Online Appendix
When Do Informational Interventions Work?
Experimental Evidence from New York City High School Choice

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Online Appendix A: Sample, treatment assignment, and intervention creation details

This appendix describes the middle school selection and randomization process in more detail. It also includes more information on the production and content of intervention materials, as well as additional tables and figures.

A.1 Sampling and treatment assignment

A.1.1 Sampling

To identify middle schools for participation in our interventions, we began with two school-level datasets from the NYCDOE: the 2015-16 Demographic Snapshot, and a list of the most current schools in operation (LCGMS extract from July, 2016). We excluded District 75 (special education) and District 79 (alternative education) schools, but retained charter schools. We identified 603 schools that enrolled a minimum of 30 students in 8th grade *or* had zero 8th graders but at least one student in 7th grade. (This second condition retained some newer schools that did not serve 8th grade in 2014-15 but may have in 2015-16). We then excluded 11 schools that were closed or consolidated in summer 2016. This resulted in 592 remaining schools – what we refer to as the "All Schools" sample.

These 592 schools were divided into three "tiers." Tier 1 were schools that were assigned to treatment in our 2015-16 intervention, which recruited high- and medium-poverty schools. These schools participated in our 2016-17 intervention and were guaranteed assignment to a treatment. Tier 2 were schools that were recruited for our 2015-16 intervention but declined to participate, as well as any additional schools that had a population with poverty greater than 50 percent and less than 50 percent of 8th graders returned to their school for 9th grade.[1] Tier 3 were the remaining schools—schools that were relatively low poverty (less than 50 percent) or schools where more than half of the students returned to the same school for 9th grade. Schools in Tier 3 did not participate in the experiment. However, there were a few exceptions to these general rules, detailed below.

In the 2015-16 experiment, 170 schools were assigned to treatment, however, there were some alterations for 2015-16 described here. Five schools that participated in the 2015-16 experiment were moved to Tier 2 because they were either volunteer schools that received a treatment with certainty or gifted and talented schools that were assigned to the control group with certainty. Four schools were merged with other schools in Tier 1. That left 161 schools in Tier 1. There were 312 Tier 2 schools. Tier 2 was divided into three groups of schools for purposes of forming randomization blocks: 147 schools who were recruited for the 2015-16 study but declined to participate, 123 schools that had poverty rates greater than 50 percent and no returning 8th graders or had moved from Tier 1, and 42 schools that had poverty rates greater than 50 but had some returning 8th graders (fewer than 50 percent). All remaining 119 schools were Tier 3.

Table A.1 provides mean characteristics of: (1) all NYC schools that served 8th grade in 2015-16 *or* served 7th grade in 2015-16 with the potential to serve 8th grade in 2016-17 (N=592); (2) all

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[1] School level poverty measures came from the NYCDOE Demographic Snapshot, and since all middle schools in NYC received free lunch as of the 2015-16 the poverty indicator identifies students from families that qualified for free or reduced price lunch or who were eligible for benefits through NYC's Human Resources Administration (such as SNAP or rental assistance).

study schools (N=473); (3) Tier 1 schools (N=161); and (4) Tier 2 schools (N=312). By design, study schools enrolled a population that is more low-income and are less likely to serve 9th grade students. Similarly, study schools had a larger percentage of Black and Hispanic/Latino students, as these populations are larger in low-income schools. Tier 1 schools were higher poverty than Tier 2 schools – this is because the 2015-16 study focused on recruiting the highest poverty middle schools in NYC. Lower ELA and math scores in the study schools, and specifically in the Tier 1 schools, reflect the focus on higher poverty schools. Tier 1 schools contained no schools from Staten Island because this borough was excluded from the 2015-2016 study.

Table A.2 provides mean outcomes of the high school admissions process in 2015-16 for the same four groups of schools. (For Tier 1 schools, these outcomes were influenced by our 2015-16 interventions). In that year, 8th graders in our study schools applied to high schools with lower graduation rates, on average, then did students in the full population, though the differences were small. Study schools included a larger share of high schools on their applications with limited unscreened admissions method (perhaps due to a focus on these schools in the 2015-16 experiment), and a smaller share of students were unmatched after the main round. Study schools also had a higher proportion of schools with graduation rates lower than 70 percent on average.

A.1.2 Treatment Assignment

Randomization was conducted within the two tiers described above. Schools in Tier 1 were randomly assigned to a treatment group. Schools in Tier 2 were randomly assigned to a treatment group or a control group. Since our treatment involved sending materials to the school counselor, we did not recruit schools to participate in the study. School counselors either received materials and supportive contact from the study office or they did not, and they could decide to use the materials, or not. As Tier 1 was made up of schools that participated in our 2015-16 experiment where school counselors may have been able to provide prior years' materials to students, and for ethical reasons, we decided that all schools in Tier 1 would receive a treatment, even if they were assigned to control in 2015-16. Thus, these schools contribute to estimating contrasts across treatments, but not comparisons to the control group. The designed randomization is summarized in Figure A.1.

We retained the 39 blocks formed by matching in the previous year. See the appendix to (Corcoran et al. **?**) for details on that randomization process. Within these 39 extant blocks, typically of four schools, schools were randomly assigned to one of the three Fast Facts treatments (the typical Fast Facts list, one which discouraged application to two schools with low odds of admission, and one which discouraged application to two schools low graduation rates), School Finder, or the App. We emphasized randomization to one of the Fast Facts tools since school counselors were already familiar with Fast Facts from their exposure in the prior year. By block, the Fast Facts schools within the block were randomly assigned to either digital only delivery or digital and paper delivery. In Tier 1, 114 schools were assigned to Fast Facts, 24 to the App, and 23 to School Finder. Within Fast Facts, half (57) of the schools were assigned to digital only delivery and half to digital and paper; a third (38) were assigned to each version of the Fast Facts sheet. We performed 102 randomizations of Tier 1 as described here, and selected the iteration with the best balance over school characteristics, as per standard practice with RCTs (**?**). School-level covariate balance is reported in Table A.3; p-values from joint hypothesis tests that the school characteristics are equal for each treatment group compared to the School Finder group (as there is no control group in Tier 1), controlling for block fixed effects, are reported in the table and are generally high.

There were two adjustments made to Tier 1 after randomization occurred due to school closures in the summer of 2016, one of these schools was assigned to Fast Facts "low odds" with digital only delivery, and one to School Finder. Since it was not possible to deliver an intervention to these schools, they are excluded from the analysis. (Additionally, while the closures were non-random, assignment to treatment was, so these drops orthogonal to randomization and should not affect inference.) Final treatment assignments in Tier 1 were thus: 113 to Fast Facts, 24 to the App, and 22 to School Finder, with 57 Fast Fact schools assigned to digital and paper delivery, and 56 to digital only delivery. 38 Fast Fact schools were assigned to receive the unaltered Fast Facts sheets, 38 to the low graduation treatment, and 37 to the low odds treatment. These changes do not greatly affect covariate balance, as shown in Table A.4.

Randomization for Tier 2 consisted of schools new to the study in 2016-17, which were high and medium poverty schools in NYC, as described above. Schools were randomized regardless of their intent to participate; that is, we did not recruit schools in advance for participation. We then blocked these schools into blocks of six schools (where possible). With six schools in a block, the modal block assigned one school to each of the three Fast Facts versions, one school to School Finder, one to the App, and one to control. Blocks were thus matched sextuplets of schools selected using a Mahalanobis distance measure of difference between schools (see **??**). School variables used in the matching procedure included prior choice outcomes (e.g., the mean graduation rate of first round matches in 2015-16), prior achievement (mean ELA and math scores in 2015-16), economic disadvantage (the percent of students in poverty), and school size. If information on test scores or choice history was missing, we imputed values using the predicted value from a regression of schools with non-missing data.

To maintain face validity, blocking was conducted within borough, and geographically isolated schools were blocked together (i.e. the Rockaways and Staten Island). Additionally, schools were blocked within categories based on their response to recruitment for the 2015-2016 experiment so that blocks were formed within groups of schools that had similar characteristics (e.g. school has returning 8th graders, school that did not choose to participate in 2015-2016, school new to study, etc.) Within these blocks, schools were randomly assigned to a treatment arm or control. The blocks were then listed in a random order and a cross randomization that alternated Fast Facts delivery method (digital only or digital and paper) within block was implemented. 136 schools were assigned to one of the three Fast Facts treatments, 58 to the App, 58 to School Finder, and 60 to control. Within the Fast Facts treatment, 68 schools each were assigned to digital or digital and paper delivery of the intervention. 45 schools were assigned to Fast Facts and Fast Facts low graduation, with 46 schools assigned to Fast Facts low odds. As in Tier 1, multiple iterations (150) of randomization were conducted, with the randomization that had the best balance selected as the final randomization. Table A.5 shows covariate balance in Tier 2; the relevant joint p-values comparing each treatment group to the control group are reported at the bottom of the table. Again, there were some post-randomization adjustments made to treatment assignment after randomization occurred. We divide these into two categories. The first are changes in status that are unrelated to treatment assignment, typically school closures. The second are changes in treatment assignment due to the study. The former changes are orthogonal to treatment status and thus should not effect inference. The latter are nonrandom, and thus for these schools we assign them to their original treatment status and estimate intent-to-treat effects.

1. Post-randomization treatment status changes that are orthogonal to random assignment:

- Consolidations:

- Two Tier 2 schools were consolidated into a single school. Both schools had been assigned to Fast Facts low graduation, though one to digital delivery and one to digital and paper delivery. Since this consolidation was independent of any random assignment, we continued with the school that absorbed the other school, which was the one assigned to digital and paper delivery. Thus one school was dropped from the count of Fast Facts, low graduation, digital only delivery.
- A Tier 2 school and a Tier 1 school were consolidated into the Tier 1 school. We retained the Tier 1 assignment, because that school was the "receiving" school and thus lost a Tier 2 assigned to Fast Facts, full list, digital only delivery.
- Two Tier 2 schools were consolidated into a single school. One school had been assigned to Fast Facts, digital delivery and one to the Fast Facts, low graduation, digital delivery. Since this consolidation was independent of any random assignment, we continued with the school that absorbed the other school, which was the one assigned to Fast Facts. Thus one school was dropped from the count of Fast Facts digital low-graduation.

- Did not serve 8th grade:

  - A Tier 2 school assigned to the App stopped serving 8th graders, and thus was dropped from the experiment.
  - A Tier 2 school which was assigned to control did not serve 8th graders; it was dropped from the analysis. We ran nearest neighbor matching on the remaining Tier 3 schools in the appropriate geographical area and drew a new, untreated school to serve as a control.

Five Tier 2 schools were excluded from the analysis, closed, or absorbed into another school. Ultimately, 308 of 312 schools were in Tier 2 after these adjustments, including the school that was randomly pulled from Tier 3. Fast Facts was assigned to 133: 68 schools were assigned to digital and paper delivery and 65 to digital delivery. Within Fast Facts types, 44 were assigned to the standard list, 43 to the low graduation list, and 46 to the low odds list. 58 schools remained in the School Finder treatment with 57 schools in the App treatment. There were 60 control schools accounting for the control school that was lost as described above, with one the substitution also described above. School-level covariates remain balanced after these adjustments, as shown in Table A.6. The treatment assignment after these random treatment status changes is what we used in the analysis, which an intent-to-treat analysis since the nonrandom post randomization changes described below were assigned to their original status. We show this assignment in Figure A.2.

2. Post-randomization treatment status changes that were nonrandom:

- Shared school counselors:

  - Two nearby Tier 2 schools shared a school counselor. To ensure both schools received the same treatment, they were both assigned to a single treatment (Fast Facts, low graduation version, digital and paper delivery). This was the assigned treatment of one of the schools. The second school was originally assigned to receive the App, and received the treatment described above instead. This school is included in the analysis with assignment to its original treatment.
  - Two Tier 2 schools shared a school counselor. These schools were not co-located, but with the same counselor, there was a chance of spillover. One school was originally assigned

to Fast Facts, low odds, digital delivery, and one to control. Thus, the control school was switched to the Fast Facts, low odds, digital delivery treatment. Another school in the same block (originally assigned to the App) that had not yet been contacted was switched to control. All schools are assigned to their original treatment status in the analysis.

- Other:

  - One school which volunteered for the experiment should have been assigned to a treatment, but was originally assigned to control. When we realized this error, we assigned that school non-randomly to the App.

The randomization as implemented, reflecting these last few nonrandom assignments, is shown in Figure A.3. Ultimately, 135 schools received some for of the Fast Facts treatment, 56 schools received the App, 58 schools received School Finder and 59 schools served as controls. However, note that estimation always uses the intended assignment and should be considered an intent-to-treat analysis.

A.2 Details on the intervention materials

The study team produced the Fast Facts sheets and website; details of the production are described below. The App was created and managed by the Heckscher Foundation for Children at the time of the study. The study team consulted with the App creators to refine their school list algorithm. A description of the App and the inputs to the search algorithm is below. Finally, the NYCDOE produced School Finder as an electronic, searchable version of the NYC High School directory. It is described below.

A.2.1 Fast Facts

A version of the Fast Facts school list was the largest treatment arm in the study. The goal of the Fast Facts list was to highlight nearby schools with relatively high graduation rates that students had a chance of getting into (based on the choice history at their middle school), while limiting application to low-graduation rate schools. The Fast Facts list was listed in descending order by graduation rate, and the list included the name of the school, the graduation rate, the commuting time between the middle school and the high school, the page in the directory, and a short guide to what to do to apply to that school based on program admissions methods (e.g. for screened programs, students the list indicated "Check if you have the grades;" for limited unscreened schools, "Go to an open house/fair and sign in"). The Fast Facts treatment also included some basic information about the high school admissions process and program admissions methods, adapted from NYCDOE materials.

Fast Facts was distributed both as a paper sheet (see Figures F.1 to F.3) and digitally, as a website (see Figures F.5 and F.6). There were three versions of the high schools listed in Fast Facts, the baseline list, a list that also highlighted two "low graduation," high schools, and a list that highlighted two "low odds" high schools. There was also a supplemental list targeted to English learners. All three versions of the Fast Facts lists were produced for all study schools, including those in alternative treatment arms and in the control group, for comparison purposes.

This section describes the process to generate the baseline Fast Facts list, with the variations and supplemental list described in more detail below.The data used to generate the Fast Facts lists came from the following sources:

- High school information, using the 2016-2017 NYC High School Directory as the authoritative list of high schools. We supplemented the directory information with other high school data sources:

  - The School Quality Review data from 2014-2015 (the same year as the source data for the directory) for school performance information and identification of transfer high schools,
  - The School Demographic Snapshot data from 2016 (to identify single sex schools),
  - High School Admissions Process data from 2014-2015 to identify high schools with more than half of their students entering the school as continuing 8th graders;

- Travel time between each middle school and each high school pair in NYC from Google Maps, by walking or public transit;

- Middle school choice history using six years of HSAPS data, 2009-10 to 2014-15. This includes for each middle school-high school combination: the total number of matches to that high school, the total number of choices for that high school, the total number of relevant choices (schools at least as highly ranked as the one the student was matched to), matches as a percent of all choices, and matches a percent of all relevant choices. When there was not middle school choice history information, we substituted choice history information aggregated at the district level.

When schools are missing a graduation rate due to being a new school, we impute a predicted graduation rate from a regression on a quadratic of the on-track indicator (percent of 9th graders earning 10 or more credits), percent of all programs in the high school that are screened, percent of all programs in the high school that are screened language. We use the upper bound of a 95 percent confidence interval on this prediction to determine inclusion in the Fast Facts high school set, but do not display imputed graduation rates on Fast Fact lists, instead substituting a note that the school was new.

We begin with the 440 high schools listed in the directory, and eliminate specialized high schools and LaGuardia, single sex schools, high schools where more than half of students are continuing 8th graders, and transfer high schools. We only include high schools on Fast Facts with at least a reported or imputed graduation rate of 70 percent (preferring a graduation rate of 75 percent where possible): this leaves 250 high schools as candidates for inclusion on a Fast Facts list.

The goal of the Fast Facts list generation procedure was to generate a list of 26 schools within a 45 minute commute of the middle school, with a graduation rate of at least 75 percent, where there was some history of successful matches to that high school in the middle school. In some cases, these guidelines were relaxed to generate a list of 26 schools. The specific procedure to generate a list of schools eligible to be listed on Fast Facts, using imputed graduation rates for new schools, went through the following steps in this order until at least 26 schools were identified:

1. Flag all high schools within 45 minutes of the middle school that have a graduation rate of 75 percent or higher, where at least one student from that middle school had chosen the high

school in the past six years, and at least one student had matched to the high school. Add to this pool schools in the top 15 of a middle school's match history, as long as the graduation rate was at least 75 percent and the commute less than 65 minutes.[2]

2. Add in schools within a 60 minute commute, retaining the graduation rate floor and the choice history criteria.

3. Add in schools within a 45 minute commute, but with a graduation rate of at least 70 percent, maintaining the choice history criteria.

4. Add in schools within a 45 minute commute, but with a graduation rate of at least 70 percent, maintaining the choice history criteria.

5. Add in schools within a 60 minute commute, but with a graduation rate of at least 70 percent, maintaining the choice history criteria.

6. At this point, the same four steps as above were followed, but using geographic district choice history instead of middle school choice history.[3] This included both cases where middle schools that did not have any choice history information and cases where the choice history criteria eliminated a high school from consideration. The process ended here, even if 26 eligible high schools were not found.

This procedure identified 26 or more eligible schools for almost all middle schools; only 10 middle schools (1.6 percent) were not able to complete a list.[4]

At this point, the list of eligible high schools needed to be refined to 26 schools. The principles here were to include schools for which there was a past history of successful matching, a variety of admissions methods, and a range of choices to appeal to multiple types of students, within the group of schools meeting the criteria for inclusion listed above. The procedure to refine the list was:

1. The pool of potential Fast Facts high schools was sorted in descending order by number of past matches to that high school, using the choice history of the middle school, and if missing, the choice history of the geographic district. Sorting by match history both highlights schools that students have been successful at in the past and prevents the list from being dominated by screened schools. Ties were broken to prioritize 1) schools that admitted students by non-screened admissions methods, and 2) match rate to that high school using the choice history as described above. High schools were sorted in descending order by graduation rate.

2. Since this method necessarily will reduce the number of newer schools on the Fast Facts list due to prioritizing match history, we added up to three new schools to the list so that a list would not exclude potentially beneficial options solely because they were new. We considered a new school for inclusion if it was in the same borough and admitted some non-screened students. We prioritized new schools in the same geographic district, and then by imputed graduation rate. New schools were substituted for the lowest school on the list from the step

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[2]Include the middle school if the middle school serves continuing 8th graders, regardless of the graduation rate.

[3]In the final step, a 75 minute commute was permitted so that schools in the Rockaways and Staten Island were able to populate their lists

[4]The incomplete schools were all in Staten Island. For this reason, Staten Island schools were assigned to either the App, School Finder, or a control group in the experiment.

above that was not a new school. The list was then resorted by graduation rate, though imputed graduation rates were not displayed, but marked with "*new."

In short, the Fast Facts list was a list of 26 nearby schools, with relatively high graduation rates, which prioritized high schools that students in that middle had successfully matched to in the past. There are a few contrasts to the similar lists we developed for Corcoran et al. (**?**) which should be highlighted. The 2016-17 Fast Facts had 26 schools, rather than 30, and a higher graduation rate floor (75 percent vs. 70 percent). Furthermore, the prior year's version did not include match history in the selection process.

A.2.2 Supplementary "Low Graduation" and "Low Odds" Schools for Fast Facts

For schools assigned to the Fast Facts "low graduation" and "low odds" treatments, the above procedure was followed, but the last two schools on the list were omitted, leaving a list of 24 high schools. This left two spots remaining on the list to include two schools that met additional criteria. The goal of the supplemental schools was to highlight the importance of considering odds of admission and the graduation rate of schools. This was done by including a short text above the list of supplemental schools. As can be seen in Figure F.2, in the case of "low graduation" Fast Fact lists, the message read: "Some students apply to the schools below, but students at these schools are less likely to graduate than at other schools on the list." For "low odds" Fast Fact lists, the additional text read: "Warning: you may have a lower chance of getting into the schools below!" (see Figure F.3). In these cases, the Fast Facts sheet did not include information about how to apply to one of these schools.

The supplemental schools were selected as follows:

1. Identify schools in the commuting radius not listed on the Fast Facts sheet that were either "low odds" high school choices (less than 20 percent match rate among historic relevant choices) or "low graduation" (graduation rate less than 70 percent).

2. Select the two schools from the above lists that that were chosen most often in the school's history.

3. To ensure that the supplemental schools were not rarely chosen at that school, calculate the share of total choices from that middle school's choice history occupied by each school on the supplemental list. Retain schools that account for at least 1.5 percent of the choice history.

4. If an additional supplemental school is needed, or if a middle school did not have a choice history, substitute schools from the geographic district. "Low odds" in this case is defined as a less than 10 percent match rate (among historical relevant choices).

5. If a supplemental school is identified as both "low odds" and "low graduation" rate, we omit that school from the low odds list, substituting the next school that meets the criteria above. This situation happened rarely.

A.2.3 Screened language insert

The high school admissions process may be especially challenging for students new to the United States and those who are learning English. We thus provided the screened language insert (Figure

F.4), a one-page list of 38 programs citywide that exclusively served such students. The list was available as a paper flyer in English and Spanish for all schools in the Fast Facts paper treatment arms and as a tab on the Fast Facts digital delivery website. The insert highlighted the school name, program name, program code, directory page number, and language(s) served. Programs were included on the insert if they had a 6-year graduation rate above 75 percent.

A.2.4   Fast Facts list characteristics

By design, the high schools listed on the Fast Fact sheets across all treatment groups all had similar characteristics in terms of graduation rates, admissions, and location. Descriptive statistics on the comparison between the three Fast Facts treatment types as well as across the two delivery methods can be found in Table B.1. More than three quarters of them were located in the same borough as the middle schools from which they received students. The average travel time between these schools and middle schools is between 33 to 35 minutes. In terms of admission outcomes, schools had approximately 150-153 seats to offer, with an average of 12 applications per seat. The recommended high schools had an average graduation rate of 86 percent , and over percent 95 of schools had graduation rates of over 75 percent . The differences between these treatment group means and those from the control group are not statistically significant. Balance tests include indicators for randomization blocks. Apparent differences across columns are due to the fact that no control schools were in Tier 1.

The supplemental schools for the "low odds" and "low graduation" treatment arms are described in Table B.2. As expected, low odds schools tend to have very high graduation rates, and low graduation rate schools average a graduate rate of about 60 percent. Low odds schools are quite popular, with more than 30 applicants per seat, and low graduation rate schools tend to be large programs, averaging over 200 9th grade seats per school. In almost all cases, low graduation rate schools are in the same borough as the middle school, though low odds schools are slightly more likely than the average Fast Facts school to be out-of-borough.

A.2.5   The NYC High School Admissions Guide "App"

The NYC High School Admissions App was created by the Heckscher Foundation for Children. It was a downloadable smartphone application, also available as an interactive website. The research team worked with the Foundation to fine-tune the search procedures and ensure that the App emphasized schools with graduation rates above a floor. To use the App, students provide their home address, middle school, borough preferences, distance preference (willingness to travel more than 45 minutes), academic interests (select up to 4 of 7 categories), and sports/activities interests (select keywords). The App then provides 20 program matches based on a search procedure that tries to satisfy all of the student's preferences. If fewer than 20 programs are returned, the app progressively relaxes students' preferences, beginning with extracurricular activities. Some details on the App search procedure:

- Schools with graduation rates less than 65 percent are omitted from search results, however students may look up these schools manually if they wish. When more than 20 programs meet the desired criteria, higher graduation rate schools are prioritized for the list of results.

- Schools with travel time greater than 75 minutes are omitted altogether, although again students may search for these schools manually. The student only receives recommendations

between 45 and 75 minutes if they state a willingness to travel further than 45 minutes.

- Programs are internally assigned "priority code" so that students are more likely to see recommendations of schools where they have a higher probability of admission (e.g. their own borough). Additionally, there are a few ad hoc controls to ensure students are not given recommendations where their chance of admission is zero. For example, District 2 screened schools when the student is not a District 2 resident or does not attend a District 2 school already. Special schools like those only for recent arrivals are omitted, since we have no way of knowing if they meet this criteria.

Students assigned to the App treatment received materials encouraging its use and showing how to use it. Students in other treatment arms and the control group were not restricted from accessing the App but were not encouraged to do so. The postcard supplied to school counselors to share with students to help them access the App is available in Figure F.7; screenshots of the App are available in Figure F.8.

A.2.6 School Finder

School Finder was released in summer 2016 by the NYCDOE as a searchable, online high school directory, which was sortable by alphabetical order or distance from a particular location. Students could access it through the NYCDOE website or directly (at SchoolFinder.nyc.gov), and it is now embedded in the MySchools.nyc, the portal used to apply to schools in NYC. In previous years, the high school directory was available online as a downloadable PDF. To access listings of schools, School Finder was searchable by keyword (e.g. basketball, science, debate, arts) and location. Results could further be filtered by school size, borough, distance from a particular zip code, program admissions method (e.g. screened, zoned), and accessibility.[5] School lists generated by these search and filter criteria were sortable by distance or school name. Clicking on a school name opened up more details about the school, including a summary written by the school, performance information, activities listings, and information about program and priorities. This is the same information that was available in the high school directory. It was not possible to sort schools by graduation rates or other performance criteria.

Importantly, students in control group schools also had access to School Finder, and all school counselors could participate in training from the NYCDOE on School Finder. However, there were not targeted activities that schools were required to engage in using School Finder. The postcard supplied to school counselors to share with students to help them access School Finder is available in Figure F.9; screenshots of School Finder are available in Figure F.10.

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[5]Results could also be filtered by "eligibility," but this was for special programs such as schools for newcomers or schools for girls only.

Figure A.1: Randomization Design
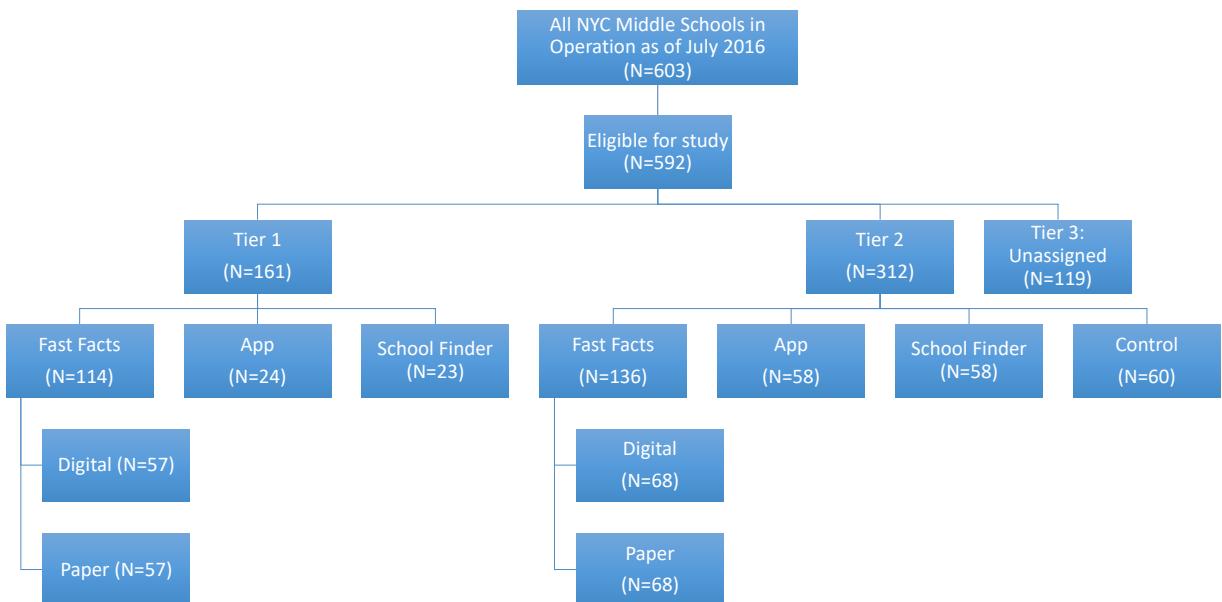
Notes: The above figure shows treatment assignment as of summer 2016. For visual clarity, the within Fast Facts variation treatment arms are not shown.

