EDUCATION RESEARCH ALLIANCE FOR NEW ORLEANS

How Does the New Orleans School Placement Algorithm Work, and What Is the Best Strategy for Getting a Preferred Placement?

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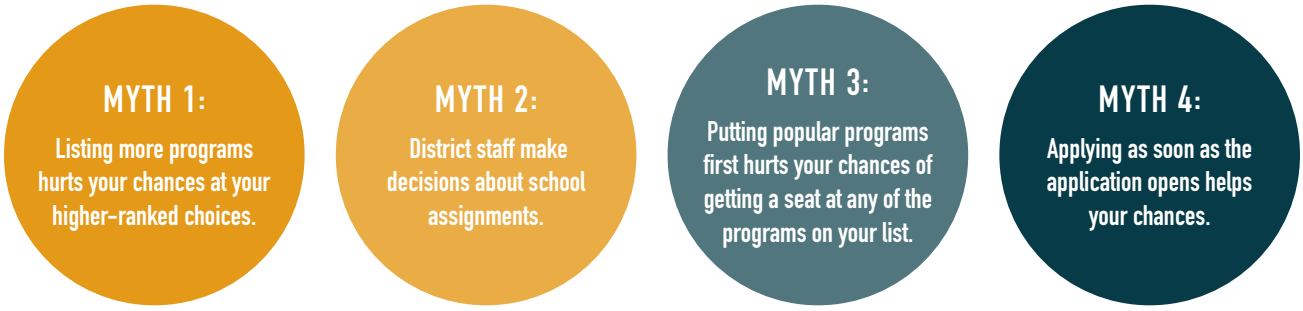
Overview

In New Orleans, students are not assigned to a school based only on where they live. Instead, families submit a ranked list of school requests through the NOLA-PS Common Application Process (NCAP), and then an algorithm assigns students to schools. Although aspects of the NCAP's placement algorithm are complex—which can produce confusion and distrust—the basic idea is quite simple.[1]

This brief describes how the NCAP placement algorithm works. It illustrates, in an oversimplified way, how the algorithm places students in schools. It then shows why strategies that families might think will help their chances of getting a preferred placement can only hurt those chances. ***Instead, an applicant's best strategy is to rank schools in order from their most-preferred option to their least-preferred option.***

To accompany this brief, the **New Orleans Collaborative for Early Childhood Research (CECR)** published a brief that examines how families perceive and approach the NCAP early childhood and kindergarten application. Through interviews with parents, CECR researchers identified four "myths" about the NCAP's placement algorithm:



Unfortunately, these myths can lead families to adopt misguided strategies. In this brief, I use an illustration of the NCAP placement process to show why these are, in fact, myths and why the strategies implied by the myths are misguided. I focus on the NCAP's K-12 placement algorithm, but the same logic applies to its early childhood placement algorithm.

[1]*Many cities, including New Orleans, use a type of algorithm known as a deferred-acceptance (DA) algorithm. While the basic ideas described in this brief should generalize to most enrollment systems that use a DA algorithm, every system's placement rules and processes are unique in some ways.*

NCAP: The Basics

Previously known as OneApp, the New Orleans school application system was renamed the NOLA-PS Common Application Process in 2021. NCAP currently has only one round in which families apply for schools. During this "Main Round," the application window is open for families to submit their ranked school requests for the following school year. The Main Round application window typically opens in the late fall and closes in winter. The window for the **2024-25 school year** is November 28 to January 19.

After the Main Round application window closes, NOLA-PS runs its placement algorithm. The algorithm assigns each student a random lottery number and places students in their highest-ranked school where a seat is available to them. If a school has enough seats to accommodate all requests, then all eligible applicants who ranked that school first receive a placement. If a school turns out to be "oversubscribed" (not enough seats to accommodate all requests), then students' priority status and lottery number determine which students receive a placement. If a student does not receive a placement in their first-choice school, they are given full consideration for their second-choice school (and, as necessary, schools they ranked lower than second). This is described in detail below.

If a child does not receive a placement in the Main Round—or if their family would like to find a seat in a different school—they can participate in the NOLA-PS Open Enrollment process. Open Enrollment is a period after the Main Round when families can enroll in schools with seats available. Unlike the Main Round, it does not use an algorithm to make placements. However, the most popular schools might have few, if any, seats available during Open Enrollment.

