two-year commitment ended in 2014. Evans had previously worked on a statistical model to estimate which TFA corps members, of all those who had accepted an offer to teach, were at the highest risk of withdrawing before the start of the school year. Evans, an art history major, noted, "I was a creative thinker, and the technical skills were all learnable."

When Evans heard that Metzger was launching a predictive analytics team, she applied to join. Metzger and Evans began discussing how a modeling approach could be used to improve TFA's other processes, starting with recruitment. Evans noted, "Initially, we didn't really have executive responsibilities and were operating primarily as a think tank." Metzger elaborated:

TFA was collecting a lot of data, but it was mostly input-focused: number of meetings recruiters held, number of emails they sent, and so on. We wanted to be more output-focused: for example, if a recruiter held a certain number of meetings with candidates or sent a certain number of emails, how did that impact the number of applications? We thought we could use predictive analytics to help make more recruitment and admissions decisions, and we began developing models to do that.

In addition to reviewing the existing selection model, Metzger and Evans began creating new models that could be applied to other parts of the recruitment and admissions funnel. For example, predictive models could identify which candidates were most likely to withdraw their applications during the admissions process or which applicants were most likely to be successful in certain regions.

The Future of the RT/AT Strategy Team

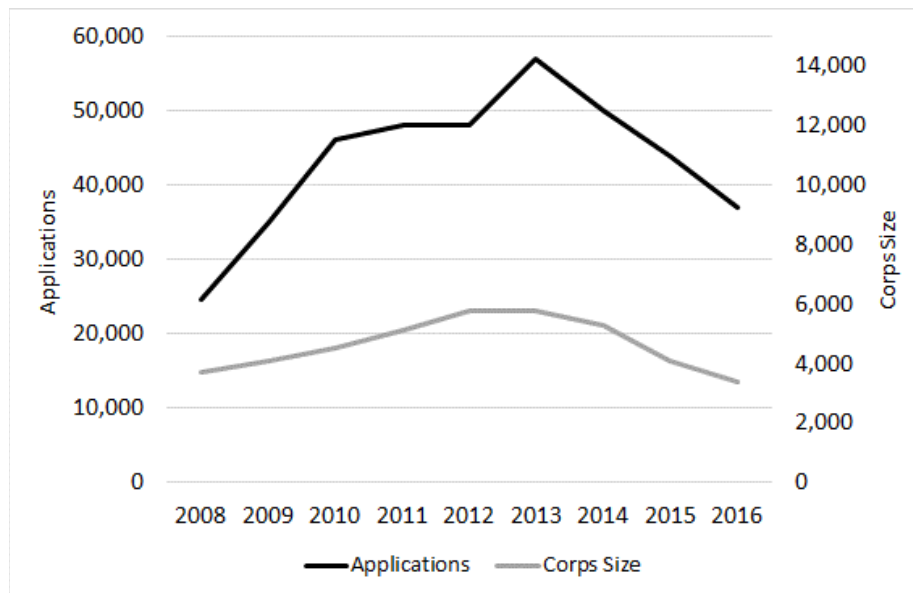
Initially, Metzger and Evans planned to spend additional time exploring and refining the models, but in spring 2016, TFA's recruitment and admissions team reported that total corps applications had decreased by 16% compared to 2015, marking the third consecutive year of declines.¹⁶ Now, in summer 2016, TFA's admissions window for the 2017 corps would soon be open. TFA's senior managers hoped that Metzger and his team could put their models to use as soon as possible, and that the models might improve overall corps yield by helping recruiters allocate their time, predicting which applicants were

likely to be accepted, and identifying which applicants were at risk of declining TFA's offer. Metzger recalled, "All of a sudden, it was like, 'Oh, you have these models? Let's give them a go.'"