Figure A.2: Randomization Design, After Orthogonal Post-Randomization Updates

Figure A.3: Randomization Design, After All Post-Randomization Updates
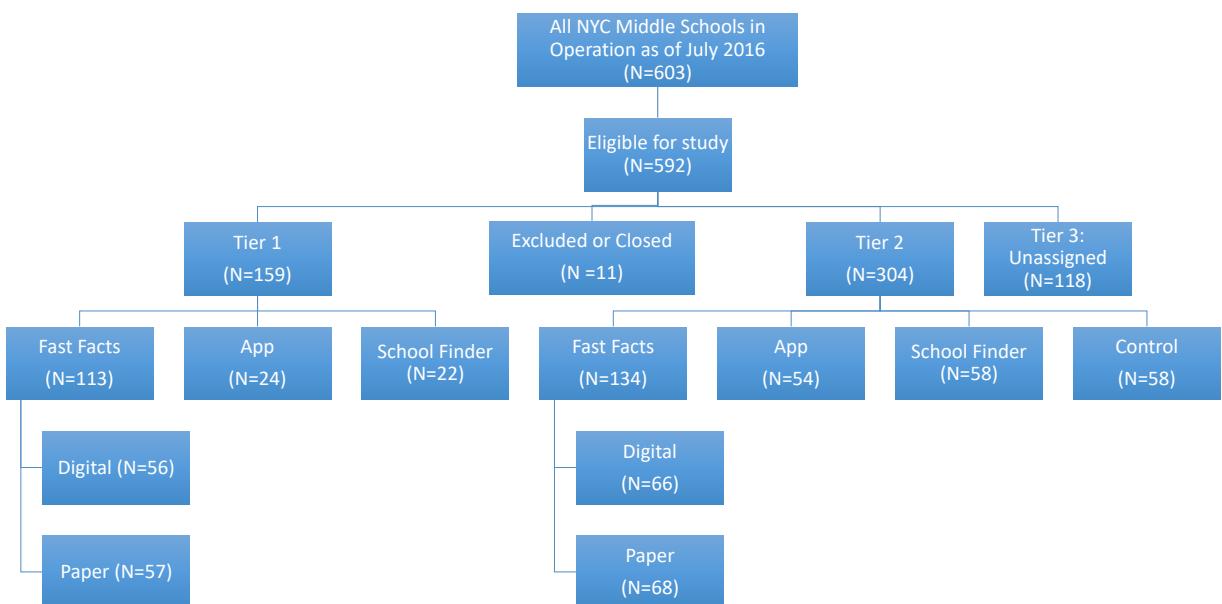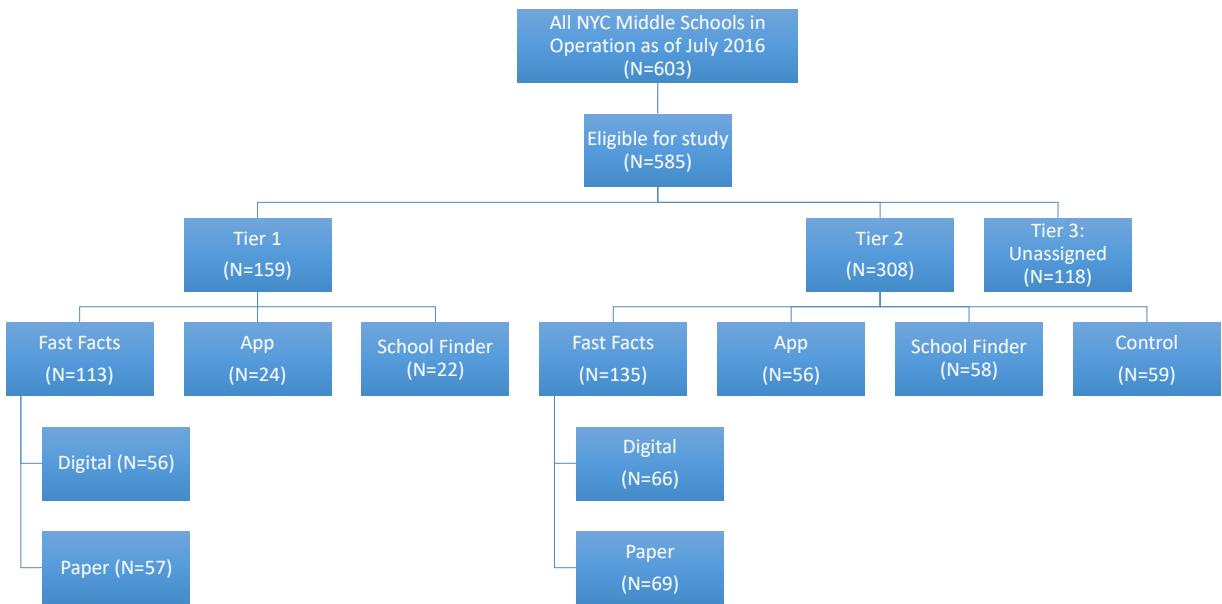
Notes: The above figure shows treatment assignment after orthogonal and nonrandom post-randomization adjustments were made. This includes schools that were closed or consolidated, which did not serve 8th graders, or a school that was randomly drawn from Tier 3. The nonrandom adjustments are for schools whose treatment status changed due to participation in the experiment. For visual clarity, the within Fast Facts variation treatment arms are not shown.

Table A.1: Middle School Characteristics

	All schools (1)	Study schools (2)	Tier 1 (3)	Tier 2 (4)
(A) Graduation rates:				
Charter	0.166	0.190	0.081	0.247
Bronx	0.243	0.260	0.366	0.205
Brooklyn	0.326	0.353	0.354	0.353
Manhattan	0.215	0.197	0.180	0.205
Queens	0.188	0.169	0.099	0.205
Staten Island	0.029	0.021	0.000	0.032
Tier 1	0.272	0.340	1.000	0.000
Tier 2	0.527	0.660	0.000	1.000
Total enrollment	604.8	583.5	474.9	639.6
Grade 8	123.8	126.4	118.7	130.3
Grade 9	19.8	8.2	0.0	12.4
(B) Student Body				
% Female	49.6	49.1	48.6	49.3
% Asian	9.7	9.0	5.2	10.9
% Black	35.8	38.7	36.0	40.1
% Latinx	41.6	43.7	52.5	39.2
% Other race	1.8	1.5	1.3	1.6
% White	11.2	7.1	5.0	8.2
% SWD	20.4	21.0	23.4	19.7
% EL	10.9	12.3	15.0	11.0
% in poverty	78.8	83.9	88.2	81.8
Mean 8th math score	292.2	290.8	283.2	295.1
Mean 8th ELA score	305.2	302.4	297.1	305.4
N	592	473	161	312

Notes: This table shows means of school-level characteristics from 2015-2016 for each group listed in the column heading. Tier 1 indicates middle schools that participated in the 2015-2016 experiment; Tier 2 middle schools new to the experiment in 2016-2017. In 2015, NYCDOE began to use average income in place of free reduced lunch to determine poverty status for schools.

Table A.2: Mean High School Admissions Characteristics

	All schools (1)	Study schools (2)	Tier 1 (3)	Tier 2 (4)
(A) Graduation rates				
1st choice	84.1	83.2	81.6	84.1
1st-3rd choices	83.3	82.4	80.8	83.2
All choices	82.1	81.1	79.5	82.0
Final matched school	78.6	77.5	76.0	78.4
Enrolled school	78.3	76.6	74.3	77.9
Variability in grad rate (range)	24.8	27.7	31.1	25.8
(B) Graduation rates <70%				
1st choice	0.165	0.181	0.207	0.166
1st-3rd choices	0.184	0.200	0.229	0.184
All choices	0.208	0.227	0.257	0.210
Final matched school	0.314	0.350	0.383	0.332
Enrolled school	0.292	0.327	0.375	0.299
(C) Graduation rates <75%				
1st choice	0.225	0.248	0.293	0.223
1st-3rd choices	0.250	0.275	0.321	0.249
All choices	0.285	0.314	0.361	0.288
Final matched school	0.419	0.469	0.520	0.440
Enrolled school	0.389	0.436	0.507	0.396
(D) Additional choice outcomes				
Number of main round choices	7.417	8.128	8.863	7.718
Matched to 1st choice	0.502	0.470	0.482	0.463
Matched to 1st-3rd choice	0.771	0.755	0.776	0.743
Participate in R2	0.111	0.120	0.118	0.121
Enrolled in matched school	84.180	83.401	87.279	81.240
Enrolled in charter school	8.745	10.231	6.460	12.324
% in same boro, choices 1-3	0.816	0.805	0.787	0.816
% limited unscreened, choices 1-3	0.313	0.334	0.394	0.304
% screened, choices 1-3	0.399	0.372	0.321	0.401
N	592	473	161	312

Notes: This table shows means of school-level characteristics from 2015-2016 for each group listed in the column heading. Tier 1 indicates middle schools that participated in the 2015-2016 experiment; Tier 2 middle schools are new to the experiment in 2016-2017.

Table A.3: Covariate Balance: Tier 1 Middle Schools, Initial Randomization

	FF vs. SF (1)	FF Low Odds vs. SF (2)	FF Low Grad vs. SF (3)	FF Digital vs. SF (4)	FF Dig + Paper vs. SF (5)	App vs. SF (6)
Percent with no R1 match	-0.001	-0.000	0.009	0.010	-0.003	0.016
	(0.013)	(0.017)	(0.010)	(0.016)	(0.012)	(0.025)
Graduation rate of top 3 choices	1.315	0.531	0.334	-0.124	1.315	0.228
	(1.576)	(1.415)	(1.651)	(1.650)	(1.643)	(2.041)
Percent of top 3 choices limited unscreened	-0.032	-0.022	-0.011	-0.014	-0.027	-0.029
	(0.046)	(0.037)	(0.047)	(0.047)	(0.046)	(0.077)
Mean 8th grade math score	7.134	-1.518	0.506	7.968	-2.063	9.556
	(6.697)	(6.073)	(7.571)	(7.781)	(6.936)	(14.012)
Mean 8th grade ELA score	4.273	2.773	3.489	1.111	5.174	7.111
	(4.962)	(3.950)	(4.643)	(5.839)	(4.369)	(5.866)
Grade 8 enrollment	-12.136	-13.409	15.318	-41.889	23.231	-6.222
	(38.120)	(35.845)	(30.077)	(48.690)	(31.045)	(32.535)
% in poverty	-2.350	-0.614	-1.227	1.259	-3.236	-1.578
	(3.397)	(2.984)	(4.132)	(4.392)	(2.881)	(8.107)
% EL	-2.450	-3.045	-2.132	2.644	-6.133**	-5.989
	(2.656)	(3.242)	(3.150)	(3.369)	(2.777)	(3.987)
% SWD	-2.936	-2.018	-0.495	0.522	-3.436	-3.244
	(3.177)	(1.959)	(2.562)	(3.120)	(2.530)	(5.539)
% Female	-0.200	1.491	0.568	-2.415	2.721	0.556
	(1.779)	(2.254)	(1.643)	(1.884)	(1.853)	(2.660)
% Asian	-1.145	0.091	1.173	-3.322	2.367	-1.033
	(2.782)	(3.083)	(3.532)	(3.644)	(3.213)	(6.194)
% Black	-1.782	-5.277	-6.623	-15.981*	3.346	24.578
	(9.262)	(8.393)	(7.876)	(9.061)	(8.148)	(16.149)
% Latinx	-1.141	3.305	4.336	16.900*	-8.033	-20.333
	(8.585)	(8.066)	(6.567)	(8.985)	(6.432)	(12.937)
% White	3.568	1.955	0.950	2.774	1.731	-4.333
	(3.659)	(3.205)	(2.724)	(2.791)	(3.650)	(6.118)
Charter School	0.000	-0.000	-0.045	-0.074	0.026	0.222
	(0.077)	(0.000)	(0.054)	(0.081)	(0.036)	(0.238)
Joint p-value	0.791	0.827	0.858	0.585	0.691	0.361
N	61	61	61	80	80	47

Notes: Each coefficient above shows the regression-adjusted difference between a treatment group and the School Finder group, using randomization block fixed effects. Robust standard errors clustered by baseline school are in parentheses (* p<.10 ** p<.05 *** p<.01). The p-values come from joint hypothesis tests of the hypothesis that all coefficients in a column are zero.

Table A.4: Covariate Balance: Tier 1 Middle Schools, Post-Randomization Updates

	FF vs. SF (1)	FF Low Odds vs. SF (2)	FF Low Grad vs. SF (3)	FF Digital vs. SF (4)	FF Dig + Paper vs. SF (5)	App vs. SF (6)
Percent with no R1 match	-0.000	-0.001	0.010	0.013	-0.003	0.016
	(0.014)	(0.018)	(0.011)	(0.018)	(0.012)	(0.025)
Graduation rate of top 3 choices	1.286	0.736	0.479	0.051	1.315	0.228
	(1.677)	(1.472)	(1.748)	(1.849)	(1.633)	(2.020)
Percent of top 3 choices limited unscreened	-0.031	-0.022	-0.001	-0.003	-0.027	-0.029
	(0.049)	(0.039)	(0.048)	(0.051)	(0.046)	(0.076)
Mean 8th grade math score	6.522	-2.496	0.054	6.923	-2.063	9.556
	(7.088)	(6.296)	(8.040)	(8.755)	(6.893)	(13.863)
Mean 8th grade ELA score	3.429	2.571	3.846	0.208	5.174	7.111
	(5.176)	(4.163)	(4.923)	(6.480)	(4.342)	(5.803)
Grade 8 enrollment	-15.619	-11.381	17.476	-46.083	23.231	-6.222
	(40.350)	(37.759)	(31.907)	(54.907)	(30.851)	(32.187)
% in poverty	-2.462	0.481	0.157	3.662	-3.236	-1.578
	(3.614)	(2.841)	(4.042)	(4.075)	(2.863)	(8.021)
% EL	-2.376	-3.190	-2.238	3.137	-6.133**	-5.989
	(2.826)	(3.418)	(3.351)	(3.785)	(2.759)	(3.944)
% SWD	-3.124	-2.086	-0.800	0.325	-3.436	-3.244
	(3.375)	(2.067)	(2.701)	(3.527)	(2.514)	(5.480)
% Female	-0.881	1.381	0.657	-3.408*	2.721	0.556
	(1.691)	(2.376)	(1.746)	(1.747)	(1.842)	(2.631)
% Asian	-1.267	0.086	1.176	-3.850	2.367	-1.033
	(2.958)	(3.255)	(3.760)	(4.100)	(3.193)	(6.128)
% Black	1.986	-3.348	-6.033	-11.908	3.346	24.578
	(8.656)	(8.530)	(8.352)	(8.983)	(8.097)	(15.976)
% Latinx	-3.705	1.019	3.514	13.779	-8.033	-20.333
	(8.556)	(8.027)	(6.915)	(9.535)	(6.392)	(12.799)
% White	2.076	1.971	0.833	1.458	1.731	-4.333
	(3.417)	(3.384)	(2.896)	(2.425)	(3.627)	(6.053)
Charter School	0.048	0.000	-0.000	0.000	0.026	0.222
	(0.057)	(0.000)	(0.000)	(.)	(0.035)	(0.235)
Joint p-value	0.359	0.835	0.817	0.363	0.645	0.141
N	60	59	60	78	79	46

Notes: Each coefficient above shows the regression-adjusted difference between a treatment group and the School Finder group, using randomization block fixed effects. Robust standard errors clustered by baseline school are in parentheses (* p<.10 ** p<.05 *** p<.01). The p-values come from joint hypothesis tests of the hypothesis that all coefficients in a column are zero.

Table A.5: Covariate Balance: Tier 2 Middle Schools, Initial Randomization

	FF vs. Control (1)	FF Low Odds vs. Control (2)	FF Low Grad vs. Control (3)	FF Digital vs. Control (4)	FF Dig + Paper vs. Control (5)	App vs. Control (6)	SF vs. Control (7)
Percent with no R1 match	0.010	0.003	-0.013	0.005	-0.005	-0.008	-0.004
	(0.015)	(0.010)	(0.017)	(0.012)	(0.013)	(0.014)	(0.011)
Graduation rate of top 3 choices	0.129	1.733	1.232	0.466	1.554	0.357	-0.146
	(0.953)	(1.227)	(1.029)	(0.848)	(0.991)	(0.869)	(1.004)
Percent of top 3 choices LUS	0.029	-0.015	0.036	0.024	0.004	0.014	0.027
	(0.032)	(0.022)	(0.030)	(0.025)	(0.024)	(0.026)	(0.023)
Mean 8th grade math score	0.128	4.330	-5.495	2.147	-0.844	0.717	-3.128
	(4.915)	(4.216)	(5.511)	(4.420)	(4.172)	(4.101)	(4.014)
Mean 8th grade ELA score	0.957	2.260	-1.905	0.599	0.885	-0.392	-2.862
	(2.995)	(2.540)	(2.875)	(2.493)	(2.421)	(2.440)	(3.070)
Grade 8 enrollment	-29.846	-25.720	-30.911	-15.506	-43.600**	0.291	-24.462
	(23.186)	(24.013)	(24.790)	(22.235)	(19.328)	(26.968)	(22.704)
% in poverty	-2.232	0.824	1.313	0.684	-0.576	1.892	0.407
	(2.671)	(2.381)	(2.925)	(2.473)	(2.170)	(2.675)	(2.293)
% EL	-5.359*	-3.617	-3.938	-4.218*	-3.738	-0.948	-0.774
	(2.680)	(2.653)	(2.953)	(2.427)	(2.347)	(2.475)	(3.335)
% SWD	2.101	0.327	2.193	1.482	1.182	1.764*	1.124
	(1.827)	(1.246)	(1.671)	(1.527)	(1.216)	(1.026)	(1.236)
% Female	2.363	3.211*	3.507*	3.024*	2.541*	1.537	-0.612
	(1.975)	(1.717)	(2.023)	(1.798)	(1.477)	(1.353)	(1.603)
% Asian	0.788	-4.462	-7.184*	-1.874	-4.222	-2.769	-5.121*
	(3.567)	(3.059)	(3.811)	(3.364)	(2.731)	(3.396)	(2.682)
% Black	6.707	9.118*	7.067	7.015	6.420	-0.499	5.860
	(5.049)	(5.299)	(7.317)	(5.089)	(5.244)	(4.630)	(4.679)
% Latinx	-7.843*	-1.160	1.511	-2.646	-1.718	2.498	-0.182
	(4.228)	(4.488)	(5.774)	(4.264)	(4.258)	(3.977)	(4.034)
% White	0.153	-3.358	-1.889	-2.952	-0.309	0.900	-0.588
	(2.444)	(2.603)	(3.092)	(2.327)	(2.376)	(1.929)	(1.930)
Charter School	0.011	0.097	0.089	0.069	0.059	-0.032	-0.043
	(0.055)	(0.076)	(0.087)	(0.064)	(0.065)	(0.070)	(0.070)
Joint p-value	0.723	0.386	0.286	0.509	0.680	0.901	0.928
N	105	106	105	128	128	118	118

Notes: Each coefficient above shows the regression-adjusted difference between a treatment group and the control group, using randomization block fixed effects. Robust standard errors clustered by baseline school are in parentheses (* p<.10 ** p<.05 *** p<.01). The p-values come from joint hypothesis tests of the hypothesis that all coefficients in a column are zero.

Table A.6: Covariate Balance: Tier 2 Middle Schools, Post-Randomization Updates

	FF vs. Control (1)	FF Low Odds vs. Control (2)	FF Low Grad vs. Control (3)	FF Digital vs. Control (4)	FF Dig + Paper vs. Control (5)	App vs. Control (6)	SF vs. Control (7)
Percent with no R1 match	0.009	0.003	-0.019	0.004	-0.006	-0.009	-0.003
	(0.016)	(0.010)	(0.018)	(0.013)	(0.013)	(0.014)	(0.011)
Graduation rate of top 3 choices	0.287	1.752	1.588	0.744	1.576	0.326	-0.202
	(0.978)	(1.269)	(1.113)	(0.880)	(1.022)	(0.886)	(1.027)
Percent of top 3 choices LUS	0.020	-0.015	0.029	0.016	0.005	0.019	0.028
	(0.032)	(0.023)	(0.032)	(0.025)	(0.025)	(0.026)	(0.024)
Mean 8th grade math score	1.490	4.293	-4.602	3.625	-0.527	0.164	-3.321
	(4.821)	(4.333)	(5.920)	(4.475)	(4.212)	(4.264)	(4.095)
Mean 8th grade ELA score	1.484	1.937	-2.112	0.976	0.942	-0.826	-3.225
	(3.027)	(2.587)	(3.042)	(2.534)	(2.461)	(2.527)	(3.112)
Grade 8 enrollment	-33.172	-28.088	-33.929	-17.609	-46.711**	-5.233	-26.591
	(24.333)	(24.546)	(26.932)	(23.586)	(19.634)	(27.805)	(23.092)
% in poverty	-2.587	1.248	2.217	0.504	-0.072	2.453	1.075
	(2.730)	(2.403)	(3.070)	(2.562)	(2.169)	(2.673)	(2.242)
% EL	-5.431*	-3.618	-2.738	-4.077*	-3.745	-0.579	-0.676
	(2.830)	(2.727)	(2.366)	(2.193)	(2.408)	(2.557)	(3.405)
% SWD	1.685	0.393	1.343	1.043	1.196	1.691	1.178
	(1.853)	(1.279)	(1.540)	(1.468)	(1.248)	(1.069)	(1.262)
% Female	2.669	3.165*	3.660	3.188*	2.649*	1.633	-0.598
	(2.077)	(1.764)	(2.204)	(1.905)	(1.514)	(1.408)	(1.638)
% Asian	0.985	-4.791	-7.469*	-1.054	-4.836*	-3.916	-5.149*
	(3.267)	(3.125)	(4.151)	(3.428)	(2.655)	(3.438)	(2.740)
% Black	6.470	9.253*	4.383	6.273	5.653	-0.511	6.057
	(5.317)	(5.445)	(7.571)	(5.288)	(5.252)	(4.834)	(4.776)
% Latinx	-8.994**	-1.801	3.731	-3.717	-1.273	3.493	-0.206
	(4.306)	(4.561)	(5.917)	(4.274)	(4.344)	(4.083)	(4.121)
% White	1.192	-2.553	-1.086	-2.145	0.680	1.104	-0.748
	(2.385)	(2.539)	(3.203)	(2.386)	(2.244)	(1.976)	(1.965)
Charter School	0.011	0.077	0.095	0.053	0.060	-0.033	-0.043
	(0.058)	(0.075)	(0.095)	(0.066)	(0.066)	(0.073)	(0.071)
Joint p-value	0.707	0.278	0.112	0.543	0.434	0.843	0.813
N	103	105	102	124	127	116	117

Notes: Each coefficient above shows the regression-adjusted difference between a treatment group and the control group, using randomization block fixed effects. Robust standard errors clustered by baseline school are in parentheses (* $p<.10$ ** $p<.05$ *** $p<.01$). The p-values come from joint hypothesis tests of the hypothesis that all coefficients in a column are zero.

Table A.7: Descriptive Statistics: Middle Schools, Initial Randomization

	FF (1)	FF Low Odds (2)	FF Low Grad (3)	FF Dig (4)	FF Dig + Paper (5)	App (6)	SF (7)	Control (8)
(A) School Characteristics								
Charter	0.181	0.190	0.181	0.192	0.176	0.195	0.160	0.250
Bronx	0.277	0.274	0.289	0.248	0.312	0.256	0.247	0.200
Brooklyn	0.349	0.369	0.349	0.328	0.384	0.354	0.358	0.333
Manhattan	0.205	0.202	0.217	0.240	0.176	0.195	0.173	0.183
Queens	0.169	0.155	0.145	0.184	0.128	0.146	0.185	0.233
Staten Island	0.000	0.000	0.000	0.000	0.000	0.049	0.037	0.050
Tier 1	0.458	0.452	0.458	0.456	0.456	0.293	0.284	0.000
Tier 2	0.542	0.548	0.542	0.544	0.544	0.707	0.716	1.000
Total enrollment	581.4	546.8	551.4	541.8	577.8	625.6	543.8	678.4
Grade 8	121.3	119.9	117.8	126.6	112.7	133.1	123.4	149.2
Grade 9	5.4	5.8	6.3	4.9	6.7	9.6	10.4	13.3
(B) Student Body								
% Female	49.1	49.9	50.1	49.9	49.6	49.1	47.8	48.1
% Asian	10.2	7.0	6.9	7.4	8.7	9.6	7.5	14.0
% Black	39.8	41.8	37.9	40.5	39.1	34.8	41.4	35.8
% Latinx	41.2	45.0	47.7	45.6	43.7	45.2	42.6	39.1
% Other race	1.6	1.2	1.5	1.5	1.4	1.6	1.6	1.7
% White	7.2	5.0	6.0	5.0	7.2	8.7	6.9	9.4
% SWD	21.1	21.0	21.9	21.9	20.8	21.5	21.1	18.5
% EL	11.8	11.9	12.6	11.8	12.4	13.1	12.3	12.4
% in poverty	83.4	85.3	85.1	85.1	84.1	84.6	83.7	80.5
Mean 8th math score	291.7	289.3	286.5	289.8	288.6	294.8	287.2	296.1
Mean 8th ELA score	302.4	301.6	300.2	301.0	301.8	303.9	301.3	306.5
(C) Prior Year Choices								
Mean grad. rate: 1st choice	82.7	83.2	83.0	82.9	83.0	82.8	82.4	83.9
Mean grad. rate: top 3	82.5	81.9	81.8	82.4	81.8	82.6	81.8	83.2
Mean grad. rate: all	80.8	80.7	81.0	80.8	80.9	80.8	80.8	81.5
Percent match 1st choice	0.465	0.463	0.453	0.464	0.457	0.484	0.492	0.459
Percent with no R1 match	0.117	0.124	0.122	0.120	0.122	0.111	0.112	0.138
N	83	84	84	125	125	82	81	60

Notes: This table shows means of school-level characteristics for each group listed in the column heading. In 2015, NYCDOE began to use average income in place of free reduced lunch to determine poverty status for schools. High school choice outcomes in Panel C are from 2015-16.

Table A.8: Descriptive Statistics: Middle Schools, Post Randomization Adjustments

	FF (1)	FF Low Odds (2)	FF Low Grad (3)	FF Dig (4)	FF Dig + Paper (5)	App (6)	SF (7)	Control (8)
(A) School Characteristics								
Charter	0.183	0.181	0.185	0.190	0.176	0.198	0.150	0.250
Bronx	0.280	0.277	0.296	0.256	0.312	0.259	0.250	0.200
Brooklyn	0.354	0.361	0.358	0.331	0.384	0.358	0.350	0.333
Manhattan	0.195	0.205	0.198	0.223	0.176	0.185	0.175	0.183
Queens	0.171	0.157	0.148	0.190	0.128	0.148	0.188	0.233
Staten Island	0.000	0.000	0.000	0.000	0.000	0.049	0.037	0.050
Tier 1	0.463	0.446	0.469	0.463	0.456	0.296	0.275	0.000
Tier 2	0.537	0.554	0.531	0.537	0.544	0.704	0.725	1.000
Total enrollment	587.2	548.9	561.6	553.5	577.8	628.5	545.9	678.8
Grade 8	122.4	120.7	119.2	129.1	112.7	134.1	123.6	150.6
Grade 9	5.5	5.9	6.4	5.1	6.7	9.7	10.5	13.3
(B) Student Body								
% Female	49.2	50.0	50.2	50.0	49.6	49.1	47.8	48.0
% Asian	10.2	7.0	7.0	7.5	8.7	9.5	7.6	14.4
% Black	39.9	41.8	37.9	40.6	39.1	35.0	40.9	35.8
% Latinx	41.1	44.9	47.5	45.3	43.7	45.2	43.1	39.0
% Other race	1.6	1.2	1.5	1.5	1.4	1.6	1.5	1.7
% White	7.3	5.1	6.1	5.1	7.2	8.7	7.0	9.2
% SWD	20.9	21.0	21.7	21.5	20.8	21.4	21.2	18.5
% EL	11.8	12.0	12.3	11.7	12.4	13.1	12.4	12.2
% in poverty	83.3	85.4	84.9	85.0	84.1	84.4	83.5	79.7
Mean 8th math score	292.0	289.4	286.8	290.2	288.6	294.7	287.5	295.5
Mean 8th ELA score	302.4	301.5	300.5	301.2	301.8	303.9	301.3	306.9
(C) Prior Year Choices								
Mean grad. rate: 1st choice	82.6	83.2	83.1	82.9	83.0	82.7	82.3	83.9
Mean grad. rate: top 3	82.5	81.9	81.8	82.4	81.8	82.6	81.8	83.3
Mean grad. rate: all	80.8	80.7	81.0	80.7	80.9	80.8	80.8	81.5
Percent match 1st choice	0.464	0.462	0.456	0.465	0.457	0.484	0.493	0.458
Percent with no R1 match	0.118	0.125	0.121	0.121	0.122	0.112	0.113	0.137
N	82	83	83	121	125	81	80	60

Notes: This table shows means of school-level characteristics for each group listed in the column heading. In 2015, NYCDOE began to use average income in place of free reduced lunch to determine poverty status for schools. High school choice outcomes in Panel C are from 2015-16.