Student Priorities in NCAP

In the Main Round, the NCAP algorithm uses student priorities to determine which students receive seats in oversubscribed schools. In essence, it ranks applicants from first to last based on their priority status at each school. Students' random lottery number is used only as a tiebreaker in placement decisions. Not all schools use the same priorities, and some priorities are more common (or stronger) than others. The three most common priorities are:

- ***sibling priority,*** which goes to applicants who have a sibling already enrolled at a school (where the sibling has not yet reached the school's final grade);
- ***geographic priority (two types)***, which goes to applicants who live within a school's geographic zone ("geographic zone priority") and/or a half-mile of a school ("half-mile proximity priority")[2];
- ***closing school priority,*** which goes to applicants in grades K-7 and 9-11 who must transition to a new school because their current school is closing.
- ***more information about priorities*** can be found **here**.

[2]*An important detail about NCAP's current priorities is that some are "full" while others are "partial." Full priorities apply to all open seats. Partial priorities apply to only a subset. Geographic zone priorities generally apply to 50% of the seats available; half-mile priorities generally apply to 25%.*

An Illustration of How the NCAP's "Strategy-Proof" Algorithm Works

IMAGINE THAT THREE CHILDREN (ANA, BEN, AND CHLOE) ARE APPLYING TO THE SAME THREE SCHOOLS (MAPLE, OAK, AND PINE).

Let's say that all three schools apply closing school and sibling priorities. Closing school priorities are stronger than sibling priorities. This means that applicants with both closing school and sibling priorities are the highest-priority group. Applicants with closing school priority only (no sibling priority) are next, followed by applicants with sibling priority only (no closing school priority). Applicants with neither priority are the lowest-priority group. Within each of these groups, applicants are ordered by their lottery numbers.

HERE ARE THE PRIORITIES AND LOTTERY NUMBERS FOR OUR HYPOTHETICAL APPLICANTS:

ANA	has closing school priority (at all schools). She has a good lottery number.
BEN	has closing school priority (at all schools) and sibling priority at Maple. He has a bad lottery number.
CHLOE	does not fit any priorities. However, she has a great lottery number.

WE CAN USE THIS INFORMATION TO DETERMINE THESE APPLICANTS' PRIORITY STATUS AT EACH SCHOOL.

At Maple, Ben is first. This is because he is the only applicant with both closing school and sibling priority. Ana is second because of her closing school priority. Chloe is third. Even with the best lottery number, Chloe does not receive a seat ahead of applicants in a higher priority group. The lottery number is only used as a tiebreaker within a priority group.

At Oak and Pine, Ana is first. This is because Ana and Ben have the same priority group status at these schools (closing school priority only), and Ana has a better lottery number than Ben. Ben is second. Chloe is third.

We can extend this example to show, in an oversimplified way, how a placement algorithm like the one used by NCAP assigns students to schools.

Let's say that Maple, Oak, and Pine each have one seat available. Ana, Ben, and Chloe's families submitted their rank-ordered requests. In this simulation, they were allowed to request up to three schools but not all of them did. Here are the requests they submitted (ranked from Choice 1 to Choice 3):

	CHOICE 1	CHOICE 2	CHOICE 3
ANA	Oak	Pine	Maple
BEN	Oak	Maple	Pine
CHLOE	Maple	Oak	

Remember, the priority order at Maple is Ben-Ana-Chloe. The priority order at Oak and Pine is Ana-Ben-Chloe.

The algorithm begins by ***tentatively*** assigning applicants to their top-choice school if there is room for them based on their priority status. If there is not room for them, they are eliminated from consideration at that school.

In our example, when we look down the "Choice 1" column, we see that Chloe is tentatively assigned to Maple in the initial step because she was the only applicant to rank Maple first. Ana is tentatively assigned to Oak, while Ben is rejected from Oak. This is because there is only one seat available at Oak, and Ana has priority over Ben. Although we don't yet know if Ana will hold that tentatively assigned seat, we know that Ben will not be assigned to Oak.

WE ARE NOW AT THIS STEP:

	CHOICE 1	CHOICE 2	CHOICE 3
ANA	Oak	Pine	Maple
BEN	~~Oak~~	Maple	Pine
CHLOE	Maple	Oak	

Ben was eliminated from his first-choice school, but he gets full consideration at his second-choice school. The algorithm treats his original second choice, Maple, as if it were his first choice all along. In other words, Chloe does not get an advantage over Ben just because Chloe ranked Maple first while Ben ranked it second. The order of applicants' rankings is irrelevant to which students get priority. This is key to the algorithm being strategy-proof.