Metzger needed to make sure his team's models were ready before the application window opened. He also had to somehow ensure that TFA's non-technical employees had the right training to be able to interpret the data-driven guidance they would be given. Metzger recalled an incident in the spring, when he had been testing a model that used historical data on who had accepted versus rejected offers to predict whether a newly-selected corps member was a high, medium, or low risk for rejecting TFA's offer to join the corps. One day, Metzger accompanied a recruiter to a meeting with an accepted applicant who was very enthusiastic about TFA. After the meeting, Metzger asked the recruiter why they had bothered to meet with someone who was clearly going to accept TFA's offer. The recruiter replied that a few days earlier, an applicant who the model had identified as being at low risk of declining the offer had in fact done so. With his trust in the model now broken, the recruiter had proceeded to schedule meetings with every single one of his applicants, regardless of their decline risk. Metzger explained, "Meeting with all 70 accepted applicants means you have less time to spend on other recruiting activities. If someone is less mathematically-inclined, you can see how a model's results can get misinterpreted, which we don't want. So we have to think about how to train and develop people."

As his team prepared for the upcoming year, Metzger needed to decide what to prioritize in the face of TFA's declining applications and offer acceptance rate. His team had already cleaned and compiled data on TFA's 2015-2016 applicant pool, combining applicant qualifications with some of the key outcomes from last year's recruiting pipeline. Metzger now hoped to use the 2015-2016 data to build several new models. An immediate goal was to create a model to predict the risk that future applicants would withdraw from consideration during the selection process. TFA could then use these predicted risks when deciding how to allocate their time to recruiting activities in order to keep promising applicants from withdrawing. (See **Exhibit 3** for a data dictionary for this modeling goal.)

Metzger knew his team members had been analyzing the data, and he had asked each person to bring his or her recommended models to the next team meeting. He also wanted the team's advice about how exactly to implement these models to help recruiters allocate their time among applicants. Metzger looked forward to a spirited discussion, hoping that the results they eventually achieved would be as robust as their debate.

Exhibit 1 Teach For America's Application and Corps Size Totals, 2008–2016

Source: Casewriters, from Teach For America, News Releases, <https://www.teachforamerica.org/about-us/media-resources/news-releases>, accessed December 2017.

Exhibit 2 2015-2016 Application Timelines for Admissions Process

Deadlines:	August	September	October	January	March
Deadline to apply online	8/22/2015	9/12/2015	10/24/2015	1/30/2016	3/5/2016
If invited to interview, submit academic information	9/19	9/19	11/7	2/12	3/16
Schedule and complete interview	10/14	10/14	12/2	2/29	4/11
If admitted, learn assignment and accept or decline offer	11/4	11/4	1/06	3/31	5/3

Source: Adapted from Teach For America, "How To Apply," via the Internet Archive Wayback Machine, captured as of May 6, 2016, accessed January 2019.

Exhibit 3 Data Dictionary

Field	Value	Description
<u>Application Fields</u>		
personid	ID	Unique numerical personal identifier
appyear	Categorical	Academic year of application (e.g., "2015-16")
gpa	Numeric	Applicant's cumulative undergraduate grade point average.
stem	Binary	"1" indicates a math, science, or Engineering major or minor; "0" indicates no math, science, or Eng major or minor.
schoolsel	Numeric	School selectivity based on annual university rankings; 1 = Least selective; 2 = Less selective; 3 = Selective; 4 = More selective; 5 = Most selective; NA = unknown
schoolsel_chr	Categorical	School selectivity based on annual university rankings; levels represented as character strings
major1	Categorical	Categorical value indicating the applicant's specific undergraduate major.
major2	Categorical	Categorical value indicating the applicant's second specific undergraduate major, if they had one.
minor	Categorical	Categorical value indicating the applicant's specific undergraduate minor, if they had one.
major1group	Categorical	Categorical value indicating the applicant's undergraduate major grouping (e.g., humanities).
major2group	Categorical	Categorical value indicating the applicant's second undergraduate major grouping (e.g., humanities).
minorgroup	Categorical	Categorical value indicating the applicant's undergraduate minor grouping, if they had one.
undergrad_uni	Categorical	Categorical value indicating the college or university the applicant attended as an undergraduate.
essay1length	Numeric	Word count of applicant's first application essay.
essay2length	Numeric	Word count of applicant's second application essay.
essay3length	Numeric	Word count of applicant's third application essay.
essayuniquewords *	Numeric	Number of unique words used by applicant, based on corpus of words from all three of the applicant's essays.
essayssentiment *	Numeric	Positive value indicates positive sentiment; negative value indicates negative sentiment; based on combined text of all three of the applicant's essays
signupdate	Numeric	The number of days before the relevant deadline when the applicant first registered on TFA's website.
startdate	Numeric	The number of days before the relevant deadline when the applicant started their TFA application.
appdeadline	Categorical	The month of the TFA application deadline when the applicant applied.
submitteddate	Numerical	The number of days before the relevant deadline when the applicant submitted their TFA application.
attendedevent	Binary	1 = applicant attended a TFA event during recruiting season; 0 = did not attend event
completedadm	Binary	outcome variable; 1 = completed all steps of admissions process; 0 = withdrew at some point during admissions process