Online Appendix B: Fast Facts descriptions

Table B.1: Mean Characteristics of Schools on Fast Facts Lists

	FF (1)	FF Low Odds (2)	FF Low Grad (3)	FF Dig (4)	FF Dig + Paper (5)	Control (6)	p-value Type (7)	p-value Delivery (8)
(A) Graduation rates								
Graduation rate	86.6	86.5	86.6	86.5	86.6	86.5	0.993	0.710
Graduation rate with imputations	86.4	86.3	86.4	86.3	86.5	86.0	0.954	0.841
Share imputed	0.137	0.079	0.089	0.101	0.102	0.151	0.000	0.001
Graduation rate $\geq 75\%$	0.977	0.969	0.977	0.972	0.978	0.955	0.917	0.994
Graduation rate $\geq 70\%$	1.000	1.000	0.999	1.000	1.000	0.988	0.920	0.785
SD grad. rate with imputations	7.23	7.27	7.22	7.30	7.18	7.46	0.977	0.972
(B) Admissions								
Total # seats	150.5	151.8	152.4	150.5	152.6	159.7	0.919	0.693
Apps per seat	11.5	11.7	11.6	11.5	11.7	11.3	0.716	0.514
Audition	0.111	0.111	0.119	0.113	0.115	0.104	0.204	0.168
Educational Option	0.130	0.131	0.133	0.133	0.130	0.143	0.433	0.339
Limited Unscreened	0.445	0.441	0.435	0.440	0.441	0.444	0.337	0.163
Screened	0.231	0.240	0.233	0.233	0.236	0.226	0.651	0.402
Screened: Language	0.029	0.027	0.031	0.030	0.029	0.026	0.851	0.897
Zoned	0.006	0.008	0.009	0.008	0.008	0.008	0.236	0.829
Screened programs only	0.155	0.164	0.155	0.156	0.160	0.143	0.637	0.524
(C) Location								
Bronx	0.215	0.226	0.225	0.253	0.191	0.155	0.446	0.034
Brooklyn	0.278	0.313	0.297	0.324	0.267	0.268	0.251	0.194
Manhattan	0.369	0.335	0.363	0.325	0.386	0.361	0.250	0.112
Queens	0.136	0.125	0.113	0.095	0.154	0.201	0.869	0.419
Same borough	0.761	0.814	0.809	0.788	0.801	0.729	0.016	0.047
(D) Other FF characteristics								
Travel time (mins.)	34.7	33.8	33.9	34.9	33.3	39.0	0.046	0.047
New School	0.137	0.079	0.089	0.101	0.102	0.151	0.000	0.001
# schools on FF	26.0	24.0	24.0	24.7	24.7	26.0		
N	83	84	83	125	125	60		

Notes: This table shows means characterizing the schools on the Fast Fact lists at each middle school by treatment group, which are the means of averages calculated at the middle school level. Fast Facts lists were generated for all schools in the study, regardless of treatment status, though are not displayed for schools in the App or School Finder treatment arms. The p-values are from regressions of the listed high school characteristic on a set of treatment group indicators and randomization block fixed effects. Due to cross-randomization, the first p-value (column 7) corresponds to the type of FF list, the second (column 8) to the delivery method. The null hypothesis tested is that the coefficients on the treatment indicators are jointly zero. The graduation rate and graduation rate $\geq$ outcomes are conditional on being non-missing. Total seat counts do not include zoned guarantee programs, which do not have a maximum seat count.

Table B.2: Mean Characteristics of Schools on Fast Facts and Control Schools

| | Low Odds Schools | | | Low Graduation Schools | | |
| | FF Low Odds | Control | p-value | FF Low Grad | Control | p-value |
	(1)	(2)	(3)	(4)	(5)	(6)
(A) Graduation rates						
Graduation rate	91.8	93.0	0.761	60.7	60.4	0.723
Graduation rate ≥75%	0.945	0.925	0.242	0.008	0.000	0.307
Graduation rate ≥70%	0.986	0.991	0.313	0.008	0.000	0.307
(B) Admissions						
Total # seats	187.0	188.7	0.491	262.0	234.3	0.513
Apps per seat	31.8	34.7	0.662	5.4	5.3	0.801
Audition	0.064	0.062	0.289	0.013	0.035	0.204
Educational Option	0.047	0.077	0.1	0.474	0.420	0.723
Limited Unscreened	0.256	0.155	0.536	0.165	0.246	0.586
Screened	0.563	0.646	0.928	0.221	0.190	0.363
Screened programs only	0.466	0.557	0.847	0.050	0.042	0.288
(C) Location						
Bronx	0.103	0.066	0.313	0.192	0.283	-
Brooklyn	0.253	0.245	0.489	0.317	0.331	-
Manhattan	0.507	0.509	0.588	0.242	0.229	0.701
Queens	0.137	0.179	0.591	0.233	0.157	0.557
Same borough	0.705	0.623	0.865	0.933	0.976	0.735
(D) Other FF characteristics						
Travel time (mins.)	46.8	50.0	0.609	31.9	27.7	0.747
N	73	53		83		

Notes: This table shows means characterizing the supplmental and schools on the Fast Fact lists for lists in these treatments, which are the means of averages calculated at the middle school level. Characteristics that have are not present in the supplemental school list are not reported (see Table B.1). Fast Facts lists were generated for all schools in the study, regardless of treatment status, though are not displayed for schools in the App or School Finder treatment arms. The p-values are from regressions of the listed high school characteristic on a set of treatment group indicators and randomization block fixed effects. The first p-value (column 3) corresponds to a test between FF Low Odds and Control. The second (column 6) corresponds to a test between FF Low Grad and Control. The null hypothesis tested is that the coefficients on the treatment indicators are jointly zero. P-values indicated as are from cases where there is no within block variation across treatment arms. The graduation rate and graduation rate ≥ outcomes are conditional on being non-missing. Total seat counts do not include zoned guarantee programs, which do not have a maximum seat count.

Online Appendix C: Through what mechanisms did the interventions work?

There are three potential channels through which the interventions may have influenced the choices and thus the matched and enrolled schools of students. First, the high schools recommended by or found in searches using the tools themselves may have influenced their choices. For this to be true, school counselors must have distributed the tools and students must have interacted with them. This is the "tools" hypothesis.

Second, the "supportive materials" hypothesis posits that the it is the wraparound materials we provided that mattered the most, influencing students' choices and knowledge of the high school choice process, regardless of a specific tool. Finally, school counselors may not have used the tools or materials, but they may have been prompted by the receipt of study materials to deploy their own curriculum and guidance around choice. We call this the "priming" hypothesis.

We present three descriptive analyses to determine which channels played a role in response to the interventions. In all cases, these analyses rely, at least in part, on reported use of tools by school counselors in our survey, interview, or call groups. Thus, since use of the tool itself is a response to treatment, these findings cannot be considered causal estimates, and it is impossible to distinguish between impact of a tool and selection into using a tool. Rather, we consider these analyses suggestive, descriptive findings. However, we note in Online Appendix Table C.3 that there are generally few systematic differences in school characteristics between schools with counselors reporting using the tool, those reporting no use, those that did not respond, and the control group. Results here are limited to the 2016-17 year, since this is the year in which we collected extensive use information. Thus estimates can be compared to the 2016-17 only estimates in Online Appendix Table D.4.

C.1.1.1 The "tools" hypothesis

To test the tools hypothesis, we determine if students in schools where counselors reported using a particular tool list choices on their high school application that correspond to that particular tool. We examine the percent of students' top three high school choices represented by schools emphasized by each tool, hypothesizing that if students are using a tool they are more likely to list high schools highlighted by the tool.[6]

The school type focused on in each intervention is different. For the Fast Facts treatment group, we look at schools from the Fast Fact lists.[7] For the App, we look at screened schools. Since the App listed search findings in order of graduation rate and did not limit the number of screened schools listed these schools were more likely to be emphasized in this treatment. Finally, for School Finder, which allowed sorting by alphabet and by distance, we examine whether students listed schools at the top of the alphabet (school name begins with a A, B, or C) as well as travel time.[8]

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[6]A tool could still be influential without necessarily affecting these particular margins, by changing the order of schools listed, the admissions probability within a school type, or other aspects of the high school application.

[7]Recall that Fast Facts lists were created for all middle schools, including App, School Finder, and control schools. Thus, we can contrast the percentage of listed Fast Facts high schools, even for middle schools not assigned to Fast Facts.

[8]Note that 23 percent of high school names begin with A, B, or C, indicating that those with power to name schools are likely savvy with regard to alphabetic listing of schools. High schools at the top of the alphabet have a high school graduation rate of 73.4 percent; schools in the rest of the alphabet have an average graduation rate of 75.8 percent. The difference is not statistically significant.

We present results from this descriptive exercise in Table C.1. Here, we have separated out school groups not just by treatment status, but also by reported use, as described in Section **??**. Columns 1 through 4 of Table C.1 report estimates for students assigned to schools in a given treatment arm that reported use of or plans to use a tool in a survey, interview, or call. Column 5 reports estimates from *all* treatments where school counselors reported that they did *not* use or plan to use the tools. Column 6 reports estimates from school counselors who did not respond to any of our outreach or with whom we could not connect for a follow-up call. We have no information about what to expect from these schools. It could be that they were unlikely to use the materials, given they did not respond to us; however that could have been a coincidence.[9]

Panel A of Online Appendix Table C.1 shows the indicators of tool use for the groups described above. Our first indicator is percentage of top three choices listing Fast Fact high schools. Here, there are no statistically significant impacts on listing Fast Facts schools, but the pattern of results is suggestive. As shown by the control group mean of 58 percent, most students list Fast Facts schools among their top choices.[10] This rate is higher for schools that reported using Fast Facts paper. Fast Facts Digital – even these schools that reported use – had no difference when it compared to the control group. We take this as evidence that the lower rates of use when using internet views were more accurate than counselor reports, as well as that a hit to a website is not sufficient to ensure take-up.[11] While the App treatment did not specifically target Fast Fact schools, it had a similar a algorithm, and thus it is not surprising that the rate of Fast Fact choices is higher for the schools reporting use of the App. There was little difference in this metric for those that used School Finder or those that reported not using the tools. However, those that did not respond to the survey seemed less likely to list Fast Facts schools, perhaps indicating unfocused high school searches for this group. As a whole, the listing of Fast Facts seems to follow the prediction we would expect from tool use; but differences are not statistically significant.

As predicted, students in schools that reported use of the App were more likely to list at least one screened school in their top three choices. While these schools tend to have high graduation rates, listing screened schools is not necessarily an optimal strategy, as admissions probability at these schools tends to be low, and impossible for students without appropriate academic credentials. Most of the other groups do not show a difference in listing screened schools, though there is a not-significant increase for Fast Facts Digital.

When it comes to listing schools near the top of the alphabet, we see that all groups that reported use are more likely to list at least one of these schools in their top three choices, with statistically significant estimates for Fast Facts and School Finder. We take this an indicator that when counselors report use of tools or materials, these are the counselors and students that are participating more in any part of the choice process, and thus, as active choosers, may be more likely to encounter materials with schools listed in alphabetical order. This is an important reminder that there is no such thing as a "neutral" default (**?????**). Listing schools in alphabetical order may seem like it is neutral, but instead, it preferences schools near the beginning of the alphabet. Students in schools where school counselors did not respond to outreach also had increased levels of

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[9]It would be interesting to separate both the "did not use" and "did not respond" groups by specific treatment arm, but sample sizes are very small when we do this.

[10]This may not be surprising, since we selected Fast Facts schools to be nearby high schools, and ones that students at a given middle school had at least some history of matching to. At least one student a middle school had to have matched to a school in the past six years for it to be added to the Fast Facts list.

[11]Online Appendix Table C.5 shows the estimates with Fast Facts Digital use recoded to follow online views of the website, and still shows few differences for this group.

listing early alphabet schools, perhaps indicating that these schools used alternative, non-targeted school choice curricula.

As a whole, we take the general trend of correspondence between a high school listing indicators for specific tools with schools reporting use of that tool as suggestive evidence that at least some of the impact of the interventions comes from directly listing the recommended high schools of that particular tool (the "tools" hypothesis). We see in turn in Panels B and C of Table C.1 that the actively used tools (Fast Facts paper, the App, and School Finder) in turn are more likely to have reductions in guaranteed low graduation first choices and listing low graduation rate schools, and eventually are less likely to enroll in low graduation rate schools.

C.1.1.2 The "supportive materials" hypothesis

To assess the "supportive materials" hypothesis, we turn to a different group: control group schools, which had access to the School Finder tool as it was available district-wide, but did not have access to the supportive materials. In Online Appendix Table C.2, we compare between control group schools that report using School Finder and those that either report not using School Finder (about a quarter of control schools that respond to the survey) or do not respond to the survey request. To estimate differences by School Finder in this group, we must remove block fixed effects since blocks only have one control group school. We substitute borough fixed effects, which means we compare between using and non-using/non-responding schools within the same borough. This difference should not be considered a causal estimate, and may be a mix of School Finder impacts and selection into use.[12]

To test the supportive materials hypothesis, we compare the School Finder "effect" in the control group to the impact in the experiment. Control group schools which report School Finder use, as shown in Panel B of Online Appendix Table C.2, reduce guaranteed low graduation first choices and percentage of top three choices that are low graduation rate, and in turn, are 3.2 percentage points less likely to enroll in low graduation rate schools. This is about three-fifths of the School Finder intervention effect of 5.1 percentage points (Table 4. If we take the control group use estimate as a suggestive estimate of tool use, this leaves about two-fifths of the School Finder impact to be explained by the supportive materials we provided with the tool. However, the School Finder "effect" in the control group may be biased upward due to selection, if school counselors that report use are generally better counselors. If that is the case, there is even more scope for the supportive materials to contribute to the intervention impact. Again, we cannot draw firm conclusions here, but these descriptive findings show suggestive benefit of wraparound materials, beyond individual tools.

C.1.1.3 The "priming" hypothesis

Finally, to test the priming hypothesis, we examine the outcomes of students in Fast Fact Digital schools (the least-used treatment) with no or unknown reported counselor use, since these are the schools with the least likely engagement with tools or supportive materials, but where counselors received an external prompt about the school admissions process (our materials). There is a drop, though not a statistically significant one, in likelihood of matching to a low graduation rate school

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[12]We observe few difference in school characteristics in terms of student demographics and tests scores between using and other schools in Online Appendix Table C.4. However, schools that report using School Finder in the control group are much more likely to be charter schools.

for these Fast Facts Digital, non-using schools, and non-respondent schools. This ranges between -1.4 and -3.2 percentage points—smaller than the statistically significant -4.4 to -6.5 found for the other treatments reporting use—but is a difference from untreated control schools. These groups also appear to have a lower rate of guaranteed low graduation first choice (though again, not to the extent of Fast Facts, the App, or School Finder). This is suggestive, though not conclusive evidence of a small "priming" channel.

Despite low rates of tool use vis-a-vis internet views and a lack of utilization of Fast Facts schools (Fast Facts Digital), reporting no use (Did Not Use), and unknown status, these schools received intervention materials thus school counselors may have been prompted to engage more (or more intensively) in the high school choice process than control group schools, as we do observe small differences from the control group for choice and enrollment outcomes, though these differences are not statistically significant. It is impossible to distinguish between a priming effect and selection out of treatment by counselors who already have impacts on the outcomes we focus on, though again, there are few differences among the low- or no-use groups in terms of school characteristics (Online Appendix Table C.3). One notable difference is that school counselors who do not opt in or respond to our outreach are slightly more likely to be charter schools, though this difference is not statistically significant.

C.1.1.4 Conclusions from the mechanisms analysis

We cannot definitively pin down the channel through which the interventions are effective, finding suggestive, descriptive evidence for all three channels: tools, materials, and priming. We note here, and discuss more deeply in our consideration of subgroup effects in Section **??** that intervention impacts are strongest where we see the greatest changes in application strategy, and that for interventions to make a difference in match and enrollment they likely need to push these levers.

Table C.1: Impact of Informational Interventions by Take-Up (2016-17)

	Used						Control	
	Fast Facts (1)	FF Digital (2)	App (3)	School Finder (4)	Did Not Use (5)	No Response (6)	Mean (7)	N (8)
(A) Use Indicators								
% of Top 3 Choices from FF List	1.736	-0.201	3.571	0.542	-1.910	-4.087	57.7	58,141
	(2.369)	(3.155)	(2.445)	(2.182)	(2.595)	(2.724)	[37.2]	
Any of Top 3 Choices Screened	-0.040	2.822	3.620+	-1.672	-0.600	-0.073	71.1	58,141
	(1.883)	(2.209)	(1.860)	(1.924)	(2.113)	(2.171)	[45.3]	
Any of Top 3 Choices Early Alphabet	5.662*	4.397	4.644+	4.854*	0.054	4.239	50.9	58,141
	(2.256)	(2.791)	(2.527)	(2.462)	(2.658)	(2.611)	[50.0]	
Avg. Travel Time Top 3 Choices	-0.380	-0.176	-1.945	-1.459	-1.494	0.461	34.0	58,134
	(1.369)	(1.586)	(1.719)	(1.385)	(1.884)	(1.425)	[16.1]	
(B) Choices								
Guaranteed Low Grad	-3.583*	-2.231	-3.250*	-2.544+	-1.433	-1.652	14.7	54,926
	(1.455)	(1.747)	(1.559)	(1.447)	(1.887)	(1.804)	[35.4]	
% of Top 3 Choices Grad Rate <75%	-3.109	-1.816	-3.769+	-1.979	0.349	-0.971	22.9	57,871
	(1.904)	(2.768)	(2.090)	(1.761)	(2.480)	(2.296)	[33.8]	
(C) Enrolled School								
Graduation Rate	1.726**	0.921	1.023+	1.188*	0.571	0.612	79.3	49,119
	(0.566)	(0.604)	(0.554)	(0.536)	(0.787)	(0.584)	[14.3]	
Grad Rate <75%	-6.736**	-1.699	-6.709*	-5.200*	-2.617	-3.511	40.2	49,119
	(2.373)	(2.953)	(2.618)	(2.342)	(3.323)	(2.720)	[49.0]	
(D) Other Choice Outcomes								
Matched to 1st Choice	-0.234	1.055	1.094	0.779	3.679+	0.414	42.0	58,141
	(1.533)	(1.714)	(1.559)	(1.503)	(1.974)	(1.835)	[49.4]	
Matched in R1	-0.776	-0.293	-1.306	-0.814	-0.106	-1.812+	92.7	58,141
	(0.845)	(0.948)	(0.973)	(0.965)	(1.013)	(0.936)	[26.0]	
Enroll in Matched School	0.100	-0.212	-0.520	1.515	0.993	-1.062	88.1	57,489
	(1.177)	(1.196)	(1.411)	(1.393)	(1.269)	(1.464)	[32.4]	
Number of Schools (2016-17)	99	83	53	58	55	60	58	

Notes: This table reports regression coefficients representing assignment to an informational intervention middle school on key outcomes, separated by use. All regressions include controls for the variables listed in Table 1, as well as for randomization block by year fixed effects. The estimation sample includes all students present in October of their 8th grade years in the 2016-2017 school year who attended randomization sample schools and participated in the Round 1 high school choice process. Use was determined by an affirmative response for indicating sharing the intervention with students or parents in any of the following: a follow-up call with the research team to confirm receipt of the materials, a survey distributed to all guidance counselors, or an interview with a sample of guidance counselors. Some schools have multiple personnel responsible for high school admissions; an affirmative response from any of these staff members was considered as use for that school. Schools without a response to any of the above are included as non-responders, and all control schools are used. The sample is limited to the first cohort, as this is the group with detailed use information, and some treatments were changed in the second year of the intervention. Robust standard errors clustered by middle school are in parentheses (+ p<.10 * p<.05 ** p<.01).

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Table C.2: Differences within Control Group Schools by School Finder Use (2016-17)

	Used School Finder (1)	Did Not Use SF or No Response (2)	N (3)
(A) Use Indicators			
% of Top 3 Choices from FF List	8.9+	56.0	8,564
	(5.2)	[37.3]	
Any of Top 3 Choices Screened	8.1**	69.0	8,564
	(2.9)	[46.3]	
Any of Top 3 Choices Early Alphabet	-8.9*	52.9	8,564
	(4.4)	[49.9]	
Avg. Travel Time Top 3 Choices	-7.8**	34.9	8,564
	(2.6)	[15.7]	
(B) Choices			
Guaranteed Low Grad	-6.5*	16.6	8,181
	(2.7)	[37.2]	
% of Top 3 Choices Grad Rate <75%	-5.4	25.2	8,548
	(4.4)	[34.8]	
(C) Enrolled School			
Graduation Rate	0.5	79.0	7,314
	(1.3)	[14.2]	
Grad Rate <75%	-3.2	40.9	7,314
	(5.8)	[49.2]	
(D) Other Choice Outcomes			
Matched to 1st Choice	-4.2	45.2	8,564
	(2.7)	[49.8]	
Matched in R1	-1.5	93.9	8,564
	(1.6)	[24.0]	
Enroll in Matched School	1.0	88.7	8,471
	(1.7)	[31.7]	
Number of Schools (2016-17)	18	40	

Notes: This table reports regression coefficients representing use of School Finder, within the control group. All regressions include controls for the variables listed in Table 1, and, in lieu of randomization block by year fixed effects, a borough fixed effect. The estimation sample includes all students present in October of their 8th grade years in the 2016-2017 school year who attended control group schools and participated in the Round 1 high school choice process. School Finder use was determined by an affirmative response from a survey distributed to all guidance counselors or an interview with a sample of guidance counselors. Some schools have multiple personnel responsible for high school admissions; an affirmative response from any of these staff members was considered as use for that school. Schools without a response to any of the above are included as non-responders, and all control schools are used. The sample is limited to the first cohort, as this is the group with detailed use information, and some treatments were changed in the second year of the intervention. Robust standard errors clustered by middle school are in parentheses (+ p<.10 * p<.05 ** p<.01).

Table C.3: School Characteristics by Informational Interventions by Take-Up (2016-17)

	Used							
	Fast Facts (1)	FF Digital (2)	App (3)	School Finder (4)	Did Not Use (5)	No Response (6)	Control Mean (7)	N (8)
Percent Female	2.729+	1.772	0.807	0.431	0.611	3.574*	48.0	466
	(1.395)	(1.550)	(1.378)	(1.569)	(2.061)	(1.745)	[7.4]	
Percent Asian	-3.254	-4.739	-1.720	-4.707	-3.492	-3.422	13.8	466
	(2.938)	(2.904)	(3.342)	(2.867)	(3.140)	(3.032)	[21.2]	
Percent Black	2.027	7.776	-1.421	5.724	6.626	3.887	36.4	466
	(4.891)	(4.790)	(4.934)	(4.895)	(5.688)	(5.328)	[31.0]	
Percent Hispanic/Latino	1.372	-1.371	0.565	-1.142	-2.434	0.174	39.5	466
	(4.258)	(4.202)	(4.367)	(3.968)	(4.489)	(4.495)	[26.1]	
Percent White	-0.426	-2.434	1.829	-0.248	-0.678	-0.416	8.9	466
	(2.099)	(1.981)	(2.177)	(2.074)	(2.349)	(2.062)	[12.2]	
Percent SWDs	0.258	2.303*	1.978	1.055	1.128	0.759	18.6	466
	(1.165)	(1.158)	(1.208)	(1.409)	(1.342)	(1.552)	[6.3]	
Percent ELs	-1.774	-2.616	-0.060	-0.398	-3.260	-3.866	12.6	466
	(2.461)	(2.059)	(2.486)	(3.068)	(2.371)	(2.409)	[15.3]	
Percent Low-Income	1.272	2.937	1.629	2.733	2.258	-0.355	80.2	466
	(2.043)	(2.090)	(2.359)	(2.185)	(2.399)	(2.233)	[14.6]	
Average Math Score	-2.484	-0.894	2.896	-0.742	2.110	1.175	296.5	466
	(4.003)	(3.841)	(4.110)	(4.212)	(4.974)	(4.309)	[25.1]	
Average ELA Score	-0.637	-1.690	-1.100	-1.789	0.261	0.458	306.5	466
	(2.461)	(2.231)	(2.392)	(2.954)	(3.000)	(2.586)	[14.7]	
Charter	-2.724	-0.826	-2.642	-3.545	3.842	3.651	25.9	466
	(6.443)	(6.264)	(7.237)	(7.086)	(7.223)	(7.567)	[44.2]	
8th Grade Seats	-23.193	-16.622	-0.585	-15.763	-32.065	-14.191	149.7	466
	(20.740)	(23.908)	(26.341)	(23.998)	(21.608)	(21.421)	[143.4]	
Number of Schools (2016-17)	99	83	53	58	55	60	58	

Notes: This table reports regression coefficients representing assignment to an informational intervention middle school on school characteristics, separated by use. All regressions include controls for the variables listed in Table 1, as well as for randomization block by year fixed effects. The estimation sample includes all students present in October of their 8th grade years in the 2016-2017 school year who attended randomization sample schools and participated in the Round 1 high school choice process. Use was determined by an affirmative response for indicating sharing the intervention with students or parents in any of the following: a follow-up call with the research team to confirm receipt of the materials, a survey distributed to all guidance counselors, or an interview with a sample of guidance counselors. Some schools have multiple personnel responsible for high school admissions; an affirmative response from any of these staff members was considered as use for that school. Schools without a response to any of the above are included as non-responders, and all control schools are used. The sample is limited to the first cohort, as this is the group with detailed use information, and some treatments were changed in the second year of the intervention. Robust standard errors clustered by middle school are in parentheses (+ p<.10 * p<.05 ** p<.01).

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Table C.4: Differences within Control Group Schools by School Finder Use (2016-17)

	Used School Finder (1)	Did Not Use SF or No Response (2)	N (3)
Percent Female	-4.7	49.4	58
	(3.3)	[3.6]	
Percent Asian	1.3	12.6	58
	(6.6)	[19.0]	
Percent Black	4.9	35.7	58
	(9.6)	[29.8]	
Percent Hispanic/Latino	-1.3	40.0	58
	(7.4)	[24.7]	
Percent White	-4.6	10.4	58
	(3.3)	[12.7]	
Percent SWDs	-2.1	19.5	58
	(1.8)	[5.8]	
Percent ELs	2.1	11.6	58
	(4.8)	[11.7]	
Percent Low-Income	-1.0	81.1	58
	(4.3)	[13.9]	
Average Math Score	4.2	294.9	58
	(7.3)	[25.5]	
Average ELA Score	-2.8	307.2	58
	(4.3)	[14.5]	
Charter	23.7+	20.0	58
	(13.9)	[40.5]	
8th Grade Seats	-9.0	149.7	58
	(38.2)	[131.1]	
Number of Schools (2016-17)	18	40	

Notes: This table reports regression coefficients representing use of School Finder on school characteristics. All regressions include controls for the variables listed in Table 1, and, in lieu of randomization block by year fixed effects, a borough fixed effect. The estimation sample includes all students present in October of their 8th grade years in the 2016-2017 school year who attended control group schools and participated in the Round 1 high school choice process. School Finder use was determined by an affirmative response from a survey distributed to all guidance counselors or an interview with a sample of guidance counselors. Some schools have multiple personnel responsible for high school admissions; an affirmative response from any of these staff members was considered as use for that school. Schools without a response to any of the above are included as non-responders, and all control schools are used. The sample is limited to the first cohort, as this is the group with detailed use information, and some treatments were changed in the second year of the intervention. Robust standard errors clustered by middle school are in parentheses (+ p<.10 * p<.05 ** p<.01).

Table C.5: Impact of Informational Interventions by Take-Up (2016-17), Alternative Definition of Use for FF Digital

| | Used | | | | | | | |
	Fast Facts (1)	FF Digital (2)	App (3)	School Finder (4)	Did Not Use (5)	No Response (6)	Control Mean (7)	N (8)
(A) Use Indicators								
% of Top 3 Choices from FF List	2.019	-1.711	3.254	0.398	-2.042	-1.608	57.7	58,141
	(2.354)	(2.702)	(2.455)	(2.149)	(2.664)	(3.085)	[37.2]	
Any of Top 3 Choices Screened	0.179	3.858+	3.589*	-1.579	0.029	0.705	71.1	58,141
	(1.877)	(2.149)	(1.808)	(1.897)	(1.967)	(2.651)	[45.3]	
Any of Top 3 Choices Early Alphabet	5.740*	0.887	4.175	4.494+	3.925	3.362	50.9	58,141
	(2.281)	(2.642)	(2.543)	(2.487)	(2.611)	(3.038)	[50.0]	
Avg. Travel Time Top 3 Choices	-0.368	-1.299	-2.078	-1.572	-0.138	0.045	34.0	58,134
	(1.358)	(1.841)	(1.702)	(1.376)	(1.502)	(1.475)	[16.1]	
(B) Choices								
Guaranteed Low Grad	-3.687*	-2.211	-3.211*	-2.552+	-1.485	-2.351	14.7	54,926
	(1.453)	(1.675)	(1.554)	(1.444)	(1.629)	(2.224)	[35.4]	
% of Top 3 Choices Grad Rate <75%	-3.242+	-2.674	-3.789+	-2.066	-0.182	-1.322	22.9	57,871
	(1.911)	(2.074)	(2.107)	(1.746)	(2.374)	(2.971)	[33.8]	
(C) Enrolled School								
Graduation Rate	1.758**	1.374*	1.060+	1.237*	0.490	0.749	79.3	49,119
	(0.564)	(0.698)	(0.556)	(0.542)	(0.586)	(0.678)	[14.3]	
Grad Rate <75%	-6.841**	-2.048	-6.805**	-5.273*	-1.735	-4.797	40.2	49,119
	(2.363)	(2.608)	(2.622)	(2.313)	(2.683)	(3.310)	[49.0]	
(D) Other Choice Outcomes								
Matched to 1st Choice	-0.315	2.268	1.266	0.896	1.664	0.723	42.0	58,141
	(1.528)	(2.072)	(1.566)	(1.505)	(1.618)	(2.218)	[49.4]	
Matched in R1	-0.817	1.122	-1.173	-0.693	-0.807	-2.164*	92.7	58,141
	(0.841)	(0.917)	(0.958)	(0.941)	(0.884)	(1.060)	[26.0]	
Enroll in Matched School	-0.038	0.319	-0.443	1.547	0.404	-1.913	88.1	57,489
	(1.187)	(1.452)	(1.427)	(1.413)	(1.095)	(1.720)	[32.4]	
Number of Schools (2016-17)	99	51	53	58	108	39	58	

Notes: This table reports regression coefficients representing assignment to an informational intervention middle school on key outcomes, separated by use. All regressions include controls for the variables listed in Table 1, as well as for randomization block by year fixed effects. The estimation sample includes all students present in October of their 8th grade years in the 2016-2017 school year who attended randomization sample schools and participated in the Round 1 high school choice process. Use was determined by an affirmative response for indicating sharing the intervention with students or parents in any of the following: a follow-up call with the research team to confirm receipt of the materials, a survey distributed to all guidance counselors, or an interview with a sample of guidance counselors for all treatments except FF Digital. For FF Digital, use was determined by 5 or more unique website hits for that middle school. Some schools have multiple personnel responsible for high school admissions; an affirmative response from any of these staff members was considered as use for that school. Schools without a response to any of the above are included as non-responders, and all control schools are used. The sample is limited to the first cohort, as this is the group with detailed use information, and some treatments were changed in the second year of the intervention. Robust standard errors clustered by middle school are in parentheses (+ p<.10 * p<.05 ** p<.01).

Table C.6: School Characteristics by Informational Interventions by Take-Up (2016-17), Alternative Definition of Use for FF Digital

| | Used | | | | | | Control | N |
	Fast Facts (1)	FF Digital (2)	App (3)	School Finder (4)	Did Not Use (5)	No Response (6)	Mean (7)	(8)
Percent Female	2.749*	2.887	0.822	0.439	1.135	3.430+	48.0	466
	(1.398)	(1.941)	(1.387)	(1.566)	(1.516)	(1.946)	[7.4]	
Percent Asian	-3.296	-5.032+	-1.685	-4.673	-3.533	-3.897	13.8	466
	(2.948)	(2.869)	(3.329)	(2.855)	(2.887)	(3.374)	[21.2]	
Percent Black	2.103	-0.272	-1.744	5.411	9.570*	3.281	36.4	466
	(4.887)	(5.112)	(4.919)	(4.905)	(4.788)	(6.004)	[31.0]	
Percent Hispanic/Latino	1.308	4.707	0.762	-0.961	-3.758	0.068	39.5	466
	(4.259)	(4.523)	(4.385)	(3.960)	(3.965)	(5.020)	[26.1]	
Percent White	-0.407	0.062	1.952	-0.116	-2.544	0.796	8.9	466
	(2.089)	(2.499)	(2.158)	(2.079)	(1.938)	(2.252)	[12.2]	
Percent SWDs	0.276	3.990*	1.994+	1.070	0.586	1.284	18.6	466
	(1.156)	(1.743)	(1.206)	(1.402)	(1.126)	(1.426)	[6.3]	
Percent ELs	-1.797	-2.004	-0.055	-0.396	-3.297	-4.086+	12.6	466
	(2.447)	(2.509)	(2.505)	(3.090)	(2.113)	(2.357)	[15.3]	
Percent Low-Income	1.159	3.719	1.653	2.746	2.255	-1.571	80.2	466
	(2.048)	(2.558)	(2.346)	(2.184)	(1.992)	(2.422)	[14.6]	
Average Math Score	-2.714	-2.020	2.997	-0.656	2.785	-1.849	296.5	466
	(3.998)	(4.387)	(4.099)	(4.181)	(3.967)	(4.846)	[25.1]	
Average ELA Score	-0.729	-1.441	-1.015	-1.708	0.068	-0.523	306.5	466
	(2.455)	(2.751)	(2.406)	(2.952)	(2.358)	(2.845)	[14.7]	
Charter	-3.224	-3.043	-2.454	-3.401	6.363	-3.556	25.9	466
	(6.435)	(6.171)	(7.187)	(7.089)	(6.109)	(8.877)	[44.2]	
8th Grade Seats	-22.995	-0.607	-0.440	-15.687	-30.500	-13.256	149.7	466
	(20.712)	(28.009)	(26.311)	(24.110)	(20.481)	(21.973)	[143.4]	
Number of Schools (2016-17)	99	51	53	58	108	39	58	

Notes: This table reports regression coefficients representing assignment to an informational intervention middle school on school characteristics, separated by use. All regressions include controls for the variables listed in Table 1, as well as for randomization block by year fixed effects. The estimation sample includes all students present in October of their 8th grade years in the 2016-2017 school year who attended randomization sample schools and participated in the Round 1 high school choice process. Use was determined by an affirmative response for indicating sharing the intervention with students or parents in any of the following: a follow-up call with the research team to confirm receipt of the materials, a survey distributed to all guidance counselors, or an interview with a sample of guidance counselors for all treatments except FF Digital. For FF Digital, use was determined by 5 or more unique website hits for that middle school. Some schools have multiple personnel responsible for high school admissions; an affirmative response from any of these staff members was considered as use for that school. Schools without a response to any of the above are included as non-responders, and all control schools are used. The sample is limited to the first cohort, as this is the group with detailed use information, and some treatments were changed in the second year of the intervention. Robust standard errors clustered by middle school are in parentheses (+ p<.10 * p<.05 ** p<.01).

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Online Appendix D: Additional results and robustness checks

Figure D.1: Distribution of Unique Views of Fast Facts Digital
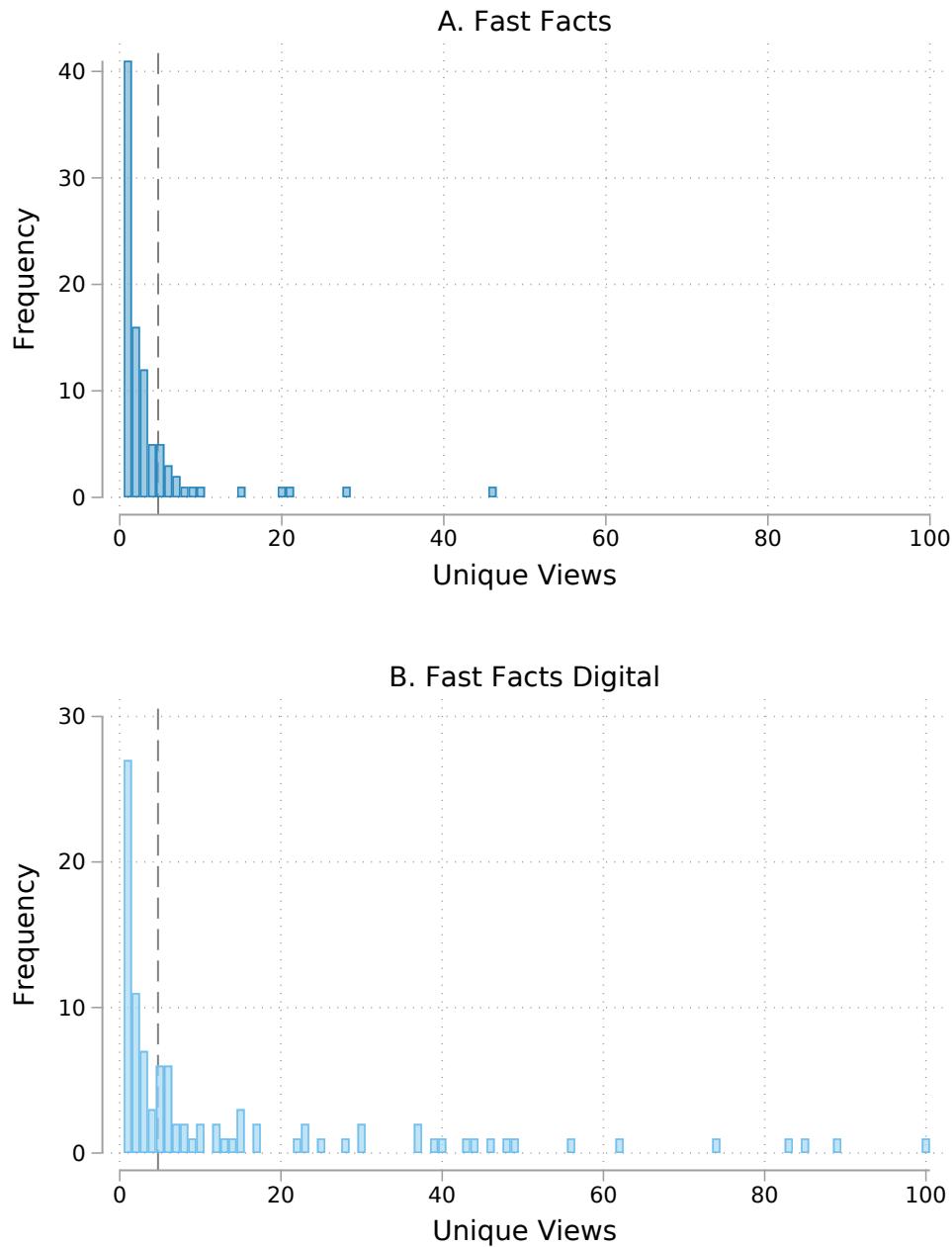
Notes: This figure shows the frequency of unique views of the the Fast Facts website by middle school, with views from NYU ISPs, the research team site, removed. One Fast Facts Digital outlier with a unique views count of 310 is topcoded in this figure and is included as 100 views. The dashed line indicates 5 views, which is the cutoff point used to indicate that FF digital was utilized by a particular school.

Figure D.2: Simulated Admissions Probabilities for First Choice High Schools
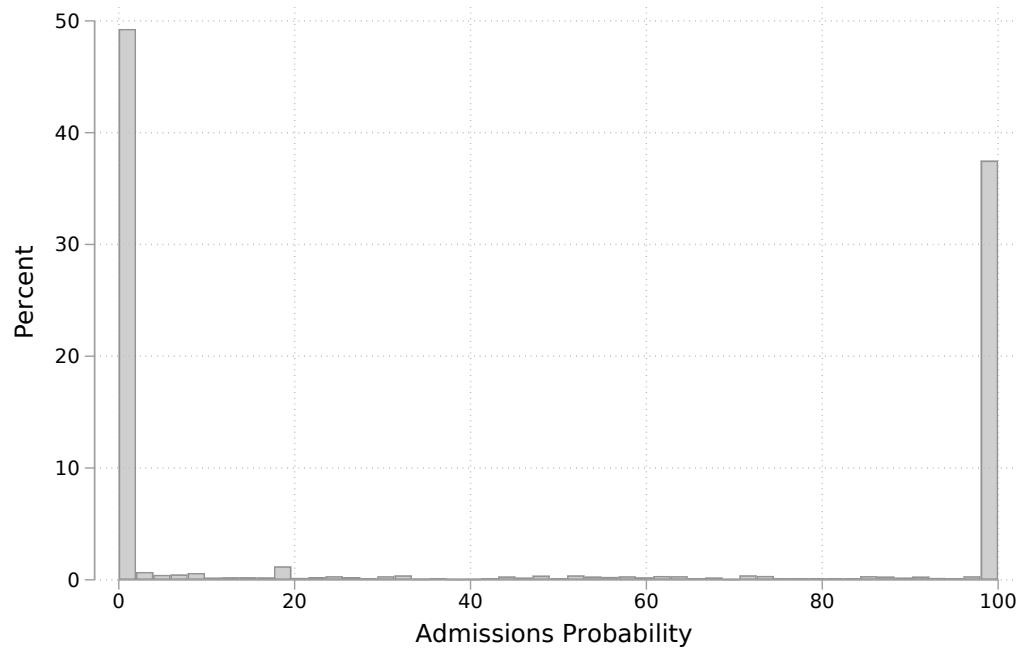
Notes: This figure shows the simulated admissions probabilities for first choice high schools from 1,000 lottery randomizations that apply the deferred acceptance algorithm to generate empirical probabilities. The sample includes all students in study schools.

Figure D.3: Impact on enrolled school graduation rate thresholds
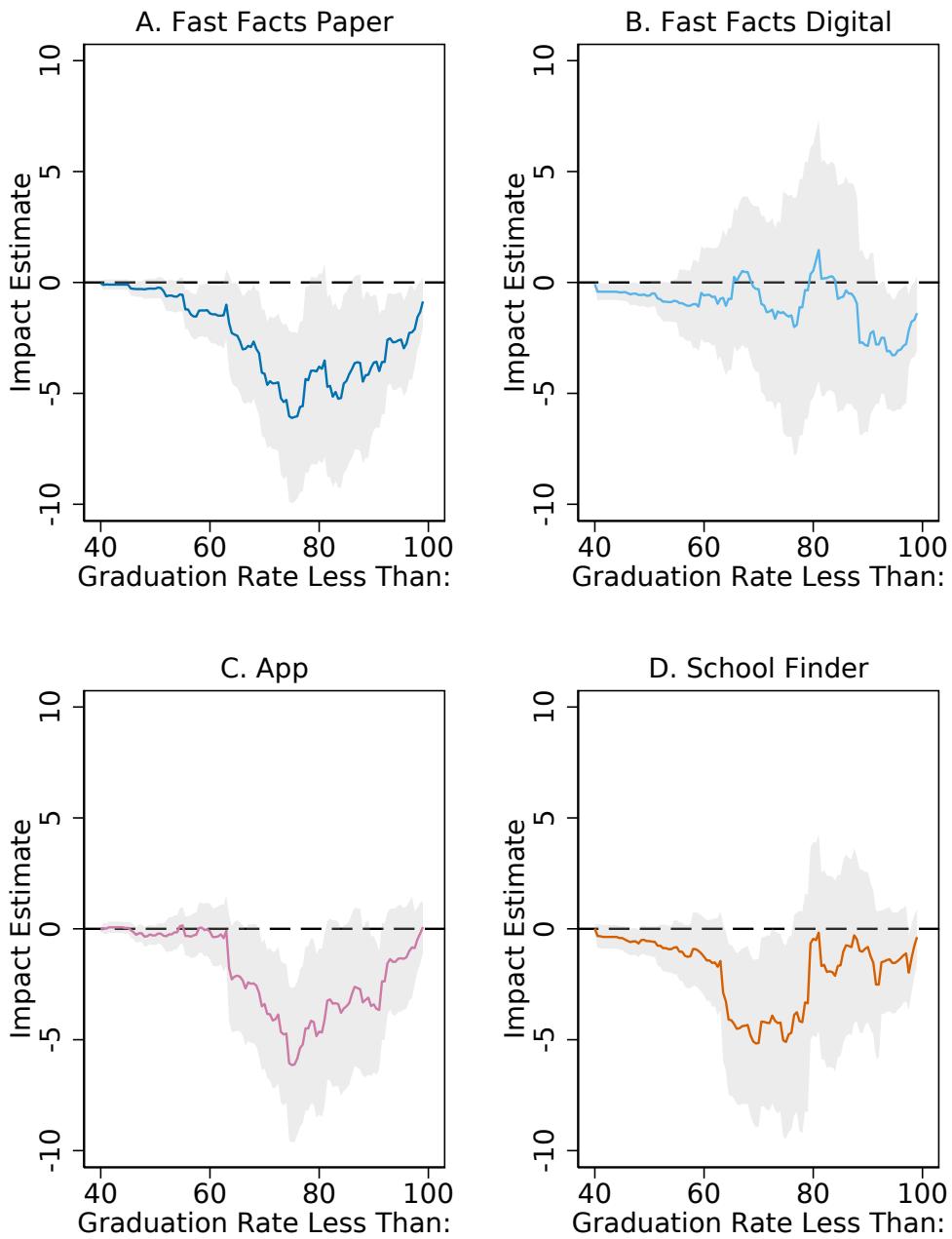
Notes: This figure plots the treatment effects from estimates of intervention impacts on a series of indicator variables for the enrolled school graduation rate being less than a threshold from 40 percent to 99 percent. The 95 percent confidence intervals are indicated in grey.

Figure D.4: Distribution of graduation rates of top 3 choices and enrolled school
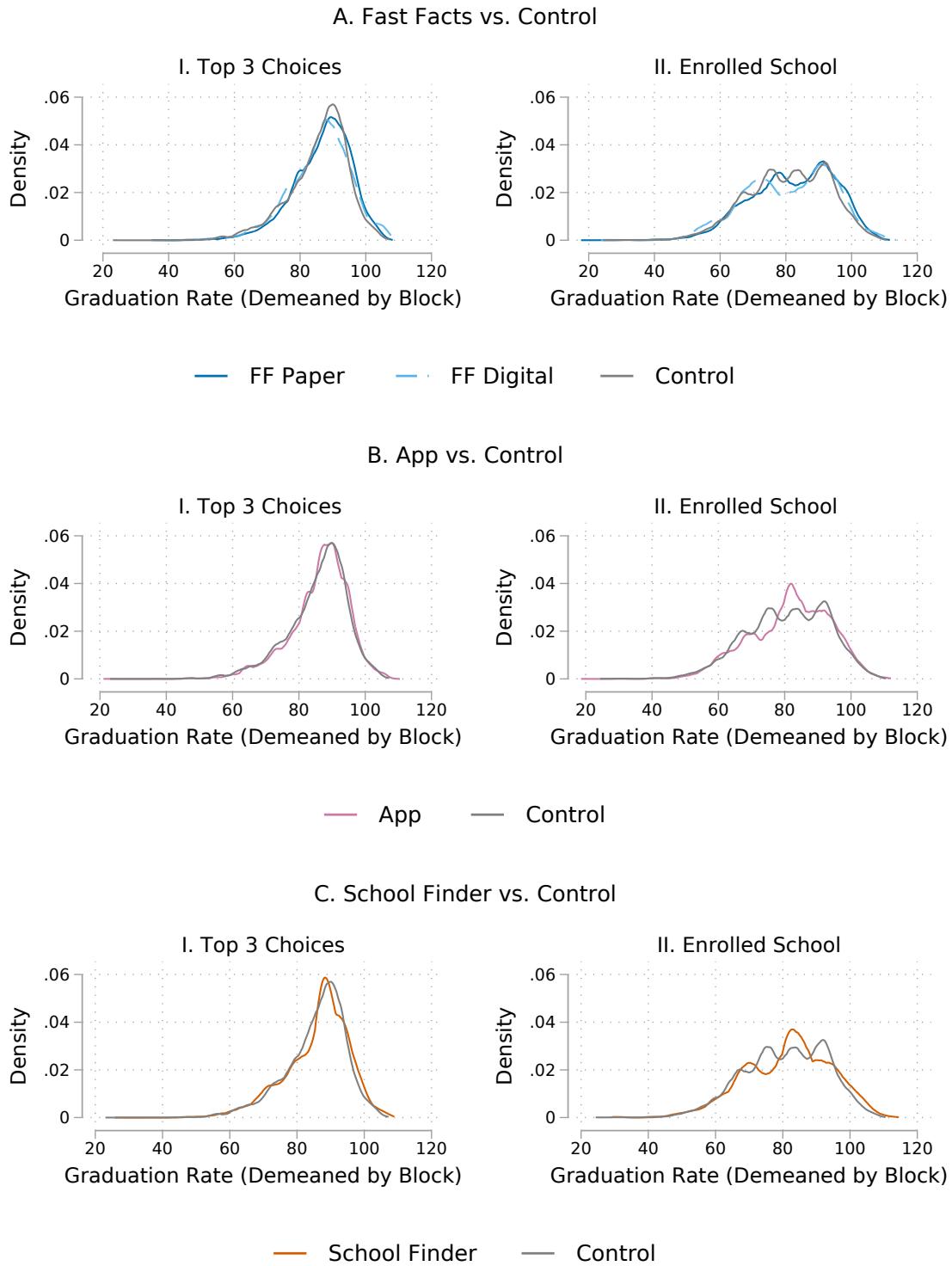
A. Fast Facts vs. Control

I. Top 3 Choices

II. Enrolled School

FF Paper — FF Digital — Control

B. App vs. Control

I. Top 3 Choices

II. Enrolled School

App — Control

C. School Finder vs. Control

I. Top 3 Choices

II. Enrolled School

School Finder — Control

Notes: This figure shows the distribution of demeaned graduation rates for the top three choices (left panels) and enrolled schools (right panels) by treatment group. Graduation rate is demeaned by block, so the figure reflects within block comparisons, to correspond more directly to the regression models used here. This demeaning occasionally results in graduation rates over 100 percent.

Figure D.5a: Distribution of graduation rates of top three choices by admissions probability at top three choices

A. Fast Facts Paper

FF Paper & Admit Probability > 0   Control & Admit Probability > 0
FF Paper & Admit Probability = 0   Control & Admit Probability = 0

B. Fast Facts Digital

FF Digital & Admission Probability > 0   Control & Admit Probability > 0
FF Digital & Admission Probability = 0   Control & Admit Probability = 0

Notes: This figure shows the distribution of demeaned graduation rates for the top three choices separated by those with a non-zero admission probability (solid lines) and those with a zero admissions probability (dashed lines) for treatment and control groups. Graduation rate is demeaned by block, so the figure reflects within block comparisons, to correspond more directly to the regression models used here. This demeaning occasionally results in graduation rates over 100 percent.

Figure D.5b: Distribution of graduation rates of top three choices by admissions probability at top three choices

Notes: This figure shows the distribution of demeaned graduation rates for the top three choices separated by those with a non-zero admission probability (solid lines) and those with a zero admissions probability (dashed lines) for treatment and control groups. Graduation rate is demeaned by block, so the figure reflects within block comparisons, to correspond more directly to the regression models used here. This demeaning occasionally results in graduation rates over 100 percent.

Figure D.6: Subgroup impacts on percent of top 3 choice with low graduation rates vs. enrollment in low graduation high schools
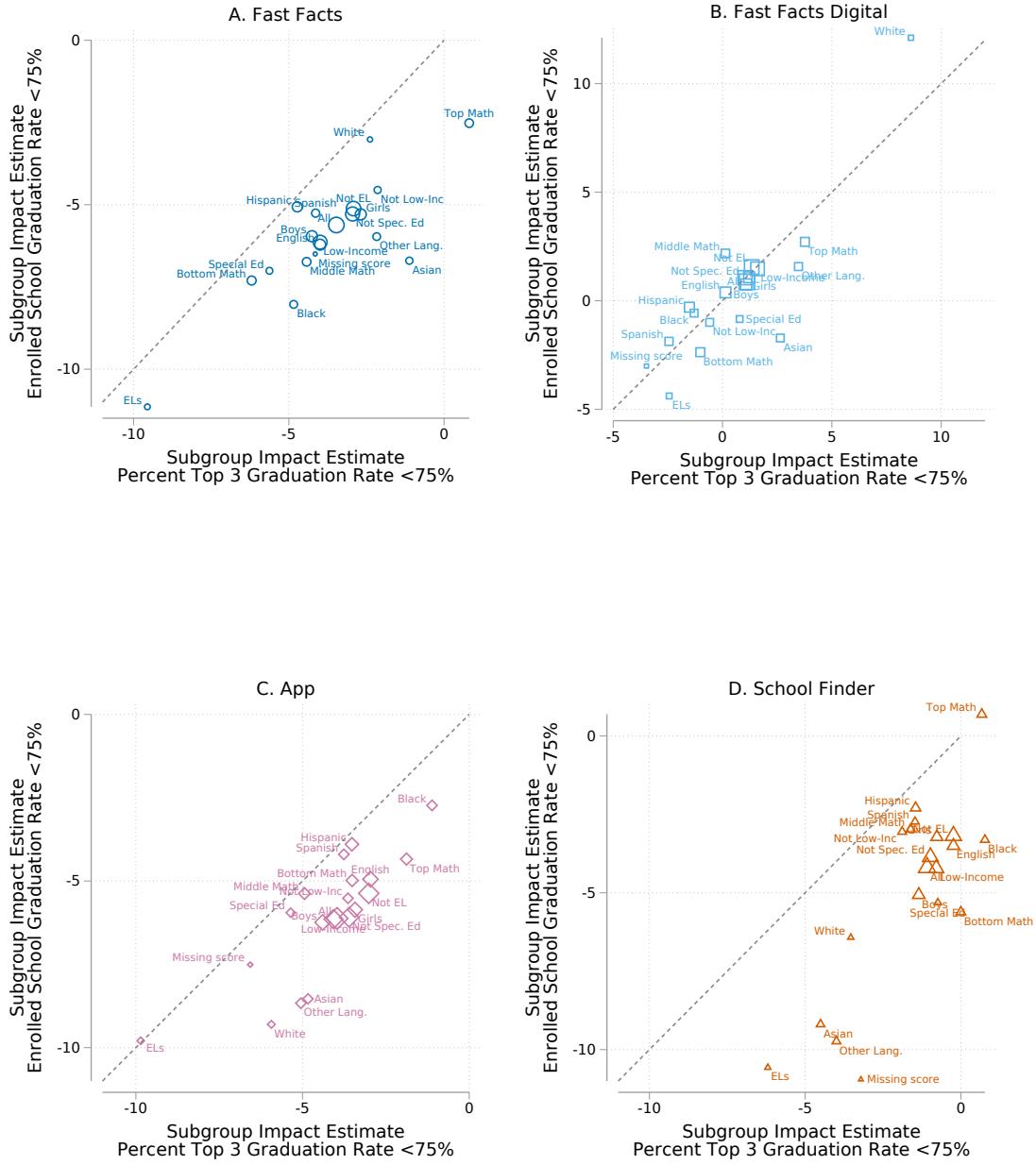
Notes: This figure plots subgroup-specific impacts on percent of top 3 choice with low graduation rate versus subgroup-specific impacts on guaranteed low graduation first choice school, weighted by number of observations in each subgroup. The estimates are generated using the same estimation strategy as for the main estimates, limited to subgroup members. Note that panels are on different scales. The dashed line is a 45 degree reference line. Precise estimates and standard errors are available in Appendix E.

Table D.1: Impact of Informational Interventions on Simulated Admissions Probability

	Fast Facts (1)	FF Digital (2)	App (3)	School Finder (4)	Control Mean (5)	N (6)
(A) First Choice						
Admissions Probability	0.564	0.704	0.229	0.875	40.9	109,733
	(1.294)	(1.718)	(1.206)	(1.424)	[47.1]	
100% Probability	-0.602	0.475	-0.405	0.729	35.1	115,126
	(1.455)	(1.754)	(1.239)	(1.511)	[47.7]	
Some Probability	1.900	1.176	1.150	0.485	14.2	115,126
	(1.184)	(1.334)	(1.145)	(1.242)	[34.9]	
No Probability	-1.298	-1.651	-0.745	-1.214	50.7	115,126
	(1.454)	(2.117)	(1.423)	(1.569)	[50.0]	
(B) Top 3 Choices						
Admissions Probability	0.342	0.357	0.338	1.010	72.2	115,126
	(1.108)	(1.493)	(1.062)	(1.246)	[42.6]	
100% Probability	-0.544	-0.429	-0.516	0.918	65.5	115,126
	(1.300)	(1.666)	(1.180)	(1.362)	[47.5]	
Some Probability	1.587	1.472	0.559	0.426	13.5	115,126
	(1.037)	(1.162)	(1.058)	(1.053)	[34.2]	
No Probability	-1.043	-1.043	-0.043	-1.344	21.0	115,126
	(1.091)	(1.576)	(1.127)	(1.243)	[40.7]	

Notes: This table reports regression coefficients representing assignment to an informational intervention middle school on admissions probabilities of high school choices. Admissions probabilities come from simulating the admissions lottery 1,000 times and calculating the empirical probability of admission to a school choice. All regressions include controls for the variables listed in Table 1, as well as for randomization block by year fixed effects. The estimation sample includes all students present in October of their 8th grade years in the 2016-2017 and 2017-2018 school years who attended randomization sample schools and participated in the Round 1 high school choice process. Robust standard errors clustered by middle school are in parentheses (+ p<.10 * p<.05 ** p<.01).