Source: Adapted from company documents. * Variables generated using Natural Language Processing techniques.

Endnotes

¹ Kerci Marcello Stroud, "Teach For America Fields Largest Teacher Corps In Its 20-Year History," Teach for America, May 25, 2010, <https://www.teachforamerica.org/press-room/press-releases/2014/teach-america-fields-largest-teacher-corps-its-20-year-history>, accessed October 2017.

² Kerci Marcello Stroud, "Teach For America Fields Largest Teacher Corps In Its 20-Year History," Teach for America, May 25, 2010, https://www.washingtonpost.com/news/wonk/wp/2015/02/09/why-teach-for-america-is-suddenly-having-trouble-recruiting-college-students/?utm_term=.847a34f84164, accessed October 2017.

³ Ehrenfreund, "Why Teach for America is suddenly having trouble recruiting college students"; and Emma Brown, "Teach for America applications fall again, diving 35 percent in three years," *The Washington Post*, April 12, 2016, , accessed October 2017.

⁴ Brown, "Teach for America applications fall again, diving 35 percent in three years."

⁵ Teach for America, "Getting Certified," <https://www.teachforamerica.org/join-tfa/leading-classroom/training-and-development/getting-certified>, accessed October 2017.

⁶ Jodi Wilgoren, "Wendy Kopp, Leader of Teach for America," *The New York Times*, November 12, 2000, <http://www.nytimes.com/2000/11/12/education/wendy-kopp-leader-of-teach-for-america.html>, accessed October 2017.

⁷ Michael Winerip, "A Chosen Few Are Teaching for America," *The New York Times*, July 11, 2010, <http://www.nytimes.com/2010/07/12/education/12winerip.html>; and Marcello Stroud, "Teach For America Fields Largest Teacher Corps In Its 20-Year History;" both accessed October 2017.

⁸ Teach For America, "Alumni Survey & Snapshot," 2016-2017, https://www.teachforamerica.org/sites/default/files/2013-14_press_kit_updated_09_18_13.pdf, accessed February 2018.

⁹ Teach For America, "Alumni Survey & Snapshot," 2016-2017, <https://www.teachforamerica.org/alumni/community/alumni-survey-snapshot>, accessed February 2018.

¹⁰ Winerip, "A Chosen Few Are Teaching for America;" and Olivia Blanchard, "I Quit Teach for America," *The Atlantic*, September 13, 2013, , accessed October 2017.

¹¹ Melissa A. Clark et al., "Impacts of the Teach For America Investing in Innovation Scale-Up," Mathematica Policy Research, February 8, 2017, <https://www.mathematica-mpr.com/our-publications-and-findings/publications/impacts-of-the-teach-for-america-investing-in-innovation-scaleup>, accessed February 2018.

¹² Teach For America, 2016-17 Press Kit, <https://teachforamerica.app.box.com/s/daekyml307gyz7lrtna2xz578ypg8yl1>, accessed October 2017.

¹³ Casewriters' estimate.

¹⁴ Internet Archive Wayback Machine, Teach For America, "How To Apply," captured as of May 6, 2016, <https://web.archive.org/web/20160506213737/https://www.teachforamerica.org/teach-with-tfa/how-to-apply>, accessed January 2019.

¹⁵ Teach For America, "2017 Summer Training Schedule," <https://www.teachforamerica.org/join-tfa/leading-classroom/training-and-development/2017-institute-schedule>, accessed October 2017.

¹⁶ Brown, "Teach for America applications fall again, diving 35 percent in three years."