Table D.2: Impact of Informational Interventions on Other Outcomes

	Fast Facts (1)	FF Digital (2)	App (3)	School Finder (4)	Control Mean (5)	N (6)
(A) Choice Outcomes						
Matched to 1st Choice	0.600	1.791	0.968	1.041	41.0	115,126
	(1.366)	(1.753)	(1.215)	(1.454)	[49.2]	
Matched to Top 3 Choice	0.830	0.660	0.615	2.094+	68.8	115,126
	(1.152)	(1.537)	(1.030)	(1.178)	[46.3]	
Matched in R1	-0.485	0.086	-0.450	-0.542	96.4	115,126
	(0.361)	(0.751)	(0.371)	(0.709)	[18.6]	
Number of Choices	-0.059	-0.174	-0.159	-0.204	7.9	115,126
	(0.197)	(0.268)	(0.195)	(0.237)	[3.3]	
Avg. Travel Time Top 3 Choices	-0.727	-0.066	-1.492	-0.846	34.8	115,119
	(1.242)	(1.578)	(1.371)	(1.393)	[16.4]	
(B) Enrollment Outcomes						
Enrolled in 9th	0.000	-0.021+	-0.005	-0.004	99.6	115,126
	(0.008)	(0.011)	(0.010)	(0.009)	[6.3]	
Enroll in Matched School	-0.550	0.229	-0.773	1.586	87.6	114,465
	(0.928)	(1.092)	(1.149)	(1.269)	[33.0]	
Same School as 8th	-0.657	0.207	0.084	0.928	1.2	114,465
	(0.545)	(0.640)	(0.503)	(0.839)	[10.9]	
Remain in 9th Grade School in 10th	-0.402	-0.737	-0.880*	-0.290	91.8	115,126
	(0.364)	(0.485)	(0.392)	(0.486)	[27.4]	
Remain in 9th Grade School in 11th	-0.262	-1.051	-1.183+	-0.475	87.5	58,141
	(0.671)	(0.662)	(0.715)	(0.693)	[33.1]	
(C) High School Characteristics						
School Size	13.633	-28.483	29.650	-1.134	1734.8	114,712
	(53.080)	(58.545)	(50.183)	(63.764)	[1509.3]	
Student-Teacher Ratio	0.105	0.155	0.041	0.032	16.5	114,640
	(0.089)	(0.103)	(0.088)	(0.124)	[3.2]	
Asian/Other Race %	0.576	0.736	0.443	1.292*	24.6	110,782
	(0.475)	(0.632)	(0.544)	(0.653)	[19.8]	
Black %	-0.634	-0.505	-0.336	-0.699	24.6	110,782
	(0.744)	(0.918)	(0.730)	(0.878)	[21.6]	
Hispanic/Latino %	0.050	0.062	0.052	-0.390	37.0	110,782
	(0.700)	(0.934)	(0.737)	(0.866)	[21.7]	
White %	0.008	-0.292	-0.159	-0.203	13.8	110,782
	(0.482)	(0.478)	(0.484)	(0.547)	[14.4]	
Subsidized Lunch %	0.050	-0.056	0.573	0.094	73.2	114,712
	(0.347)	(0.413)	(0.380)	(0.442)	[13.9]	
Students with Disabilities %	-0.224	-0.354	0.069	-0.288	15.3	110,782
	(0.194)	(0.263)	(0.193)	(0.247)	[7.0]	

Notes: This table reports regression coefficients representing assignment to an informational intervention middle school on high schools outcomes. 11th grade outcomes are not yet available for the second cohort of students in the experiment. All regressions include controls for the variables listed in Table 1, as well as for randomization block by year fixed effects. The estimation sample includes all students present in October of their 8th grade years in the 2016-2017 and 2017-2018 school years who attended randomization sample schools and participated in the Round 1 high school choice process. Robust standard errors clustered by middle school are in parentheses (+ p<.10 * p<.05 ** p<.01).

Table D.3: Impact of Informational Interventions on Graduation Rates with and without Imputation

	Fast Facts (1)	FF Digital (2)	App (3)	School Finder (4)	Control Mean (5)	N (6)
(A) Top 3 Choices						
Graduation Rate	0.837*	0.391	0.521	0.172	85.5	114,696
	(0.419)	(0.578)	(0.383)	(0.458)	[10.2]	
Graduation Rate (Imp)	0.782+	0.272	0.550	0.075	85.4	115,020
	(0.414)	(0.569)	(0.376)	(0.463)	[10.0]	
Graduation Rate (Double Imp)	0.790+	0.278	0.569	0.088	85.4	115,126
	(0.414)	(0.569)	(0.377)	(0.462)	[10.0]	
(B) Final Match						
Graduation Rate	1.440**	0.534	1.047*	1.004*	79.9	106,628
	(0.452)	(0.566)	(0.410)	(0.505)	[13.7]	
Graduation Rate (Imp)	1.365**	0.451	1.052**	0.845+	79.7	113,152
	(0.436)	(0.546)	(0.396)	(0.508)	[13.5]	
Graduation Rate (Double Imp)	1.407**	0.419	1.094**	0.883+	79.7	115,126
	(0.430)	(0.537)	(0.392)	(0.493)	[13.4]	
(C) Enrolled School						
Graduation Rate	1.514**	0.574	1.157**	1.118*	80.0	98,455
	(0.466)	(0.590)	(0.432)	(0.523)	[13.7]	
Graduation Rate (Imp)	1.399**	0.526	1.106**	0.859	79.8	104,382
	(0.449)	(0.569)	(0.417)	(0.530)	[13.6]	
Graduation Rate (Double Imp)	1.397***	0.403	1.114**	0.925*	79.8	115,126
	(0.401)	(0.504)	(0.372)	(0.466)	[13.1]	

Notes: This table reports regression coefficients representing assignment to an informational intervention middle school on graduation rates of high school choices, matched school, and enrolled school, with imputations. Outcomes labeled "(Imp)" include imputed graduation rates based on on-time progress variables for high schools that have such variables. Outcomes labeled "(Double Imp)" include imputed graduation rates described above, and impute mean graduation rates by borough for high schools that are still missing graduation rates. All regressions include controls for the variables listed in Table 1, as well as for randomization block by year fixed effects. The estimation sample includes all students present in October of their 8th grade years in the 2016-2017 and 2017-2018 school years who attended randomization sample schools and participated in the Round 1 high school choice process. Robust standard errors clustered by middle school are in parentheses (+ p<.10 * p<.05 ** p<.01).

Table D.4: Impact of Informational Interventions by Cohort

	Fast Facts (1)	FF Digital (2)	App (3)	School Finder (4)	Control Mean (5)	N (6)
(A) Guaranteed Low Graduation 1st Choice						
All	-3.304**	-1.809	-3.205**	-2.451+	14.4	109,733
	(1.010)	(1.602)	(0.988)	(1.275)	[35.1]	
2016-17 only	-3.131*	-1.567	-3.278*	-2.258+	14.7	54,926
	(1.539)	(1.593)	(1.446)	(1.366)	[35.4]	
2017-18 only	-3.564***		-3.268***		14.0	54,807
	(0.959)		(0.963)		[34.7]	
2017-18 with original treatments	-2.440*	-2.440*	-2.860*	-3.790**	14.0	54,807
	(1.110)		(1.187)	(1.214)	[34.7]	
All with original treatments	-2.637*	-0.519	-3.067**	-2.959*	14.4	109,733
	(1.068)		(1.172)	(1.162)	[35.1]	
(B) % of Top 3 Choices, Grad Rates <75%						
All	-2.587+	-2.987+	-2.635*	-1.805	21.1	114,696
	(1.463)	(1.527)	(1.267)	(1.574)	[32.6]	
2016-17 only	-1.470	-1.706	-3.111+	-1.491	22.9	57,871
	(2.417)	(2.340)	(1.816)	(1.635)	[33.8]	
2017-18 only	-3.497**		-2.508*		19.4	56,825
	(1.272)		(1.140)		[31.3]	
2017-18 with original treatments	-2.677+	-1.762	-2.280	-2.793*	19.4	56,825
	(1.556)		(1.428)	(1.371)	[31.3]	
All with original treatments	-2.539+	-0.100	-2.651+	-2.020	21.1	114,696
	(1.475)		(1.510)	(1.429)	[32.6]	
(C) Enrolled School, Grad Rate <75%						
All	-5.596**	-5.639*	-6.142***	-5.543*	38.9	98,455
	(2.044)	(2.232)	(1.764)	(2.188)	[48.8]	
2016-17 only	-5.736*	-4.169	-6.285**	-5.386*	40.2	49,119
	(2.682)	(3.011)	(2.276)	(2.146)	[49.0]	
2017-18 only	-6.152**		-6.084***		37.7	49,336
	(2.099)		(1.790)		[48.5]	
2017-18 with original treatments	-4.258+	-4.168*	-5.847**	-6.459**	37.7	49,336
	(2.334)		(2.096)	(2.034)	[48.5]	
All with original treatments	-4.921*	0.173	-6.022**	-5.692**	38.9	98,455
	(2.087)		(2.037)	(1.977)	[48.8]	

Notes: This table reports regression coefficients representing assignment to an informational intervention middle school on key outcomes, seperately for several samples. Guaranteed low graduation first choice indicatates first choice application to a high school with a graduation rate below 75% that also has with guaranteed simulated admission probability. All regressions include controls for the variables listed in Table 1, as well as for randomization block by year fixed effects. The estimation sample is labeled in each row. Robust standard errors clustered by middle school are in parentheses (+ p<.10 * p<.05 ** p<.01).

Table D.5: Impact of Informational Interventions on 9th and 10th Grade Academics

	Fast Facts (1)	FF Digital (2)	App (3)	School Finder (4)	Control Mean (5)	N (6)
(A) Academic Courses						
Average GPA	0.216	0.301	0.251	0.257	79.2	94,692
	(0.214)	(0.262)	(0.218)	(0.273)	[11.4]	
Credits Attempted	-0.133	-0.312	0.272	0.154	21.8	95,366
	(0.320)	(0.449)	(0.364)	(0.370)	[5.9]	
Credits Passed	-0.093	-0.255	0.354	0.193	19.1	95,366
	(0.295)	(0.401)	(0.326)	(0.351)	[6.8]	
Credits Failed	-0.040	-0.057	-0.081	-0.039	2.7	95,366
	(0.097)	(0.123)	(0.103)	(0.130)	[5.2]	
(B) All Courses						
Average GPA	0.230	0.328	0.244	0.295	80.5	94,920
	(0.212)	(0.264)	(0.218)	(0.271)	[11.1]	
Credits Attempted	-0.162	-0.415	0.369	0.351	30.7	95,366
	(0.395)	(0.553)	(0.448)	(0.462)	[7.4]	
Credits Passed	-0.089	-0.315	0.480	0.422	27.3	95,366
	(0.376)	(0.509)	(0.412)	(0.453)	[8.9]	
Credits Failed	-0.073	-0.101	-0.111	-0.071	3.4	95,366
	(0.118)	(0.152)	(0.127)	(0.159)	[6.6]	
(C) On Track 9th and 10th						
All Students	-1.719	-1.264	-0.782	-0.160	63.2	95,366
	(1.195)	(1.208)	(1.197)	(1.305)	[48.2]	
Low math scores	-1.021	-0.759	-1.343	-0.644	43.5	32,812
	(1.402)	(1.630)	(1.339)	(1.511)	[49.6]	
Medium math scores	-3.212*	0.116	0.591	2.042	65.3	29,736
	(1.525)	(1.714)	(1.524)	(1.854)	[47.6]	
High math scores	0.043	-0.644	-0.111	1.059	79.4	26,709
	(1.442)	(1.500)	(1.732)	(1.714)	[40.5]	
Missing math scores	-2.689	-3.960	-0.220	3.035	53.1	6,108
	(2.615)	(3.102)	(2.588)	(3.820)	[49.9]	

Notes: This table reports regression coefficients representing assignment to an informational intervention middle school on high schools listed on the Fast Facts interventions. The On Track indicator includes students who obtain at least 10 credits and do not fail any academic classes in a given year. All outcomes are conditional on attending an NYC DOE school in 9th and 10th grade. All regressions include controls for the variables listed in Table 1, as well as for randomization block by year fixed effects. The estimation sample includes all students present in October of their 8th grade years in the 2016-2017 and 2017-2018 school years who attended randomization sample schools and participated in the Round 1 high school choice process. Math score groups (Panel C) are terciles of 7th grade standardized tests. Robust standard errors clustered by middle school are in parentheses (+ p<.10 * p<.05 ** p<.01).

Table D.6: Impact of Informational Interventions on Choices from Fast Facts

	Fast Facts (1)	FF Digital (2)	App (3)	School Finder (4)	Control Mean (5)	N (6)
(A) Any Fast Facts School						
1st Choice	0.242	-3.182	0.587	-0.900	62.2	115,126
	(1.796)	(2.790)	(1.836)	(2.088)	[48.5]	
1st-3rd Choices	0.335	-2.371	0.872	-0.027	58.5	115,126
	(1.751)	(2.803)	(1.812)	(2.052)	[37.5]	
All Choices	-0.067	-2.351	1.003	0.251	52.5	115,126
	(1.811)	(2.932)	(1.903)	(2.103)	[30.8]	
(B) Supplemental Schools						
Low Graduation	-0.810+	0.247	-1.235*	-0.152	3.6	115,126
	(0.457)	(0.632)	(0.536)	(0.649)	[14.5]	
Low Odds	0.048	0.763	-0.260	-1.115+	2.8	58,141
	(0.595)	(0.610)	(0.490)	(0.596)	[10.8]	
(C) FF 1st Choice and...						
Non-Zero Chance Admission	2.414+	0.608	1.295	0.371	26.5	115,126
	(1.337)	(1.464)	(1.336)	(1.436)	[44.1]	
No Chance Admission	-2.172	-3.791	-0.709	-1.271	35.7	115,126
	(1.645)	(2.355)	(1.681)	(1.781)	[47.9]	

Notes: This table reports regression coefficients representing assignment to an informational intervention middle school on high schools listed on the Fast Facts interventions. All regressions include controls for the variables listed in Table 1, as well as for randomization block by year fixed effects. The estimation sample includes all students present in October of their 8th grade years in the 2016-2017 and 2017-2018 school years who attended randomization sample schools and participated in the Round 1 high school choice process. Robust standard errors clustered by middle school are in parentheses (+ p<.10 * p<.05 ** p<.01).

Table D.7: Impact of Informational Interventions, Robustness Checks

	Fast Facts (1)	FF Digital (2)	App (3)	School Finder (4)	Control Mean (5)	N (6)
(A) Guaranteed Low Graduation 1st Choice						
All (for reference)	-3.304**	-1.809	-3.205**	-2.451+	14.4	109,733
	(1.010)	(1.602)	(0.988)	(1.275)	[35.1]	
New to experiment 16-17	-3.497***	-1.883	-3.583***	-2.932*	14.4	75,419
	(1.012)	(1.714)	(0.993)	(1.359)	[35.1]	
Omitting blocks with closed schools	-3.969***	-2.359	-3.902***	-2.873*	14.6	100,672
	(1.028)	(1.618)	(1.021)	(1.285)	[35.4]	
(B) % of 1st-3rd grad. rate <75%						
All (for reference)	-3.100*	-1.230	-2.640*	-1.491	21.1	114,696
	(1.358)	(2.468)	(1.272)	(1.595)	[32.6]	
New to experiment 16-17	-3.188*	-0.816	-3.128*	-2.098	21.1	78,367
	(1.395)	(2.736)	(1.304)	(1.657)	[32.6]	
Omitting blocks with closed schools	-4.029**	-1.875	-3.748**	-2.351	21.6	105,210
	(1.361)	(2.509)	(1.299)	(1.612)	[33.1]	
(C) Matched school grad. rate <75%						
All (for reference)	-5.815**	-1.095	-5.476**	-4.461*	39.1	106,628
	(1.933)	(2.677)	(1.722)	(2.123)	[48.8]	
New to experiment 16-17	-5.566**	-1.633	-6.095***	-5.466*	39.1	73,089
	(2.000)	(2.886)	(1.746)	(2.161)	[48.8]	
Omitting blocks with closed schools	-7.454***	-1.983	-6.753***	-5.140*	39.8	97,798
	(1.870)	(2.667)	(1.725)	(2.111)	[48.9]	
(D) Enrolled school grad. rate <75%						
All (for reference)	-6.110**	-1.459	-6.146***	-5.106*	38.9	98,455
	(1.962)	(2.780)	(1.767)	(2.218)	[48.8]	
New to experiment 16-17	-5.825**	-1.986	-6.848***	-6.102**	38.9	67,367
	(2.021)	(2.982)	(1.781)	(2.242)	[48.8]	
Omitting blocks with closed schools	-7.904***	-2.521	-7.414***	-5.952**	39.6	90,532
	(1.885)	(2.777)	(1.757)	(2.209)	[48.9]	

Notes: All notes are the same as those in Table 4, but the sample is limited to the group as labeled.

Table D.8: Impact of Informational Interventions Robustness Checks, Continued

	Fast Facts (1)	FF Digital (2)	App (3)	School Finder (4)	Control Mean (5)	N (6)
(A) Matched to First Choice						
All (for reference)	0.600	1.791	0.968	1.041	41.0	115,126
	(1.366)	(1.753)	(1.215)	(1.454)	[49.2]	
New to experiment 16-17	0.192	2.769	0.145	1.100	41.0	78,742
	(1.414)	(1.800)	(1.206)	(1.563)	[49.2]	
Omitting blocks with closed schools	-0.091	1.025	-0.124	-0.077	41.1	105,588
	(1.295)	(1.706)	(1.168)	(1.382)	[49.2]	
(B) Matched in R1						
All (for reference)	-0.485	0.086	-0.450	-0.542	96.4	115,126
	(0.361)	(0.751)	(0.371)	(0.709)	[18.6]	
New to experiment 16-17	-0.341	-0.205	-0.233	0.149	96.4	78,742
	(0.379)	(0.838)	(0.364)	(0.763)	[18.6]	
Omitting blocks with closed schools	-0.480	-0.070	-0.594	-0.866	96.2	105,588
	(0.384)	(0.776)	(0.401)	(0.723)	[19.1]	
(C) Enrolled in match						
All (for reference)	-0.550	0.229	-0.773	1.586	87.6	114,465
	(0.928)	(1.092)	(1.149)	(1.269)	[33.0]	
New to experiment 16-17	-0.501	0.431	-0.962	2.351	87.6	78,234
	(0.986)	(1.217)	(1.362)	(1.523)	[33.0]	
Omitting blocks with closed schools	-0.713	-0.087	-0.368	1.529	87.8	104,955
	(0.967)	(1.114)	(1.223)	(1.329)	[32.8]	

Notes: All notes are the same as those in Tables D.2, but the sample is limited to the group as labeled.

Online Appendix E: Results for subgroups

Figure E.1: Treatment effects by subgroups: Fast Facts
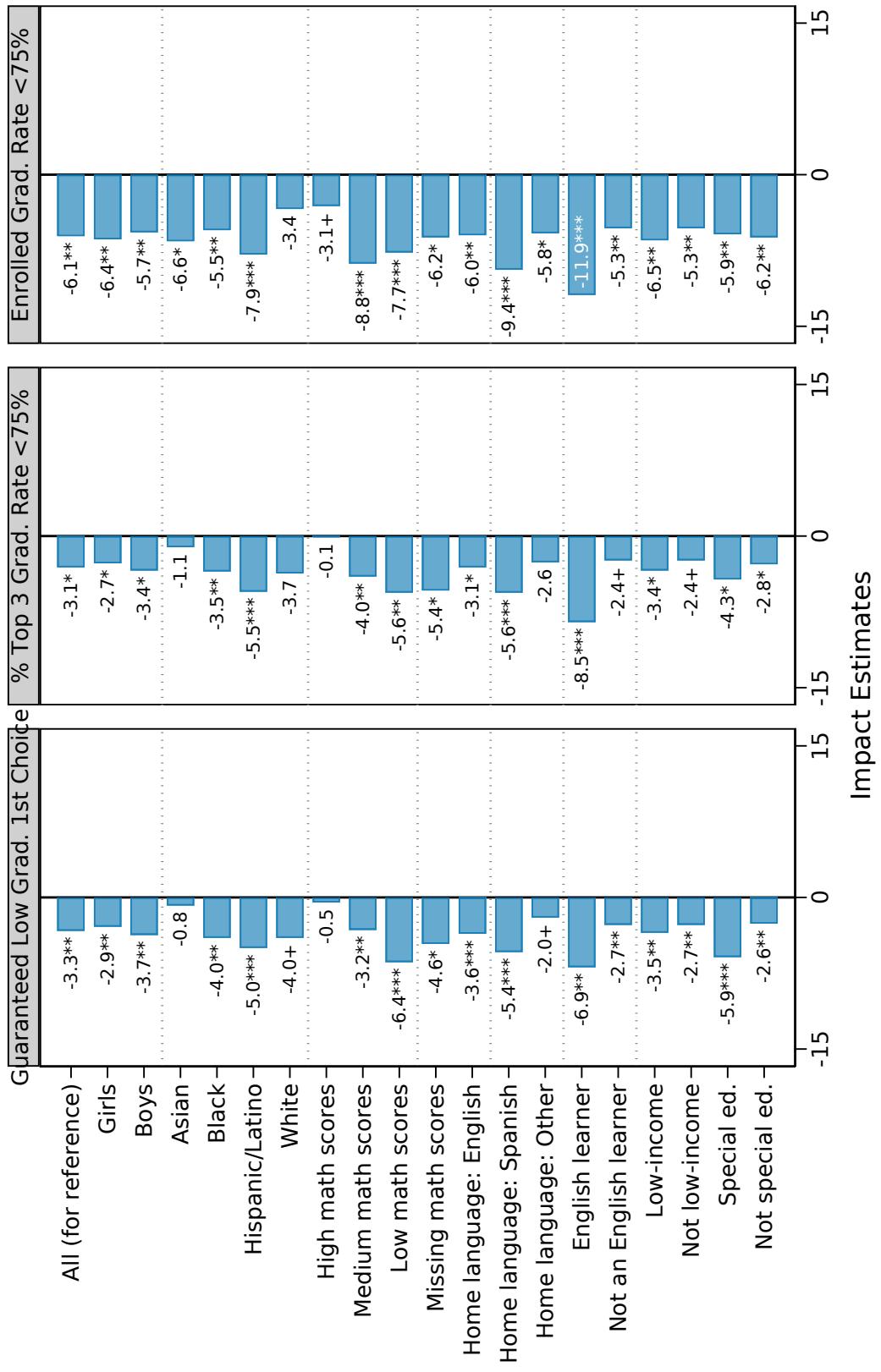
Notes: This figure summarizes student subgroup Fast Facts impact estimates for several outcomes. Estimates come from regressions like those in the main specification, limited to the students who are members of the indicated subgroup. Tables with more complete information, including standard errors and additional outcomes, are in Online Appendix E.

Figure E.2: Treatment effects by subgroups: Fast Facts Digital
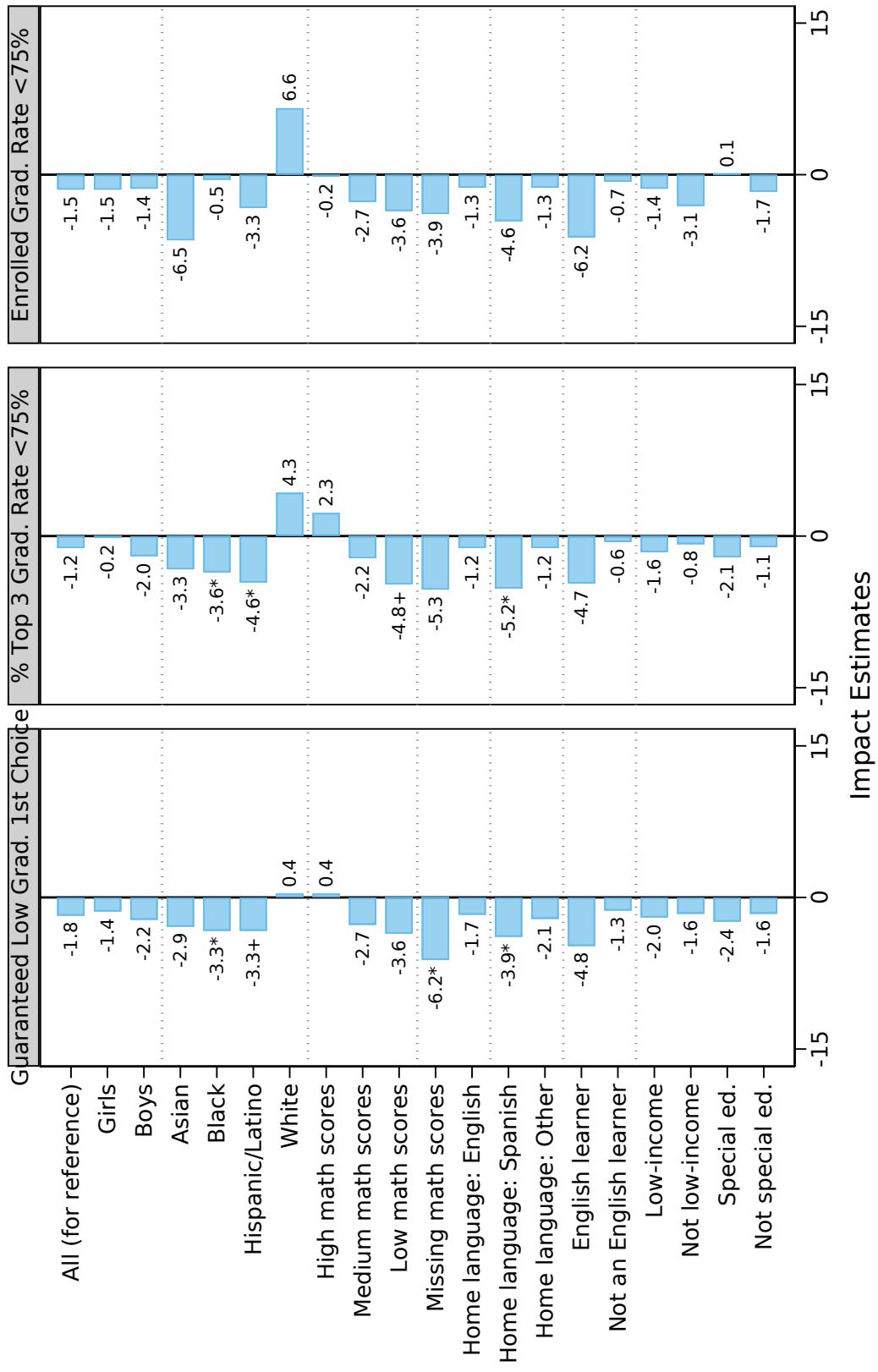
Notes: This figure summarizes student subgroup Fast Facts digital impact estimates for several outcomes. Estimates come from regressions like those in the main specification, limited to the students who are members of the indicated subgroup. Tables with more complete information, including standard errors and additional outcomes, are in Online Appendix E.

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Figure E.3: Treatment effects by subgroups: App
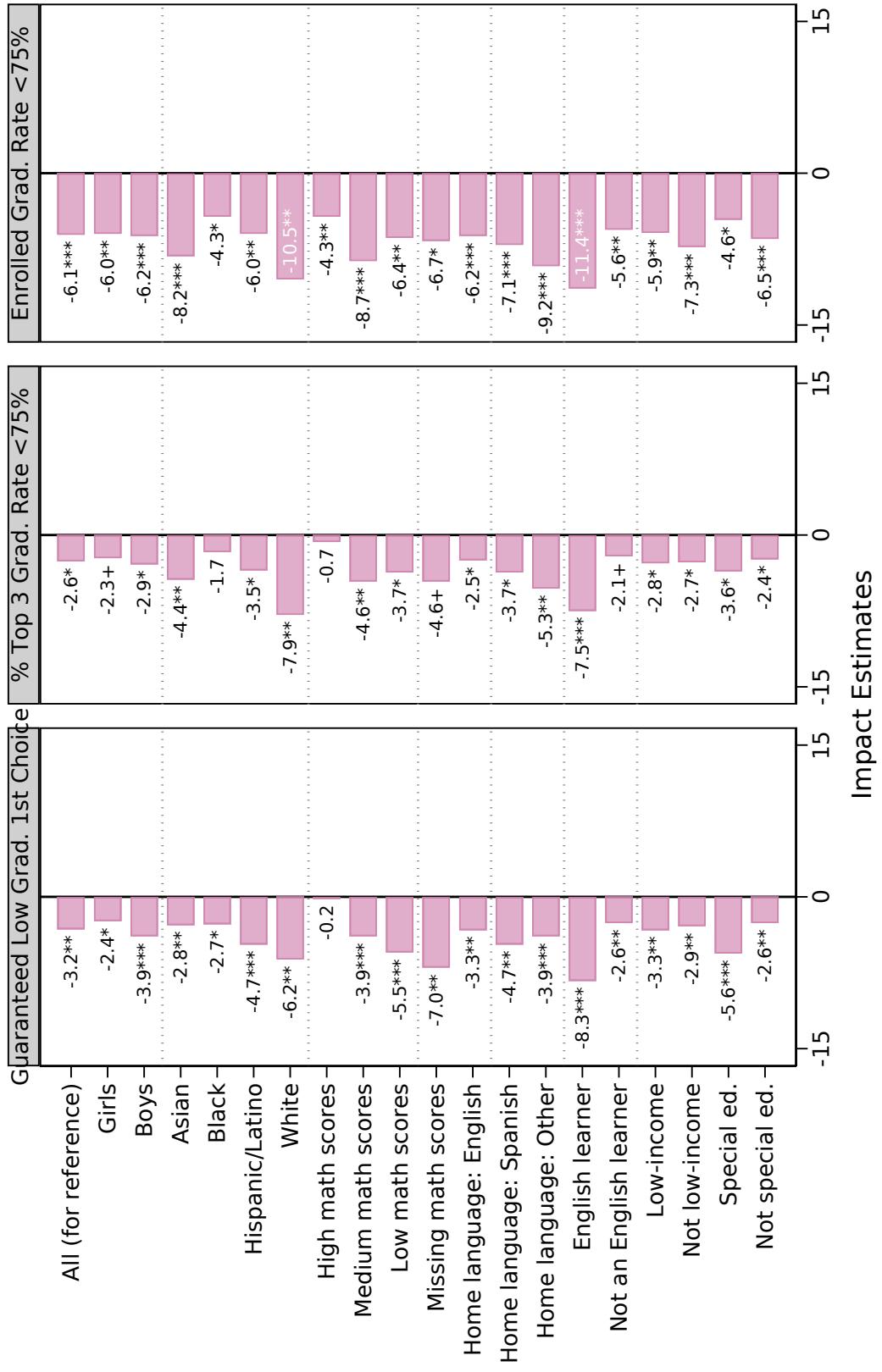
Notes: This figure summarizes student subgroup App impact estimates for several outcomes. Estimates come from regressions like those in the main specification, limited to the students who are members of the indicated subgroup. Tables with more complete information, including standard errors and additional outcomes, are in Online Appendix E.

Figure E.4: Treatment effects by subgroups: School Finder
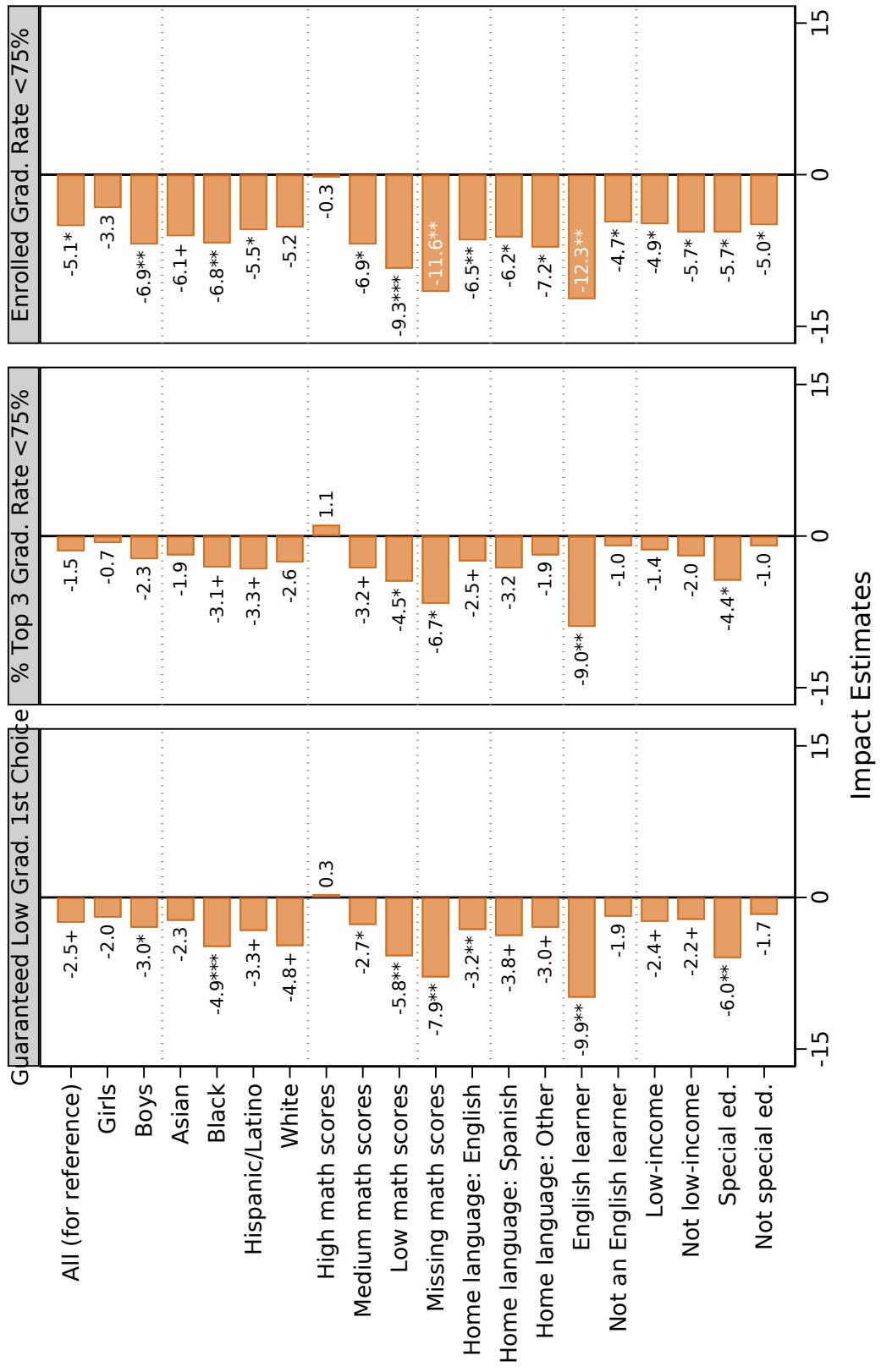
Notes: This figure summarizes student subgroup School Finder impact estimates for several outcomes. Estimates come from regressions like those in the main specification, limited to the students who are members of the indicated subgroup. Tables with more complete information, including standard errors and additional outcomes, are in Online Appendix E.

Table E.1: Impact of Informational Interventions, by 7th Grade Math Score Subgroups

	Fast Facts (1)	FF Digital (2)	App (3)	School Finder (4)	Control Mean (5)	N (6)
(A) Guaranteed Low Graduation 1st Choice						
All (for reference)	-3.304**	-1.809	-3.205**	-2.451+	14.4	109,733
	(1.010)	(1.602)	(0.988)	(1.275)	[35.1]	
High math scores	-0.528	0.414	-0.215	0.301	4.2	30,663
	(0.667)	(1.009)	(0.716)	(0.935)	[20.0]	
Medium math scores	-3.166**	-2.734	-3.921***	-2.678*	13.9	34,147
	(1.038)	(1.880)	(1.052)	(1.360)	[34.6]	
Low math scores	-6.406***	-3.554	-5.455***	-5.838**	25.3	36,946
	(1.570)	(2.229)	(1.560)	(1.940)	[43.5]	
Missing math scores	-4.601*	-6.191*	-6.982**	-7.855**	22.5	7,976
	(2.226)	(2.992)	(2.497)	(2.953)	[41.8]	
(B) % of 1st-3rd grad. rate <75%						
All (for reference)	-3.100*	-1.230	-2.640*	-1.491	21.1	114,696
	(1.358)	(2.468)	(1.272)	(1.595)	[32.6]	
High math scores	-0.135	2.270	-0.656	1.139	7.7	31,239
	(1.023)	(2.317)	(1.010)	(1.372)	[21.1]	
Medium math scores	-4.008**	-2.206	-4.635**	-3.207+	21.6	35,764
	(1.438)	(2.808)	(1.419)	(1.780)	[32.3]	
Low math scores	-5.598**	-4.779+	-3.730*	-4.504*	34.5	39,261
	(1.752)	(2.665)	(1.677)	(2.051)	[36.3]	
Missing math scores	-5.393*	-5.349	-4.587+	-6.651*	29.6	8,431
	(2.322)	(3.297)	(2.388)	(3.107)	[37.4]	
(C) Matched school grad. rate <75%						
All (for reference)	-5.815**	-1.095	-5.476**	-4.461*	39.1	106,628
	(1.933)	(2.677)	(1.722)	(2.123)	[48.8]	
High math scores	-2.984+	0.445	-4.092*	0.130	19.0	29,780
	(1.743)	(2.316)	(1.591)	(2.099)	[39.3]	
Medium math scores	-8.159***	-2.642	-7.990***	-6.247*	45.0	33,005
	(2.259)	(3.402)	(2.132)	(2.620)	[49.8]	
Low math scores	-7.625***	-3.418	-5.627**	-8.095**	55.6	36,192
	(2.162)	(2.913)	(1.970)	(2.604)	[49.7]	
Missing math scores	-4.891+	-1.369	-5.246+	-11.871**	47.6	7,650
	(2.748)	(4.035)	(2.760)	(3.630)	[50.0]	
(D) Enrolled school grad. rate <75%						
All (for reference)	-6.110**	-1.459	-6.146***	-5.106*	38.9	98,455
	(1.962)	(2.780)	(1.767)	(2.218)	[48.8]	
High math scores	-3.091+	-0.184	-4.335**	-0.300	17.9	27,771
	(1.770)	(2.328)	(1.592)	(2.104)	[38.4]	
Medium math scores	-8.796***	-2.668	-8.704***	-6.857*	44.9	30,324
	(2.258)	(3.565)	(2.186)	(2.660)	[49.7]	
Low math scores	-7.700***	-3.598	-6.377**	-9.257***	56.4	33,483
	(2.179)	(3.007)	(2.000)	(2.699)	[49.6]	
Missing math scores	-6.249*	-3.853	-6.692*	-11.589**	49.9	6,873
	(2.880)	(4.163)	(3.024)	(3.885)	[50.0]	

Notes: All notes are the same as those in Table 1, but sample is limited to the group as labeled.

Table E.2: Impact of Informational Interventions by 7th Grade Math Score Subgroups, Continued

	Fast Facts (1)	FF Digital (2)	App (3)	School Finder (4)	Control Mean (5)	N (6)
(A) Matched to First Choice						
All (for reference)	0.600	1.791	0.968	1.041	41.0	115,126
	(1.366)	(1.753)	(1.215)	(1.454)	[49.2]	
High math scores	3.998*	3.572+	4.424**	0.650	34.6	31,296
	(1.575)	(1.822)	(1.496)	(1.777)	[47.6]	
Medium math scores	0.815	0.586	0.720	1.781	38.2	35,909
	(1.614)	(1.961)	(1.354)	(1.841)	[48.6]	
Low math scores	-2.513+	-1.532	-1.802	-0.619	49.8	39,442
	(1.403)	(1.877)	(1.405)	(1.695)	[50.0]	
Missing math scores	-3.924*	-2.894	-3.129	-3.449	47.3	8,478
	(1.939)	(2.384)	(2.174)	(2.453)	[49.9]	
(B) Matched in R1						
All (for reference)	-0.485	0.086	-0.450	-0.542	96.4	115,126
	(0.361)	(0.751)	(0.371)	(0.709)	[18.6]	
High math scores	0.039	0.378	-0.157	-1.687	96.4	31,296
	(0.508)	(1.158)	(0.491)	(1.085)	[18.7]	
Medium math scores	-1.093*	0.250	-0.782	-0.984	95.8	35,909
	(0.529)	(1.074)	(0.518)	(0.948)	[20.0]	
Low math scores	-0.368	-0.169	-0.328	0.031	97.3	39,442
	(0.400)	(0.682)	(0.395)	(0.745)	[16.1]	
Missing math scores	-1.129	0.188	-1.649*	-0.020	95.0	8,478
	(0.711)	(1.416)	(0.836)	(1.210)	[21.8]	
(C) Enrolled in match						
All (for reference)	-0.550	0.229	-0.773	1.586	87.6	114,465
	(0.928)	(1.092)	(1.149)	(1.269)	[33.0]	
High math scores	-0.395	-0.865	-0.957	0.430	90.2	31,075
	(0.966)	(1.408)	(1.259)	(1.777)	[29.7]	
Medium math scores	-0.913	-0.516	-0.948	1.776	87.1	35,739
	(1.186)	(1.337)	(1.415)	(1.598)	[33.6]	
Low math scores	-0.074	1.324	-0.137	2.719*	86.5	39,292
	(1.055)	(1.235)	(1.205)	(1.296)	[34.2]	
Missing math scores	-1.391	0.871	-0.938	0.575	81.3	8,358
	(1.802)	(1.882)	(1.861)	(2.084)	[39.0]	

Notes: All notes are the same as those in Tables D.2, but the sample is limited to the group as labeled.

Table E.3: Impact of Informational Interventions, by Race/Ethnicity

	Fast Facts (1)	FF Digital (2)	App (3)	School Finder (4)	Control Mean (5)	N (6)
(A) Guaranteed Low Graduation 1st Choice						
All (for reference)	-3.304**	-1.809	-3.205**	-2.451+	14.4	109,733
	(1.010)	(1.602)	(0.988)	(1.275)	[35.1]	
Asian	-0.823	-2.871	-2.770**	-2.283	6.9	19,609
	(0.949)	(2.358)	(1.037)	(1.787)	[25.4]	
Black	-3.964**	-3.258*	-2.689*	-4.945***	19.5	29,462
	(1.207)	(1.440)	(1.247)	(1.490)	[39.6]	
Hispanic/Latino	-4.974***	-3.277+	-4.668***	-3.274+	19.3	46,638
	(1.212)	(1.695)	(1.268)	(1.684)	[39.5]	
White	-4.032+	0.438	-6.197**	-4.832+	8.8	11,931
	(2.422)	(3.977)	(2.086)	(2.621)	[28.3]	
(B) % of 1st-3rd grad. rate <75%						
All (for reference)	-3.100*	-1.230	-2.640*	-1.491	21.1	114,696
	(1.358)	(2.468)	(1.272)	(1.595)	[32.6]	
Asian	-1.069	-3.340	-4.392**	-1.854	12.0	19,906
	(1.552)	(3.697)	(1.540)	(2.210)	[27.0]	
Black	-3.497**	-3.612*	-1.655	-3.109+	26.0	30,905
	(1.317)	(1.579)	(1.327)	(1.685)	[33.1]	
Hispanic/Latino	-5.529***	-4.606*	-3.522*	-3.304+	27.9	49,521
	(1.448)	(2.094)	(1.458)	(1.817)	[35.1]	
White	-3.665	4.259	-7.902**	-2.648	14.1	12,184
	(3.018)	(6.555)	(2.649)	(3.080)	[30.3]	
(C) Matched school grad. rate <75%						
All (for reference)	-5.815**	-1.095	-5.476**	-4.461*	39.1	106,628
	(1.933)	(2.677)	(1.722)	(2.123)	[48.8]	
Asian	-5.813*	-6.117	-8.286***	-6.171+	30.6	19,141
	(2.497)	(4.051)	(2.386)	(3.535)	[46.1]	
Black	-4.729**	-0.237	-2.960+	-4.692*	46.2	28,459
	(1.789)	(2.029)	(1.729)	(2.282)	[49.9]	
Hispanic/Latino	-8.003***	-3.459	-5.759**	-5.494*	47.9	45,442
	(2.053)	(2.565)	(1.928)	(2.400)	[50.0]	
White	-3.286	9.840	-9.867**	-4.265	23.1	11,606
	(4.263)	(7.334)	(3.605)	(4.001)	[42.1]	
(D) Enrolled school grad. rate <75%						
All (for reference)	-6.110**	-1.459	-6.146***	-5.106*	38.9	98,455
	(1.962)	(2.780)	(1.767)	(2.218)	[48.8]	
Asian	-6.567*	-6.450	-8.239***	-6.051+	30.2	18,823
	(2.559)	(4.144)	(2.422)	(3.656)	[45.9]	
Black	-5.517**	-0.469	-4.330*	-6.818**	46.8	25,289
	(1.884)	(2.167)	(1.853)	(2.400)	[49.9]	
Hispanic/Latino	-7.944***	-3.318	-5.967**	-5.502*	47.9	41,774
	(2.047)	(2.584)	(1.976)	(2.477)	[50.0]	
White	-3.435	6.614	-10.488**	-5.177	23.0	10,889
	(4.051)	(7.395)	(3.462)	(3.990)	[42.1]	

Notes: All notes are the same as those in Table 4, but sample is limited to the group as labeled.

Table E.4: Impact of Informational Interventions by Race/Ethnicity, Continued

	Fast Facts (1)	FF Digital (2)	App (3)	School Finder (4)	Control Mean (5)	N (6)
(A) Matched to First Choice						
All (for reference)	0.600	1.791	0.968	1.041	41.0	115,126
	(1.366)	(1.753)	(1.215)	(1.454)	[49.2]	
Asian	4.550*	1.927	1.043	0.101	31.7	19,919
	(2.081)	(2.120)	(1.611)	(2.415)	[46.6]	
Black	-2.939*	-3.877*	-0.273	-2.221	45.1	31,039
	(1.304)	(1.731)	(1.321)	(1.646)	[49.8]	
Hispanic/Latino	-1.857	0.092	-1.699	-1.545	44.9	49,781
	(1.357)	(1.856)	(1.315)	(1.621)	[49.7]	
White	1.711	0.408	0.794	2.975	42.9	12,200
	(2.424)	(3.336)	(2.319)	(2.872)	[49.5]	
(B) Matched in R1						
All (for reference)	-0.485	0.086	-0.450	-0.542	96.4	115,126
	(0.361)	(0.751)	(0.371)	(0.709)	[18.6]	
Asian	-0.613	-0.597	-1.238+	-2.631+	96.2	19,919
	(0.541)	(1.614)	(0.670)	(1.557)	[19.1]	
Black	-0.402	0.085	-0.188	0.022	96.6	31,039
	(0.431)	(0.756)	(0.431)	(0.695)	[18.1]	
Hispanic/Latino	-0.635	-0.920	-0.780+	-0.255	96.5	49,781
	(0.439)	(0.809)	(0.409)	(0.822)	[18.4]	
White	-0.656	2.333	-0.889	0.857	96.8	12,200
	(0.930)	(1.828)	(1.122)	(1.493)	[17.5]	
(C) Enrolled in match						
All (for reference)	-0.550	0.229	-0.773	1.586	87.6	114,465
	(0.928)	(1.092)	(1.149)	(1.269)	[33.0]	
Asian	-0.026	0.417	0.248	1.537	93.5	19,865
	(0.612)	(0.809)	(0.768)	(1.203)	[24.6]	
Black	-0.351	1.808	-0.117	3.342+	82.7	30,875
	(1.424)	(1.605)	(1.728)	(1.776)	[37.8]	
Hispanic/Latino	-0.798	-0.846	-1.062	1.399	85.8	49,506
	(1.274)	(1.534)	(1.511)	(1.604)	[34.9]	
White	-2.477	-5.446**	-2.241	-4.414*	91.2	12,073
	(1.815)	(1.761)	(1.798)	(2.178)	[28.4]	

Notes: All notes are the same as those in Tables D.2, but the sample is limited to the group as labeled.

Table E.5: Impact of Informational Interventions, by Home Language

	Fast Facts (1)	FF Digital (2)	App (3)	School Finder (4)	Control Mean (5)	N (6)
(A) Guaranteed Low Graduation 1st Choice						
All (for reference)	-3.304**	-1.809	-3.205**	-2.451+	14.4	109,733
	(1.010)	(1.602)	(0.988)	(1.275)	[35.1]	
Home Language: English	-3.587***	-1.710	-3.261**	-3.221**	14.7	56,949
	(1.013)	(1.417)	(0.987)	(1.203)	[35.4]	
Home Language: Spanish	-5.381***	-3.932*	-4.712**	-3.772+	20.8	29,991
	(1.407)	(1.994)	(1.475)	(2.012)	[40.6]	
Home Language: Other	-2.032+	-2.144	-3.868***	-3.026+	8.9	22,792
	(1.081)	(2.692)	(1.080)	(1.554)	[28.4]	
(B) % of 1st-3rd grad. rate <75%						
All (for reference)	-3.100*	-1.230	-2.640*	-1.491	21.1	114,696
	(1.358)	(2.468)	(1.272)	(1.595)	[32.6]	
Home Language: English	-3.098*	-1.178	-2.507*	-2.524+	21.1	59,776
	(1.270)	(2.236)	(1.221)	(1.501)	[32.2]	
Home Language: Spanish	-5.644***	-5.158*	-3.655*	-3.196	29.6	31,721
	(1.599)	(2.328)	(1.634)	(2.108)	[35.3]	
Home Language: Other	-2.584	-1.159	-5.276**	-1.913	14.6	23,199
	(1.755)	(4.272)	(1.682)	(2.124)	[29.6]	
(C) Matched school grad. rate <75%						
All (for reference)	-5.815**	-1.095	-5.476**	-4.461*	39.1	106,628
	(1.933)	(2.677)	(1.722)	(2.123)	[48.8]	
Home Language: English	-5.825**	-0.911	-5.502***	-5.705**	39.2	55,061
	(1.818)	(2.456)	(1.654)	(2.031)	[48.8]	
Home Language: Spanish	-8.618***	-4.135	-5.987**	-5.593*	50.0	29,287
	(2.220)	(2.964)	(2.123)	(2.798)	[50.0]	
Home Language: Other	-5.039+	-0.584	-8.383***	-6.028*	30.7	22,279
	(2.663)	(4.346)	(2.476)	(2.993)	[46.1]	
(D) Enrolled school grad. rate <75%						
All (for reference)	-6.110**	-1.459	-6.146***	-5.106*	38.9	98,455
	(1.962)	(2.780)	(1.767)	(2.218)	[48.8]	
Home Language: English	-5.961**	-1.299	-6.184***	-6.506**	39.0	49,601
	(1.811)	(2.567)	(1.663)	(2.121)	[48.8]	
Home Language: Spanish	-9.387***	-4.597	-7.128***	-6.199*	50.4	27,238
	(2.152)	(2.906)	(2.077)	(2.884)	[50.0]	
Home Language: Other	-5.834*	-1.331	-9.154***	-7.203*	30.3	21,613
	(2.600)	(4.345)	(2.447)	(2.997)	[46.0]	

Notes: All notes are the same as those in Table 4, but the sample is limited to the group as labeled.

Table E.6: Impact of Informational Interventions by Home Language, Continued

	Fast Facts (1)	FF Digital (2)	App (3)	School Finder (4)	Control Mean (5)	N (6)
(A) Matched to First Choice						
All (for reference)	0.600	1.791	0.968	1.041	41.0	115,126
	(1.366)	(1.753)	(1.215)	(1.454)	[49.2]	
Home Language: English	-0.161	0.500	1.162	1.004	41.6	60,030
	(1.230)	(1.627)	(1.205)	(1.438)	[49.3]	
Home Language: Spanish	-3.774*	-0.595	-2.729+	-2.386	46.0	31,875
	(1.644)	(2.122)	(1.599)	(2.073)	[49.8]	
Home Language: Other	2.985	-0.173	-0.302	-0.367	35.8	23,221
	(2.249)	(2.200)	(1.792)	(2.364)	[48.0]	
(B) Matched in R1						
All (for reference)	-0.485	0.086	-0.450	-0.542	96.4	115,126
	(0.361)	(0.751)	(0.371)	(0.709)	[18.6]	
Home Language: English	-0.405	0.152	-0.276	-0.296	96.4	60,030
	(0.376)	(0.686)	(0.382)	(0.616)	[18.6]	
Home Language: Spanish	-1.055*	-1.176	-1.152*	-0.772	96.7	31,875
	(0.524)	(0.970)	(0.491)	(0.988)	[17.9]	
Home Language: Other	-1.218*	-0.472	-1.362*	-1.201	96.2	23,221
	(0.567)	(1.443)	(0.641)	(1.240)	[19.2]	
(C) Enrolled in match						
All (for reference)	-0.550	0.229	-0.773	1.586	87.6	114,465
	(0.928)	(1.092)	(1.149)	(1.269)	[33.0]	
Home Language: English	-0.145	0.311	-0.450	2.301	84.5	59,605
	(1.064)	(1.272)	(1.283)	(1.454)	[36.2]	
Home Language: Spanish	-2.133	-1.003	-2.155	1.025	88.4	31,717
	(1.359)	(1.608)	(1.564)	(1.614)	[32.1]	
Home Language: Other	-0.925	-0.105	0.146	-0.218	92.7	23,143
	(0.798)	(0.917)	(1.069)	(1.389)	[26.0]	

Notes: All notes are the same as those in Tables D.2, but the sample is limited to the group as labeled.

Table E.7: Impact of Informational Interventions, by English Learner Status

	Fast Facts (1)	FF Digital (2)	App (3)	School Finder (4)	Control Mean (5)	N (6)
(A) Guaranteed Low Graduation 1st Choice						
All (for reference)	-3.304**	-1.809	-3.205**	-2.451+	14.4	109,733
	(1.010)	(1.602)	(0.988)	(1.275)	[35.1]	
English learner	-6.947**	-4.764	-8.281***	-9.905**	29.5	14,266
	(2.151)	(4.218)	(2.123)	(3.119)	[45.6]	
Not an English learner	-2.747**	-1.334	-2.565**	-1.894	12.2	95,465
	(0.947)	(1.400)	(0.930)	(1.181)	[32.8]	
(B) % of 1st-3rd grad. rate <75%						
All (for reference)	-3.100*	-1.230	-2.640*	-1.491	21.1	114,696
	(1.358)	(2.468)	(1.272)	(1.595)	[32.6]	
English learner	-8.468***	-4.733	-7.521***	-8.963**	38.6	15,069
	(2.248)	(4.226)	(2.222)	(2.986)	[38.6]	
Not an English learner	-2.416+	-0.642	-2.148+	-1.014	18.7	99,625
	(1.273)	(2.307)	(1.206)	(1.510)	[30.9]	
(C) Matched school grad. rate <75%						
All (for reference)	-5.815**	-1.095	-5.476**	-4.461*	39.1	106,628
	(1.933)	(2.677)	(1.722)	(2.123)	[48.8]	
English learner	-9.894***	-4.116	-9.425***	-10.622**	57.8	13,985
	(2.912)	(5.056)	(2.764)	(3.878)	[49.4]	
Not an English learner	-5.271**	-0.488	-5.144**	-4.096*	36.4	92,641
	(1.889)	(2.514)	(1.697)	(2.071)	[48.1]	
(D) Enrolled school grad. rate <75%						
All (for reference)	-6.110**	-1.459	-6.146***	-5.106*	38.9	98,455
	(1.962)	(2.780)	(1.767)	(2.218)	[48.8]	
English learner	-11.902***	-6.164	-11.449***	-12.257**	59.5	13,172
	(2.717)	(4.956)	(2.596)	(3.713)	[49.1]	
Not an English learner	-5.317**	-0.669	-5.632**	-4.703*	35.9	85,279
	(1.930)	(2.621)	(1.756)	(2.176)	[48.0]	

Notes: All notes are the same as those in Table 4, but the sample is limited to the group as labeled.

Table E.8: Impact of Informational Interventions by English Learner Status, Continued

	Fast Facts (1)	FF Digital (2)	App (3)	School Finder (4)	Control Mean (5)	N (6)
(A) Matched to First Choice						
All (for reference)	0.600	1.791	0.968	1.041	41.0	115,126
	(1.366)	(1.753)	(1.215)	(1.454)	[49.2]	
English learner	-2.167	1.322	-3.482+	-3.846	50.4	15,125
	(2.360)	(2.687)	(1.988)	(2.584)	[50.0]	
Not an English learner	0.754	1.706	1.351	1.312	39.7	99,999
	(1.382)	(1.745)	(1.233)	(1.488)	[48.9]	
(B) Matched in R1						
All (for reference)	-0.485	0.086	-0.450	-0.542	96.4	115,126
	(0.361)	(0.751)	(0.371)	(0.709)	[18.6]	
English learner	-0.839	0.675	-1.071*	-0.764	97.2	15,125
	(0.523)	(0.905)	(0.493)	(1.060)	[16.6]	
Not an English learner	-0.497	0.000	-0.409	-0.670	96.3	99,999
	(0.379)	(0.789)	(0.387)	(0.727)	[18.9]	
(C) Enrolled in match						
All (for reference)	-0.550	0.229	-0.773	1.586	87.6	114,465
	(0.928)	(1.092)	(1.149)	(1.269)	[33.0]	
English learner	-1.260	0.355	-2.492	-2.009	89.3	15,047
	(1.465)	(1.626)	(1.556)	(1.818)	[30.9]	
Not an English learner	-0.416	0.318	-0.519	2.167	87.3	99,416
	(0.952)	(1.156)	(1.188)	(1.341)	[33.3]	

Notes: All notes are the same as those in Tables D.2, but the sample is limited to the group as labeled.

Table E.9: Impact of Informational Interventions, by Free/Reduced Price Lunch Status

	Fast Facts (1)	FF Digital (2)	App (3)	School Finder (4)	Control Mean (5)	N (6)
(A) Guaranteed Low Graduation 1st Choice						
All (for reference)	-3.304**	-1.809	-3.205**	-2.451+	14.4	109,733
	(1.010)	(1.602)	(0.988)	(1.275)	[35.1]	
Low-income	-3.538**	-1.972	-3.320**	-2.445+	16.0	85,583
	(1.077)	(1.652)	(1.069)	(1.346)	[36.7]	
Not low-income	-2.657**	-1.639	-2.881**	-2.211+	9.5	24,150
	(0.943)	(1.491)	(0.977)	(1.297)	[29.4]	
(B) % of 1st-3rd grad. rate <75%						
All (for reference)	-3.100*	-1.230	-2.640*	-1.491	21.1	114,696
	(1.358)	(2.468)	(1.272)	(1.595)	[32.6]	
Low-income	-3.432*	-1.642	-2.754*	-1.386	23.4	89,682
	(1.404)	(2.459)	(1.326)	(1.639)	[33.6]	
Not low-income	-2.398+	-0.751	-2.687*	-1.958	14.6	25,014
	(1.325)	(2.574)	(1.306)	(1.636)	[28.5]	
(C) Matched school grad. rate <75%						
All (for reference)	-5.815**	-1.095	-5.476**	-4.461*	39.1	106,628
	(1.933)	(2.677)	(1.722)	(2.123)	[48.8]	
Low-income	-6.120**	-1.122	-5.271**	-4.156+	42.7	83,500
	(1.968)	(2.705)	(1.759)	(2.166)	[49.5]	
Not low-income	-5.169**	-2.232	-6.268***	-5.519*	28.4	23,128
	(1.928)	(2.853)	(1.873)	(2.269)	[45.1]	
(D) Enrolled school grad. rate <75%						
All (for reference)	-6.110**	-1.459	-6.146***	-5.106*	38.9	98,455
	(1.962)	(2.780)	(1.767)	(2.218)	[48.8]	
Low-income	-6.456**	-1.393	-5.909**	-4.892*	42.6	77,309
	(1.998)	(2.804)	(1.815)	(2.253)	[49.5]	
Not low-income	-5.258**	-3.071	-7.294***	-5.666*	27.7	21,146
	(1.939)	(2.909)	(1.849)	(2.382)	[44.8]	

Notes: All notes are the same as those in Table 4, but the sample is limited to the group as labeled.

Table E.10: Impact of Informational Interventions by Free/Reduced Price Lunch Status, Continued

	Fast Facts (1)	FF Digital (2)	App (3)	School Finder (4)	Control Mean (5)	N (6)
(A) Matched to First Choice						
All (for reference)	0.600	1.791	0.968	1.041	41.0	115,126
	(1.366)	(1.753)	(1.215)	(1.454)	[49.2]	
Low-income	0.634	1.310	0.849	1.238	41.5	90,066
	(1.425)	(1.844)	(1.298)	(1.542)	[49.3]	
Not low-income	-0.023	2.861+	0.972	0.485	39.6	25,060
	(1.519)	(1.702)	(1.442)	(1.735)	[48.9]	
(B) Matched in R1						
All (for reference)	-0.485	0.086	-0.450	-0.542	96.4	115,126
	(0.361)	(0.751)	(0.371)	(0.709)	[18.6]	
Low-income	-0.529	0.042	-0.532	-0.406	96.6	90,066
	(0.366)	(0.814)	(0.386)	(0.729)	[18.0]	
Not low-income	-0.556	0.303	-0.126	-0.959	95.7	25,060
	(0.493)	(0.884)	(0.521)	(0.891)	[20.4]	
(C) Enrolled in match						
All (for reference)	-0.550	0.229	-0.773	1.586	87.6	114,465
	(0.928)	(1.092)	(1.149)	(1.269)	[33.0]	
Low-income	-0.842	0.697	-0.748	1.815	87.7	89,760
	(1.012)	(1.163)	(1.243)	(1.295)	[32.8]	
Not low-income	0.790	-1.031	-0.575	1.469	87.0	24,705
	(1.068)	(1.476)	(1.223)	(1.678)	[33.6]	

Notes: All notes are the same as those in Tables D.2, but the sample is limited to the group as labeled.

Table E.11: Impact of Informational Interventions, by Immigrant Status

	Fast Facts (1)	FF Digital (2)	App (3)	School Finder (4)	Control Mean (5)	N (6)
(A) Guaranteed Low Graduation 1st Choice						
All (for reference)	-3.304**	-1.809	-3.205**	-2.451+	14.4	109,733
	(1.010)	(1.602)	(0.988)	(1.275)	[35.1]	
Immigrant	-4.150**	-3.813	-4.203**	-2.869	18.3	22,303
	(1.493)	(2.571)	(1.406)	(2.038)	[38.6]	
Not an immigrant	-3.148**	-1.429	-3.095**	-2.506*	13.3	87,430
	(0.995)	(1.486)	(0.996)	(1.263)	[34.0]	
(B) % of 1st-3rd grad. rate <75%						
All (for reference)	-3.100*	-1.230	-2.640*	-1.491	21.1	114,696
	(1.358)	(2.468)	(1.272)	(1.595)	[32.6]	
Immigrant	-4.906*	-4.783	-4.233*	-2.030	25.8	23,245
	(1.907)	(3.430)	(1.733)	(2.374)	[35.4]	
Not an immigrant	-2.764*	-0.356	-2.414+	-1.480	19.9	91,451
	(1.288)	(2.317)	(1.243)	(1.531)	[31.7]	
(C) Matched school grad. rate <75%						
All (for reference)	-5.815**	-1.095	-5.476**	-4.461*	39.1	106,628
	(1.933)	(2.677)	(1.722)	(2.123)	[48.8]	
Immigrant	-8.137**	-3.632	-6.785**	-3.775	46.0	21,749
	(2.630)	(4.048)	(2.412)	(3.281)	[49.9]	
Not an immigrant	-5.374**	-0.642	-5.421**	-4.886*	37.2	84,879
	(1.884)	(2.527)	(1.713)	(2.100)	[48.3]	
(D) Enrolled school grad. rate <75%						
All (for reference)	-6.110**	-1.459	-6.146***	-5.106*	38.9	98,455
	(1.962)	(2.780)	(1.767)	(2.218)	[48.8]	
Immigrant	-8.642***	-3.555	-7.094**	-4.519	46.1	20,538
	(2.560)	(4.098)	(2.375)	(3.349)	[49.9]	
Not an immigrant	-5.550**	-1.083	-6.133***	-5.540*	36.9	77,917
	(1.933)	(2.655)	(1.779)	(2.212)	[48.3]	

Notes: All notes are the same as those in Table 4, but the sample is limited to the group as labeled.

Table E.12: Impact of Informational Interventions by Immigrant Status, Continued

	Fast Facts (1)	FF Digital (2)	App (3)	School Finder (4)	Control Mean (5)	N (6)
(A) Matched to First Choice						
All (for reference)	0.600	1.791	0.968	1.041	41.0	115,126
	(1.366)	(1.753)	(1.215)	(1.454)	[49.2]	
Immigrant	0.981	0.303	0.736	-0.705	41.7	23,314
	(1.949)	(2.135)	(1.740)	(2.024)	[49.3]	
Not an immigrant	0.611	2.082	0.966	1.685	40.8	91,812
	(1.356)	(1.769)	(1.227)	(1.501)	[49.1]	
(B) Matched in R1						
All (for reference)	-0.485	0.086	-0.450	-0.542	96.4	115,126
	(0.361)	(0.751)	(0.371)	(0.709)	[18.6]	
Immigrant	-1.329**	-1.098	-1.630**	-1.885+	96.8	23,314
	(0.501)	(1.065)	(0.531)	(1.013)	[17.7]	
Not an immigrant	-0.330	0.390	-0.204	-0.370	96.3	91,812
	(0.378)	(0.746)	(0.383)	(0.709)	[18.9]	
(C) Enrolled in match						
All (for reference)	-0.550	0.229	-0.773	1.586	87.6	114,465
	(0.928)	(1.092)	(1.149)	(1.269)	[33.0]	
Immigrant	-2.690**	-0.603	-2.594*	-1.758	90.8	23,196
	(1.012)	(1.067)	(1.132)	(1.259)	[29.0]	
Not an immigrant	-0.021	0.425	-0.349	2.460+	86.7	91,269
	(0.994)	(1.210)	(1.243)	(1.393)	[34.0]	

Notes: All notes are the same as those in Tables D.2, but the sample is limited to the group as labeled.

Table E.13: Impact of Informational Interventions, by Special Education Status

	Fast Facts (1)	FF Digital (2)	App (3)	School Finder (4)	Control Mean (5)	N (6)
(A) Guaranteed Low Graduation 1st Choice						
All (for reference)	-3.304**	-1.809	-3.205**	-2.451+	14.4	109,733
	(1.010)	(1.602)	(0.988)	(1.275)	[35.1]	
Receives special education services	-5.926***	-2.378	-5.623***	-5.972**	23.1	20,597
	(1.721)	(2.248)	(1.689)	(2.012)	[42.2]	
Does not receive special ed. services	-2.639**	-1.643	-2.585**	-1.721	12.6	89,136
	(0.939)	(1.547)	(0.906)	(1.196)	[33.2]	
(B) % of 1st-3rd grad. rate <75%						
All (for reference)	-3.100*	-1.230	-2.640*	-1.491	21.1	114,696
	(1.358)	(2.468)	(1.272)	(1.595)	[32.6]	
Receives special education services	-4.255*	-2.097	-3.619*	-4.388*	31.0	21,988
	(1.776)	(2.767)	(1.786)	(2.164)	[36.2]	
Does not receive special ed. services	-2.815*	-1.146	-2.421*	-0.985	19.1	92,708
	(1.326)	(2.461)	(1.227)	(1.524)	[31.5]	
(C) Matched school grad. rate <75%						
All (for reference)	-5.815**	-1.095	-5.476**	-4.461*	39.1	106,628
	(1.933)	(2.677)	(1.722)	(2.123)	[48.8]	
Receives special education services	-5.927**	-0.898	-4.748*	-5.556*	42.7	20,401
	(2.226)	(3.265)	(2.074)	(2.745)	[49.5]	
Does not receive special ed. services	-5.792**	-1.130	-5.678**	-4.325*	38.3	86,227
	(1.983)	(2.692)	(1.774)	(2.129)	[48.6]	
(D) Enrolled school grad. rate <75%						
All (for reference)	-6.110**	-1.459	-6.146***	-5.106*	38.9	98,455
	(1.962)	(2.780)	(1.767)	(2.218)	[48.8]	
Receives special education services	-5.890**	0.097	-4.634*	-5.715*	43.2	18,925
	(2.258)	(3.358)	(2.069)	(2.833)	[49.5]	
Does not receive special ed. services	-6.166**	-1.689	-6.482***	-5.035*	38.0	79,530
	(2.015)	(2.793)	(1.822)	(2.205)	[48.5]	

Notes: All notes are the same as those in Table 4, but the sample is limited to the group as labeled.

Table E.14: Impact of Informational Interventions by Special Education Status, Continued

	Fast Facts (1)	FF Digital (2)	App (3)	School Finder (4)	Control Mean (5)	N (6)
(A) Matched to First Choice						
All (for reference)	0.600	1.791	0.968	1.041	41.0	115,126
	(1.366)	(1.753)	(1.215)	(1.454)	[49.2]	
Receives special education services	-1.484	-0.980	-1.022	-1.020	54.1	22,113
	(1.392)	(2.115)	(1.398)	(1.883)	[49.8]	
Does not receive special ed. services	1.291	2.533	1.612	1.564	38.3	93,013
	(1.432)	(1.767)	(1.252)	(1.517)	[48.6]	
(B) Matched in R1						
All (for reference)	-0.485	0.086	-0.450	-0.542	96.4	115,126
	(0.361)	(0.751)	(0.371)	(0.709)	[18.6]	
Receives special education services	-0.189	0.377	-0.266	-0.406	98.0	22,113
	(0.331)	(0.625)	(0.342)	(0.612)	[14.1]	
Does not receive special ed. services	-0.556	0.013	-0.457	-0.552	96.1	93,013
	(0.406)	(0.844)	(0.411)	(0.805)	[19.4]	
(C) Enrolled in match						
All (for reference)	-0.550	0.229	-0.773	1.586	87.6	114,465
	(0.928)	(1.092)	(1.149)	(1.269)	[33.0]	
Receives special education services	0.662	0.310	-0.991	0.813	87.8	22,032
	(1.218)	(1.558)	(1.547)	(1.575)	[32.8]	
Does not receive special ed. services	-0.795	0.307	-0.642	1.778	87.5	92,433
	(0.928)	(1.079)	(1.116)	(1.283)	[33.1]	

Notes: All notes are the same as those in Tables D.2, but the sample is limited to the group as labeled.

Table E.15: Impact of Informational Interventions, by Borough

	Fast Facts (1)	FF Digital (2)	App (3)	School Finder (4)	Control Mean (5)	N (6)
(A) Guaranteed Low Graduation 1st Choice						
All (for reference)	-3.304**	-1.809	-3.205**	-2.451+	14.4	109,733
	(1.010)	(1.602)	(0.988)	(1.275)	[35.1]	
Bronx	-4.557*	-6.741*	-4.525**	-3.944+	27.7	23,732
	(1.861)	(2.667)	(1.686)	(2.030)	[44.7]	
Brooklyn	-4.260**	-1.337	-4.516**	-3.486	15.6	36,571
	(1.633)	(2.914)	(1.662)	(2.310)	[36.2]	
Manhattan	1.932	6.223**	2.415	-0.284	6.8	11,121
	(1.638)	(2.345)	(1.657)	(2.300)	[25.1]	
Queens	-3.348**	-2.112	-2.775*	-3.382*	9.3	33,512
	(1.130)	(1.359)	(1.092)	(1.389)	[29.1]	
(B) % of 1st-3rd grad. rate <75%						
All (for reference)	-3.100*	-1.230	-2.640*	-1.491	21.1	114,696
	(1.358)	(2.468)	(1.272)	(1.595)	[32.6]	
Bronx	-3.845+	-7.646*	-1.543	-2.069	38.2	26,261
	(2.209)	(3.076)	(2.027)	(2.551)	[36.9]	
Brooklyn	-3.713+	0.434	-5.019*	-1.136	23.6	37,151
	(2.026)	(4.422)	(1.943)	(2.719)	[33.4]	
Manhattan	1.186	1.906	3.248	0.466	12.2	11,934
	(1.926)	(2.352)	(2.185)	(2.421)	[24.9]	
Queens	-4.606***	-2.404	-3.007*	-4.380*	13.6	34,506
	(1.322)	(1.749)	(1.221)	(1.677)	[27.8]	
(C) Matched school grad. rate <75%						
All (for reference)	-5.815**	-1.095	-5.476**	-4.461*	39.1	106,628
	(1.933)	(2.677)	(1.722)	(2.123)	[48.8]	
Bronx	-6.052*	-6.758*	-3.348	0.857	63.8	23,205
	(2.679)	(3.354)	(2.386)	(2.846)	[48.1]	
Brooklyn	-8.941***	-2.068	-10.119***	-5.115	38.4	35,969
	(2.568)	(3.980)	(2.395)	(3.096)	[48.6]	
Manhattan	2.459	7.236+	3.915	-3.703	22.8	10,545
	(2.827)	(4.256)	(3.017)	(5.484)	[42.0]	
Queens	-6.361**	-3.479	-3.806+	-10.291**	34.6	32,148
	(2.242)	(2.772)	(2.140)	(3.557)	[47.6]	
(D) Enrolled school grad. rate <75%						
All (for reference)	-6.110**	-1.459	-6.146***	-5.106*	38.9	98,455
	(1.962)	(2.780)	(1.767)	(2.218)	[48.8]	
Bronx	-6.614*	-8.046*	-3.624	0.054	64.7	20,334
	(2.760)	(3.457)	(2.475)	(3.121)	[47.8]	
Brooklyn	-9.021***	-2.547	-11.214***	-5.698+	38.3	33,152
	(2.523)	(3.996)	(2.426)	(3.259)	[48.6]	
Manhattan	1.902	8.428+	3.013	-3.806	22.1	9,468
	(2.788)	(4.468)	(2.809)	(5.291)	[41.5]	
Queens	-7.169**	-3.846	-4.764*	-11.406**	34.6	30,928
	(2.290)	(2.765)	(2.154)	(3.598)	[47.6]	

Notes: All notes are the same as those in Table IV, but sample is limited to the group as labeled.

Table E.16: Impact of Informational Interventions by Borough, Continued

	Fast Facts (1)	FF Digital (2)	App (3)	School Finder (4)	Control Mean (5)	N (6)
(A) Matched to First Choice						
All (for reference)	0.600	1.791	0.968	1.041	41.0	115,126
	(1.366)	(1.753)	(1.215)	(1.454)	[49.2]	
Bronx	-5.880**	-6.389*	-2.796	-6.712**	48.6	26,556
	(2.184)	(3.034)	(1.945)	(2.316)	[50.0]	
Brooklyn	2.250	2.121	2.259	1.452	44.8	37,213
	(2.289)	(2.306)	(2.058)	(2.472)	[49.7]	
Manhattan	3.883	-2.603	4.864+	4.363	35.7	11,972
	(2.642)	(3.135)	(2.701)	(3.616)	[47.9]	
Queens	-2.257	0.375	-1.659	-0.895	35.1	34,524
	(1.898)	(2.230)	(1.596)	(2.183)	[47.7]	
(B) Matched in R1						
All (for reference)	-0.485	0.086	-0.450	-0.542	96.4	115,126
	(0.361)	(0.751)	(0.371)	(0.709)	[18.6]	
Bronx	-0.847	-1.359	-0.718	0.791	97.2	26,556
	(0.592)	(0.937)	(0.561)	(0.919)	[16.4]	
Brooklyn	-0.190	-0.402	-0.577	-1.642+	97.1	37,213
	(0.515)	(1.243)	(0.526)	(0.929)	[16.7]	
Manhattan	-0.468	-0.497	0.804	1.788	94.2	11,972
	(0.753)	(1.676)	(0.778)	(1.351)	[23.3]	
Queens	-1.588*	0.263	-1.481+	-2.411	95.8	34,524
	(0.689)	(1.336)	(0.774)	(1.712)	[20.0]	
(C) Enrolled in match						
All (for reference)	-0.550	0.229	-0.773	1.586	87.6	114,465
	(0.928)	(1.092)	(1.149)	(1.269)	[33.0]	
Bronx	-2.919	-3.675	-1.824	-0.123	83.0	26,371
	(1.838)	(2.739)	(1.790)	(2.156)	[37.5]	
Brooklyn	-1.038	0.487	-3.084+	-2.934	88.6	37,057
	(1.495)	(1.546)	(1.718)	(2.425)	[31.8]	
Manhattan	-7.470**	-9.453***	-5.490*	-4.177+	87.2	11,861
	(2.427)	(2.717)	(2.392)	(2.487)	[33.4]	
Queens	2.712**	2.983***	2.002**	4.404***	88.7	34,330
	(0.900)	(0.820)	(0.742)	(1.041)	[31.6]	

Notes: All notes are the same as those in Tables D.2, but the sample is limited to the group as labeled.

Table E.17: Impact of Informational Interventions, by Gender

	Fast Facts (1)	FF Digital (2)	App (3)	School Finder (4)	Control Mean (5)	N (6)
(A) Guaranteed Low Graduation 1st Choice						
All (for reference)	-3.304**	-1.809	-3.205**	-2.451+	14.4	109,733
	(1.010)	(1.602)	(0.988)	(1.275)	[35.1]	
Girls	-2.882**	-1.423	-2.416*	-1.996	12.9	53,766
	(1.033)	(1.562)	(0.979)	(1.341)	[33.5]	
Boys	-3.691**	-2.168	-3.934***	-3.011*	15.7	55,967
	(1.155)	(1.824)	(1.177)	(1.486)	[36.4]	
(B) % of 1st-3rd grad. rate <75%						
All (for reference)	-3.100*	-1.230	-2.640*	-1.491	21.1	114,696
	(1.358)	(2.468)	(1.272)	(1.595)	[32.6]	
Girls	-2.679*	-0.193	-2.293+	-0.685	19.0	55,936
	(1.270)	(2.259)	(1.175)	(1.521)	[30.9]	
Boys	-3.441*	-2.041	-2.866*	-2.294	23.0	58,760
	(1.514)	(2.759)	(1.442)	(1.800)	[34.0]	
(C) Matched school grad. rate <75%						
All (for reference)	-5.815**	-1.095	-5.476**	-4.461*	39.1	106,628
	(1.933)	(2.677)	(1.722)	(2.123)	[48.8]	
Girls	-6.226**	-1.181	-5.348**	-3.342	36.9	52,212
	(2.185)	(2.907)	(1.929)	(2.283)	[48.2]	
Boys	-5.385**	-1.092	-5.604**	-5.684*	41.2	54,416
	(1.859)	(2.636)	(1.722)	(2.246)	[49.2]	
(D) Enrolled school grad. rate <75%						
All (for reference)	-6.110**	-1.459	-6.146***	-5.106*	38.9	98,455
	(1.962)	(2.780)	(1.767)	(2.218)	[48.8]	
Girls	-6.428**	-1.481	-6.001**	-3.319	36.8	48,040
	(2.164)	(2.986)	(1.929)	(2.328)	[48.2]	
Boys	-5.680**	-1.423	-6.183***	-6.915**	40.8	50,415
	(1.917)	(2.742)	(1.792)	(2.357)	[49.2]	

Notes: All notes are the same as those in Table 4, but the sample is limited to the group as labeled.

Table E.18: Impact of Informational Interventions by Gender, Continued

	Fast Facts (1)	FF Digital (2)	App (3)	School Finder (4)	Control Mean (5)	N (6)
(A) Matched to First Choice						
All (for reference)	0.600	1.791	0.968	1.041	41.0	115,126
	(1.366)	(1.753)	(1.215)	(1.454)	[49.2]	
Girls	1.125	3.764*	1.541	0.846	40.7	56,094
	(1.500)	(1.838)	(1.314)	(1.612)	[49.1]	
Boys	-0.026	-0.466	0.235	0.758	41.3	59,032
	(1.390)	(1.875)	(1.338)	(1.591)	[49.2]	
(B) Matched in R1						
All (for reference)	-0.485	0.086	-0.450	-0.542	96.4	115,126
	(0.361)	(0.751)	(0.371)	(0.709)	[18.6]	
Girls	-0.528	0.130	-0.441	-0.440	96.7	56,094
	(0.385)	(0.789)	(0.403)	(0.733)	[18.0]	
Boys	-0.477	0.044	-0.513	-0.687	96.1	59,032
	(0.413)	(0.822)	(0.432)	(0.789)	[19.2]	
(C) Enrolled in match						
All (for reference)	-0.550	0.229	-0.773	1.586	87.6	114,465
	(0.928)	(1.092)	(1.149)	(1.269)	[33.0]	
Girls	-1.089	-0.179	-1.427	0.725	87.6	55,755
	(0.972)	(1.193)	(1.163)	(1.325)	[33.0]	
Boys	-0.047	0.691	-0.176	2.509+	87.5	58,710
	(0.987)	(1.132)	(1.237)	(1.380)	[33.1]	

Notes: All notes are the same as those in Tables D.2, but the sample is limited to the group as labeled.

Table E.19: Impact of Informational Interventions, by School Type

	Fast Facts (1)	FF Digital (2)	App (3)	School Finder (4)	Control Mean (5)	N (6)
(A) Guaranteed Low Graduation 1st Choice						
All (for reference)	-3.304**	-1.809	-3.205**	-2.451+	14.4	109,733
	(1.010)	(1.602)	(0.988)	(1.275)	[35.1]	
Charter	1.165	3.448	2.978	3.204	14.5	8,118
	(2.196)	(2.375)	(1.891)	(3.346)	[35.3]	
District	-2.832**	-1.716	-3.312**	-2.895*	14.3	101,615
	(1.037)	(1.701)	(1.019)	(1.355)	[35.1]	
(B) % of 1st-3rd grad. rate <75%						
All (for reference)	-3.100*	-1.230	-2.640*	-1.491	21.1	114,696
	(1.358)	(2.468)	(1.272)	(1.595)	[32.6]	
Charter	0.533	0.983	3.313+	1.682	18.9	8,503
	(2.282)	(2.361)	(1.988)	(2.690)	[31.4]	
District	-2.346+	-1.092	-2.571+	-1.579	21.3	106,193
	(1.422)	(2.674)	(1.369)	(1.734)	[32.7]	
(C) Matched school grad. rate <75%						
All (for reference)	-5.815**	-1.095	-5.476**	-4.461*	39.1	106,628
	(1.933)	(2.677)	(1.722)	(2.123)	[48.8]	
Charter	-0.277	7.963+	4.360	12.532+	35.3	7,603
	(3.297)	(4.301)	(3.800)	(6.405)	[47.8]	
District	-4.578*	-1.005	-5.217**	-4.024+	39.4	99,025
	(2.028)	(2.857)	(1.863)	(2.339)	[48.9]	
(D) Enrolled school grad. rate <75%						
All (for reference)	-6.110**	-1.459	-6.146***	-5.106*	38.9	98,455
	(1.962)	(2.780)	(1.767)	(2.218)	[48.8]	
Charter	-0.206	7.801+	3.256	8.820	32.0	4,921
	(4.064)	(4.557)	(4.621)	(8.445)	[46.7]	
District	-5.051*	-1.467	-5.734**	-4.907*	39.3	93,534
	(2.041)	(2.934)	(1.885)	(2.397)	[48.8]	

Notes: All notes are the same as those in Table 4, but the sample is limited to the group as labeled.

Table E.20: Impact of Informational Interventions by School Type, Continued

	Fast Facts (1)	FF Digital (2)	App (3)	School Finder (4)	Control Mean (5)	N (6)
(A) Matched to First Choice						
All (for reference)	0.600	1.791	0.968	1.041	41.0	115,126
	(1.366)	(1.753)	(1.215)	(1.454)	[49.2]	
Charter	3.585	-3.672	3.615	-2.543	39.7	8,517
	(3.730)	(3.189)	(4.237)	(4.217)	[48.9]	
District	0.753	2.561	0.611	0.345	41.1	106,609
	(1.454)	(1.788)	(1.296)	(1.481)	[49.2]	
(B) Matched in R1						
All (for reference)	-0.485	0.086	-0.450	-0.542	96.4	115,126
	(0.361)	(0.751)	(0.371)	(0.709)	[18.6]	
Charter	0.639	-3.864*	0.316	-6.515*	95.8	8,517
	(1.240)	(1.912)	(1.340)	(2.772)	[20.2]	
District	-0.702+	0.302	-0.867*	-1.120	96.4	106,609
	(0.398)	(0.810)	(0.424)	(0.734)	[18.5]	
(C) Enrolled in match						
All (for reference)	-0.550	0.229	-0.773	1.586	87.6	114,465
	(0.928)	(1.092)	(1.149)	(1.269)	[33.0]	
Charter	-0.401	-0.725	-4.619	-0.691	63.8	8,344
	(6.004)	(5.787)	(6.700)	(10.832)	[48.1]	
District	0.135	0.406	-0.461	0.226	89.5	106,121
	(0.646)	(0.760)	(0.714)	(0.811)	[30.6]	

Notes: All notes are the same as those in Tables D.2, but the sample is limited to the group as labeled.

Online Appendix F: Intervention materials

Figure F.1: Sample Fast Facts Paper Sheet

Notes: Fast Fact sheets were also available in Spanish.

Figure F.2: Sample Fast Facts Paper Sheet: "Low Graduation" Version

Notes: Fast Fact sheets were also available in Spanish. See the last two lines of the school list for the "low graduation" alert.

Figure F.3: Sample Fast Facts Paper Sheet: "Low Odds" Version

Notes: Fast Fact sheets were also available in Spanish. See the last two lines of the school list for the "low odds" alert.

Figure F.4: Screened Language Insert

FAST FACTS FOR STUDENTS LEARNING ENGLISH

WHAT IS THIS? A list of high schools with programs for students who are learning English

WHY AM I GETTING IT? To help you find high schools to put on your application

WHERE CAN I GET MORE INFORMATION? Look in the high school book ("Directory") on the page number for the program. Some of the programs for students learning English have additional requirements for grades, test scores, and number of years living in the United States, so be sure to check the book ("Directory") for more details.

SCHOOL NAME	PROGRAM NAME	CODE	PAGE	LANGUAGE
BRONX				
Academy for Language and Tech	Media Communications	Y31B	29	Spanish
	Institute for Computer Tech	Y31C	29	Spanish
	Computer Networking	Y31D	29	Spanish
Alfred E. Smith Career & Technical Education HS	Bilingual Spanish NATEF Automotive Tech	X69D	32	Spanish
Bronx Bridges HS	Bronx Bridges HS	Y47A	42	Any
Bronx Int'l HS	Bronx Int'l HS	X36A	60	Any
Claremont Int'l HS	Claremont Int'l HS	Y64A	75	Any
Crotona Int'l HS	Digital Media/Recording Entertainment Tech	Y56A	80	Many; see directory
HS of Language & Innovation	HS of Language & Innovation	Y52A	107	Spanish
Int'l School for Liberal Arts	Int'l School for Liberal Arts	Y24A	113	Any
Kingsbridge Int'l HS	Kingsbridge Int'l HS	X86R	114	Spanish
M.S. 223 Laboratory School of Finance & Tech	Dual Language Spanish Program	Y72A	117	Any
Marble Hill HS for Int'l Studies	Int'l Academy	X43B	118	Any
New World HS	New World HS	X87R	132	Spanish
Pan American Int'l HS at Monroe	Pan American Int'l HS at Monroe	Y26A	134	Spanish
World View HS	Spanish Transitional Bilingual	X89B	157	Spanish
BROOKLYN				
Brooklyn Int'l High School	Brooklyn Int'l HS	K53A	193	Any
Clara Barton HS	Bilingual Haitian Creole Program	K50B	207	Haitian Creole
Edward R. Murrow HS	Bilingual Mandarin Communication Arts	K57B	219	Chinese (Mandarin)
	Bilingual Spanish Communication Arts	K57C	219	Spanish
Green School: An Academy for Environmental Careers	Transitional Bilingual	L27C	235	Spanish
Int'l HS at Lafayette	Int'l HS	K38R	250	Any
Int'l HS at Prospect Heights	Int'l HS at Prospect Heights	K98X	251	Chinese (Mandarin)
John Dewey HS	Bilingual Mandarin College Prep Program	K56B	256	Chinese (Mandarin)
Midwood HS	Bilingual Haitian Creole Institute	K26L	270	Haitian Creole
MANHATTAN				
A. Philip Randolph Campus HS	Dual Language Spanish Program	M19L	322	Spanish
Esperanza Prep Academy	Esperanza Prep Academy	A37A	345	Spanish
Gregorio Luperon HS for Science & Mathematics	Bilingual Spanish Science & Mathematics	M62A	361	Spanish
HS for Dual Language & Asian Studies	HS for Dual Language & Asian Studies	M59A	365	Chinese (Mandarin)
Int'l HS at Union Square	Int'l HS at Union Square	Y46A	385	Chinese (Mandarin)
Manhattan Academy for Arts & Language	Manhattan Academy for Arts & Language	A22A	392	Spanish
Manhattan Bridges HS	Bilingual Spanish Information Tech & Computer Science	M57B	394	Spanish
	Bilingual Spanish Pre-Engineering	M57C	394	Spanish
	Dual Language Spanish Pre-Engineering	M57D	394	Spanish
	Dual Language Spanish Information Tech & Computer Science	M57E	394	Spanish
Manhattan Center for Science & Mathematics	Bilingual Spanish Science & Mathematics	M16K	397	Spanish
Manhattan Int'l HS	Humanities & Interdisciplinary	M93A	400	Any
University Neighborhood HS	Bilingual Mandarin	M35B	434	Chinese (Mandarin)
QUEENS				
Flushing Int'l HS	Flushing Int'l HS	Q25X	486	Any
Int'l HS at LaGuardia Community College	Int'l HS at LaGuardia Community College	Q27J	512	Any
Int'l HS for Health Sciences	Int'l HS for Health Sciences	Q63A	513	Any
Newcomers HS	Newcomers HS	Q98A	527	Any
Pan American Int'l HS	Pan American Int'l HS	Q03A	530	Spanish
Queens HS for Language Studies	Queens HS for Language Studies	Q62A	581	Chinese (Mandarin)

INFORMACIÓN RÁPIDA

PARA ESTUDIANTES QUIENES ESTÁN APRENDIENDO INGLÉS

¿QUÉ ES ESTO? Una lista de escuelas secundarias en la ciudad de Nueva York para estudiantes quienes están aprendiendo inglés

¿POR QUÉ LA RECIBÍ? Para ayudarte a encontrar escuelas secundarias para poner en tu solicitud

¿DÓNDE PUEDO CONSEGUIR MÁS INFORMACIÓN? Ve a la página del programa en el libro de escuelas secundarias públicas ("el directorio"). Algunos de los programas para estudiantes quienes están aprendiendo inglés tienen otros requisitos como notas mínimas del final del séptimo grado, puntajes mínimos en exámenes estandarizados y cuántos años han vivido en los Estados Unidos. Ve el libro de escuelas secundarias públicas ("el directorio") para averiguar los detalles.

NOMBRE DE LA ESCUELA	NOMBRE DEL PROGRAMA	CÓDIGO	PÁGINA	IDIOMAS
BRONX				
Academy for Language and Tech	Media Communications	Y31B	29	español
	Institute for Computer Tech	Y31C	29	español
	Computer Networking	Y31D	29	español
Alfred E. Smith Career & Technical Education HS	Bilingual Spanish NATEF Automotive Tech	X69D	32	español
Bronx Bridges HS	Bronx Bridges HS	Y47A	42	cualquier idioma
Bronx Int'l HS	Bronx Int'l HS	X36A	60	cualquier idioma
Claremont Int'l HS	Claremont Int'l HS	Y64A	75	cualquier idioma
Crotona Int'l HS	Digital Media/Recording Entertainment Tech	Y56A	80	cualquier idioma
HS of Language & Innovation	HS of Language & Innovation	Y52A	107	varios; ve al directorio
Int'l School for Liberal Arts	Int'l School for Liberal Arts	Y24A	113	español
Kingsbridge Int'l HS	Kingsbridge Int'l HS	X86R	114	cualquier idioma
M.S. 223 Laboratory School of Finance & Tech	Dual Language Spanish Program	Y72A	117	español
Marble Hill HS for Int'l Studies	Int'l Academy	X43B	118	cualquier idioma
New World HS	New World HS	X87R	132	cualquier idioma
Pan American Int'l HS at Monroe	Pan American Int'l HS at Monroe	Y26A	134	español
World View HS	Spanish Transitional Bilingual	X89B	157	español
BROOKLYN				
Brooklyn Int'l High School	Brooklyn Int'l HS	K53A	193	cualquier idioma
Clara Barton HS	Bilingual Haitian Creole Program	K50B	207	criollo haitiano
Edward R. Murrow HS	Bilingual Mandarin Communication Arts	K57B	219	chino mandarín
	Bilingual Spanish Communication Arts	K57C	219	español
Green School: An Academy for Environmental Careers	Transitional Bilingual	L27C	235	español
Int'l HS at Lafayette	Int'l HS	K38R	250	cualquier idioma
Int'l HS at Prospect Heights	Int'l HS at Prospect Heights	K98X	251	cualquier idioma
John Dewey HS	Bilingual Mandarin College Prep Program	K56B	256	chino mandarín
Midwood HS	Bilingual Haitian Creole Institute	K26L	270	criollo haitiano
MANHATTAN				
A. Philip Randolph Campus HS	Dual Language Spanish Program	M19L	322	español
Esperanza Prep Academy	Esperanza Prep Academy	A37A	345	español
Gregorio Luperon HS for Science & Mathematics	Bilingual Spanish Science & Mathematics	M62A	361	español
HS for Dual Language & Asian Studies	HS for Dual Language & Asian Studies	M59A	365	chino mandarín
Int'l HS at Union Square	Int'l HS at Union Square	Y46A	385	cualquier idioma
Manhattan Academy for Arts & Language	Manhattan Academy for Arts & Language	A22A	392	cualquier idioma
Manhattan Bridges HS	Bilingual Spanish Information Tech & Computer Science	M57B	394	español
	Bilingual Spanish Pre-Engineering	M57C	394	español
	Dual Language Spanish Pre-Engineering	M57D	394	español
	Dual Language Spanish Information Tech & Computer Science	M57E	394	español
Manhattan Center for Science & Mathematics	Bilingual Spanish Science & Mathematics	M16K	397	español
Manhattan Int'l HS	Humanities & Interdisciplinary	M93A	400	cualquier idioma
University Neighborhood HS	Bilingual Mandarin	M35B	434	chino mandarín
QUEENS				
Flushing Int'l HS	Flushing Int'l HS	Q25X	486	cualquier idioma
Int'l HS at LaGuardia Community College	Int'l HS at LaGuardia Community College	Q27J	512	cualquier idioma
Int'l HS for Health Sciences	Int'l HS for Health Sciences	Q63A	513	cualquier idioma
Newcomers HS	Newcomers HS	Q98A	527	cualquier idioma
Pan American Int'l HS	Pan American Int'l HS	Q03A	530	español
Queens HS for Language Studies	Queens HS for Language Studies	Q62A	581	chino mandarín

Figure F.5: Postcards Provided for Fast Facts Digital Delivery Treatment Arm
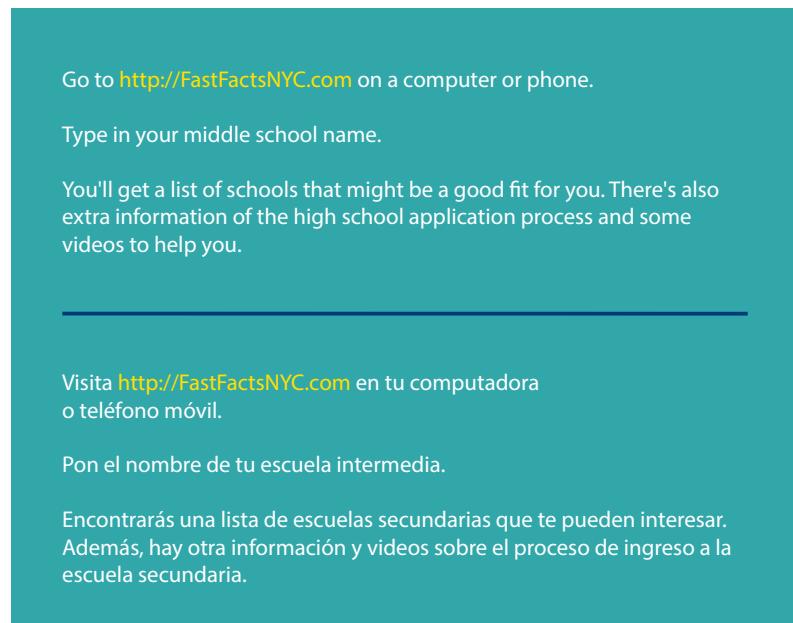
Notes: School counselors were provided with postcards for all 8th graders.

Figure F.6: Screen Shots of Fast Facts Digital Delivery

Notes: Fast Facts digital delivery contained the same information as the Fast Facts paper sheets. All information was available in Spanish in addition to English.

Figure F.7: Postcards Provided for App Treatment Arm

Notes: School counselors were provided with postcards for all 8th graders.

Figure F.8: Screen Shots of the App
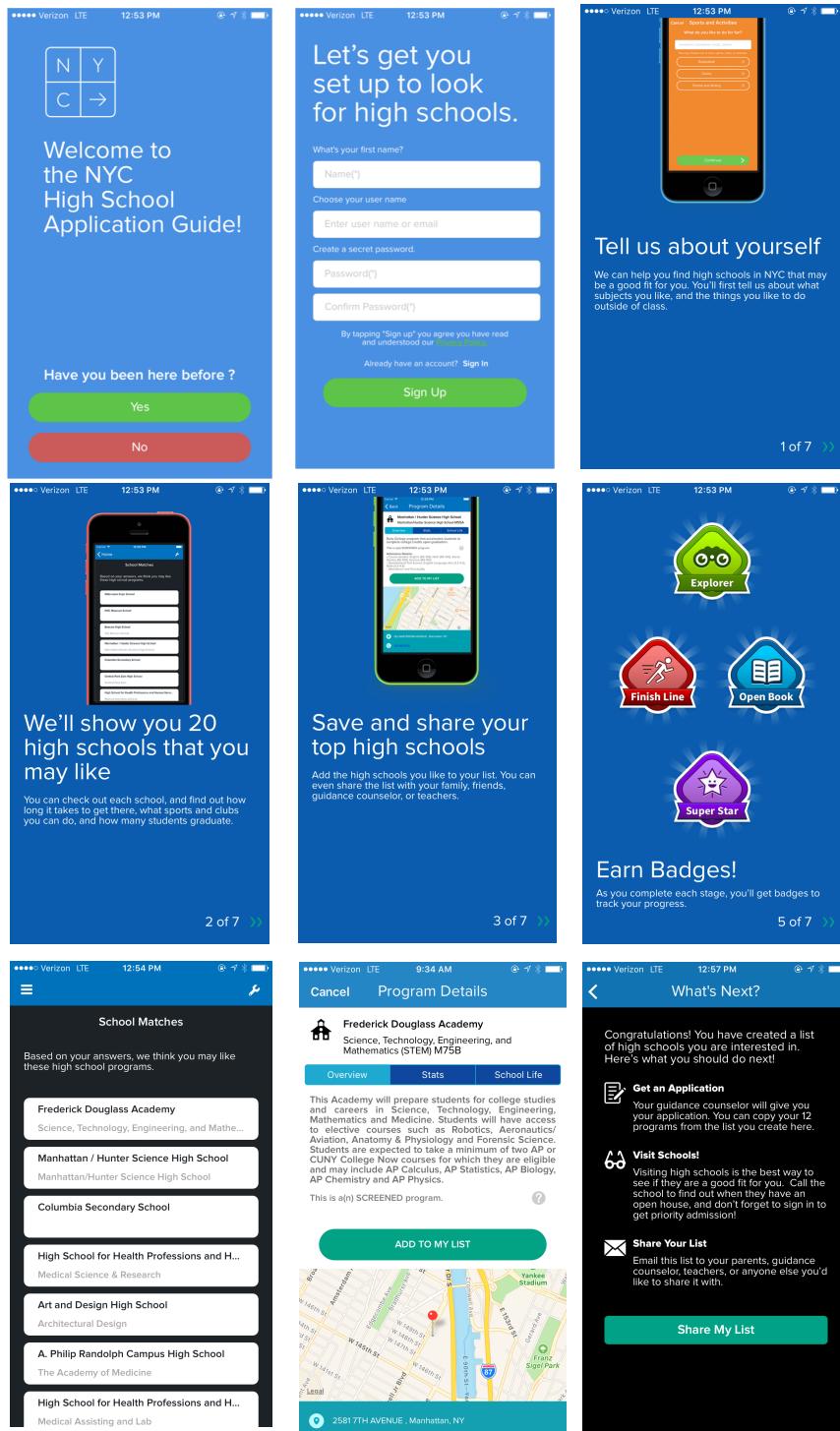
Notes: The App was also available as an interactive website.

Figure F.9: Postcards Provided for School Finder Treatment Arm

Figure F.10: Screen Shots of School Finder
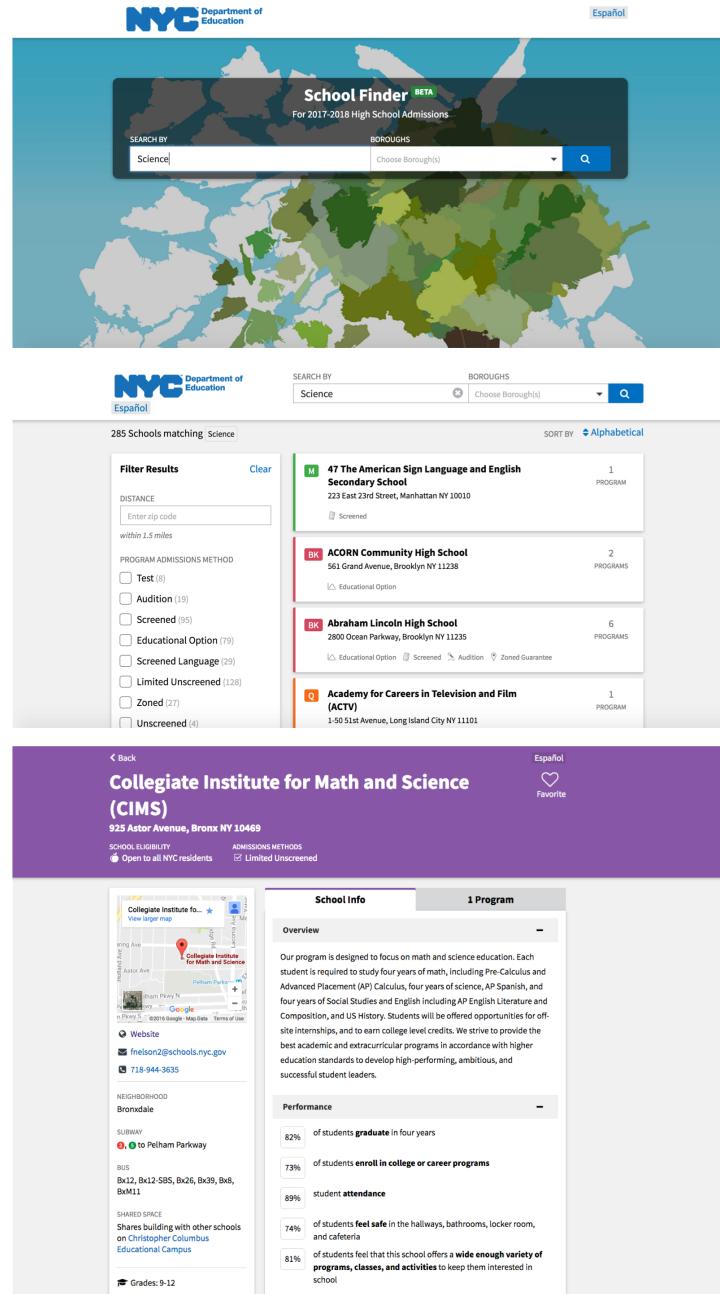
Notes: School Finder was also optimized for use on a smartphone. School Finder material was also available in Spanish.

Figure F.11: Supportive Materials: Mailing Boxes and Toolkit Packaging

Notes: The photo on the left shows the boxes that toolkits and postcards or Fast Facts printouts were mailed in. The upper right photo shows the outside of the toolkit box; the lower right photo shows the interior, which included the materials in the exhibits that follow, as well as digital versions on the included USB flash drive.

Figure F.12: Supportive Materials: Introductory Letters for Counselor Toolkit

Notes: Toolkit materials are for Fast Facts digital delivery. Materials for other treatment arms have small variations tailored to their treatment and are available from the authors by request.

Figure F.13: Supportive Materials: Counselor Lesson Plan
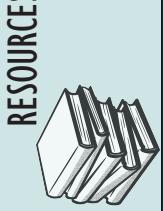
HIGH SCHOOL ADMISSIONS PROCESS LESSON PLAN - GUIDANCE COUNSELOR	GRADE 8	DATE: OCTOBER

LEARNING TARGET: I can use my tool and the HS directory to research high schools to put on my application.

INSTRUCTIONAL OUTCOMES: Students identify what they are looking for in a high school and use their tool and the directory to find and gather information on schools to put on their application.

	RESOURCES	LESSON DESCRIPTION	KEY QUESTIONS
RESOURCES	♦ "Which High School Is Your Number 1?" Hip-Hop Video ♦ "Which High School Is Your Number 1?" Lyrics Explanation ♦ High School Admissions: My Checklist ♦ High School Admissions: My Notes ♦ High School Admissions: My Tool ♦ 2017 NYC DOE High School Directory		

	LESSON DESCRIPTION	KEY QUESTIONS
Mini-Lesson LAUNCH	-FOCUS QUESTION: How can we find schools to put on our high school applications? -LAUNCH: Introduce and play the "Which High School Is Your Number 1?" video. -Turn & Talk: Ask students to read the Lyrics Explanation sheet and in pairs, identify 3 important points about the high school admissions process mentioned in the video. Pairs share an example. -Say, "Choosing a high school from hundreds of options can be overwhelming. We will use these tools to help us narrow down our choices and choose schools that are a good fit for you."	-What are important facts to remember about the high school admissions process? -What are the most important things to consider when choosing a high school?
Group/Independent Work EXPLORE	-Students will read the instructions for their tool. Guide students through using the tool, pausing to discuss the different school features they might consider in their search. -Scaffolding: Prompt students to begin searching for high schools by choosing a school feature to focus on. i.e. A student concerned about grades might choose to focus on admissions methods and look for limited unscreened schools. -Depending on how much time you have, have students research a number of schools using their tool and/or the directory and fill out the schools' information using the "My Notes" sheet.	-What matters most to me in a high school? What type of school would be a good fit for me? -How can we use our tool to help search for high schools that fit our criteria?
Discussion/Share/Summarize REFLECTION	-Ask students to revisit the focus question. -Go through the "My Checklist" sheet and reiterate key dates and actions students should take. -Hand out the postcards so students can access their tool at home.	-What did we learn about the high schools we researched today? How can we find out more about these schools?

Online Appendix 89

Figure F.14: Supportive Materials: Lyrics Sheet to Accompany Hip-Hop Video Lesson

WHICH HIGH SCHOOL IS YOUR NUMBER 1?

MY LYRICS

**Grade 7 mastered, got done, spun out the door, want a
High school, stuck in the middle of a confusing spot
in your application
It's monstrous, so astonished, you holler
Call me up a hero or a scholar**

Welcome to 8th grade! This year, you have to submit a high school application. You will get your application in October. Here are some tips to help you with the application: when you first get it, check your 7th grade attendance, grades, and test scores at the bottom. Why does this matter? Some schools (called screened schools) will use this information to decide whether to offer you a spot. Others (limited unscreened schools) won't see any of this information at all. Once you've checked it, put it in a safe place! It's due on December 1st, and your parent or guardian has to sign it.

**Just one offer, we have tools so you won't falter
Get a lot farther by searching a lot harder
By being a lot smarter
By being a self-starter
By thirteen, they declared you
are a high school decider**

"Just one offer" means you only get accepted to one school from your main application. How do you find the best school for you? We've made a special list for your school that we call "Fast Facts" (http://FastFactsNYC.com). The list has schools that are mostly a short distance from where you live. We picked these schools because kids at these schools are more likely to graduate from high school. Actually, all of the high schools on Fast Facts have graduation rates that are above average!

Why does that matter? You might think that all schools are the same. But at some schools, a lot of kids don't graduate. If you don't graduate from high school, it's harder to get a job later, and you can't go to college without finishing high school. So when you're checking out high schools, always look at the graduation rate! The graduation rate is listed for all of the schools on your Fast Facts list. For other schools, check out the High School Directory, which some 8th graders call "the book" or "the high school book."

**Here is the way, be brave, your high school path uncharted
What subjects do you crave, explore and keep your head up
Inside, you are longing for a school to be a part of
Dare to visit a school fair
Your counselor is your partner**

High schools often have a theme, like health professions, humanities, science and engineering, or history. Think about what subjects you like and look for schools that fit your interests. Visiting a school fair or open house is a great way to learn more about the school by talking to teachers and students from that school. For limited unscreened schools, visiting a fair or open house also gives you priority for admission. Remember, the Borough Fairs are October 15th & 16th.

**Success is the aim, don't take that feat in vain
Your choice, a reflection of the legacy in your name
Put a pencil to your temple, then connect it to your brain
And write your fiercest claim, as to why you're the big game**

Screened schools sometimes require that you fill out an additional application telling the school why they should pick you. Remember, screened schools may look at 7th grade ELA and math state exams, grades, and attendance. Some ask you to do an in-person interview, write an essay, or visit the school. Some schools require essays with questions such as, "Why should we choose you?", "How would your friends describe you?", and "What extracurriculars do you participate in and what does that reveal about you?" If a school you like requires an interview, remember that preparation will make you less nervous. Try doing a practice interview at home with friends or family, or ask someone at school to practice with you.

**With the options that you have, every kid will find their placement
Drama, history, science, engineering, it's insane man
Get your education, don't forget from whence you came, and
The world's gonna know your name. What's your game plan?**

Applying to high school might seem complicated, but if you make a game plan and follow it, you'll be ready to tackle anything. Use "My Checklist" to keep track of what you need to do over the next few months. The "My Notes" sheet has space for you to take notes on the schools and keep track of the open house dates of schools you want to visit.

**Which high school is your number 1?
Write down which high school is your number 1
And there's a million things that must get done
But just don't wait, just don't wait...**

**There are schools in the Bronx, Queens,
Brooklyn, Staten, and Manhattan
Think about location
So your vibe doesn't flatten
Half-dead, sittin' on the subway
Work not done
You could have been closer
This is really not fun**

Travel time is important to consider. Can you wake up early every morning to get to a school that's far away? Do you want to go to a school that you can walk to instead? Make sure to check Google Maps to see how long it will take you to get to and from the high schools you are interested in!

**Bear in mind that screened schools have a stated grade minimum
Compare last year's grades with them
And check out the curriculum
Hear a voice saying
Listen, do careful research yourself
Now you start readin' and defeatin' every handbook on the shelf**

Screened schools look at things like attendance, grades, and test scores to decide whether to offer you a spot. Be sure to check the directory for these schools' requirements and see if your grades and test scores match what they are looking for. Complete any other things the school asks for, too, like an interview or school visit.

**Search up all the tools, the rules, do graduation rates compute?
7-0, a school you will recruit, jotting down the best solution
Enlisting, persisting
On your draft app you record
Talking with your mom or dad, grasping that they're on board**

School	Graduation Rates
The Sonia Sotomayor School of Law	80
Aaron Burr School of History	55
The Rosalind Franklin School of Science	95
Lin-Manuel Miranda School of Government	90
Venus & Serena Williams School of Sports & Business	70
The Raymond School of the Arts	85

Schools have different graduation rates, which means you are more or less likely to finish high school depending on which school you go to. A higher graduation rate means you are more likely to finish and have the option to go on to college. The average graduation rate for the city is about 70%; that's what we mean by 7-0. Once you've checked the graduation rate, use your "My Draft Application" sheet to practice filling out your application. Fill out all 12 spots on the sheet. Share it with your parents, guidance counselor, or another adult you trust and finalize your list. This way, when it's time to fill out your real application, you'll have everything you need!

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	

**Signin' up for every audition you intend on
Scanning for open house dates with your pen drawn
Ask your teachers to lend their helping hand, and
Put down as many schools as you can**

Some schools require an audition to be admitted and others (limited unscreened schools) give you priority if you attend an open house. Look in the directory to check the requirements for schools you're interested in, and if you need to, call or check the school's website to find out audition and open house dates. Make sure to go to auditions and open houses if they are required, so you have a better chance of being accepted to these schools.

**Put down as many schools as you can
Put down as many schools as you can
Put down as many schools as you can
Put down as many schools as you can
In New York**

Make sure you fill all the spots on your application! When you pick 12 schools, you have a much better chance of getting into one of your choices in the first round of the admissions process and going to a high school you like next year.

**Which high school is your number 1?
Your future's waiting in the wings for you
You will never back down
You will never stop until your pr-i-i-me
Which high school is your number 1?
When your peers all cheer for you
Will they know what you overcame?
Will they know you rewrote the game?
Your life will never be the same**

**A genius in the works is born
See if you can spot him
Your plans so intricate
Your GC knows you've got 'em
You're all done with your high school app
Man your list is awesome**

*Remember, your application is due to your guidance counselor on **December 1st**! As long as you followed your game plan, you should have 12 great schools picked out and be ready to hand in your application by the deadline.*

**We taught you well
Me, I eyed my chance
Me, I will advance
Me, I loved my dance
And me
I'm the tool to rely on!**

**There's a million things to factor in
So just don't wait!
What's your game plan?
This high school is my number 1!**

Figure F.15: Supportive Materials: "My Tool" and "My Draft Application"

Figure F.16: Supportive Materials: "My Notes"