Ben has higher priority at Maple than Chloe. He tentatively takes that seat in the algorithm's next step, which considers Ana for Oak, Ben for Maple, and Chloe for Maple. This results in Chloe being eliminated from consideration at Maple. Ana holds her tentative placement at Oak.

THAT LEAVES US HERE:

	CHOICE 1	CHOICE 2	CHOICE 3
ANA	Oak	Pine	Maple
BEN	~~Oak~~	Maple	Pine
CHLOE	~~Maple~~	Oak	

Now, Chloe now is considered for Oak, which is her top choice remaining. She has an opportunity to take the seat tentatively held by Ana. However, Ana has priority over Chloe. Therefore, Chloe is eliminated from consideration at Oak.

THE ALGORITHM IS NOW FINISHED MAKING PLACEMENTS. ANA IS ASSIGNED TO OAK. BEN IS ASSIGNED TO MAPLE. CHLOE IS NOT ASSIGNED TO ANY SCHOOL.

	CHOICE 1	CHOICE 2	CHOICE 3
ANA	Oak	Pine	Maple
BEN	~~Oak~~	Maple	Pine
CHLOE	~~Maple~~	~~Oak~~	

Chloe's family will have to seek a placement after the Main Round. They could try to find a school during the Open Enrollment period. ***However, their options might be limited if their preferred schools filled up during the Main Round***.

Myths About NCAP and Why Strategies to Outsmart the Algorithm Don't Work

This illustration can be helpful in debunking the myths described in the CECR brief. It shows why the strategies implied by those myths will not succeed in getting applicants more desirable placements.

MYTH 1: LISTING MORE PROGRAMS HURTS YOUR CHANCES AT YOUR HIGHER-RANKED CHOICES.

A long-running myth about the school placement process in New Orleans is that applicants can trick the algorithm into giving them one of their top choices by ranking only a small number of schools. The thinking is that ranking more schools might invite the district to place an applicant in a lower-ranked, less popular school while preserving a seat in a more popular school.

Maybe this was Chloe's family's strategy above. Maybe they liked all three schools, but they ***really*** liked Maple and Oak. Even though they would have been satisfied with a placement at Pine (their third-favorite school), they chose not to list it because they worried that doing so would hurt their chances at Maple or Oak.

This strategy does not work because an applicant is never punished for ranking more schools. Applicants are assigned to their highest-ranked school where a seat is available to them.

Note that Ana's family did not undermine her chances of a placement at Oak—where she was placed—by ranking two schools after Oak. However, Chloe's family might have made a costly mistake. If they had ranked Pine third rather than omitting it altogether, they would have emerged from the Main Round with a seat at Pine. Now, however, they will enter Open Enrollment with no guarantee that Chloe will have a seat in any of their top three schools.

MYTH 2: DISTRICT STAFF MAKE DECISIONS ABOUT SCHOOL ASSIGNMENTS.

A second myth described by CECR is that some parents believe that district staff can decide, on their own, where to place students in the Main Round.

This reflects a misunderstanding of how the Main Round placement process works. As shown above, the placement algorithm—not district staff—determines students' placements. It makes those placements based on families' requests, seat availability, and placement policies.

However, it is important to note that placement algorithms are designed by people through a policymaking process. Decisions about issues such as which priorities to use—and how to order those priorities relative to one another—have important implications for which students have access to which schools. By engaging and participating in this decision-making process, residents can help to ensure that the NCAP's priorities reflect the communities' values and desires.

MYTH 3: PUTTING POPULAR PROGRAMS FIRST HURTS YOUR CHANCES OF GETTING A SEAT AT ANY OF THE PROGRAMS ON YOUR LIST.

Another long-running myth about the school assignment process is that applicants can outsmart the algorithm by ranking a less-preferred school above a more-preferred school if they believe they have a better chance of getting into the less-preferred school.

Let's imagine that Chloe's family used this strategy above. Let's say their actual favorite school was Oak, but they knew that Oak was popular. They figured—correctly—that Chloe didn't have a great shot of getting a seat there. Therefore, they ranked Maple first in hopes of grabbing a seat ahead of the applicants who ranked Maple second or lower.

The problem with this strategy is that ranking a school higher does not give an applicant higher priority status at that school. This is evident in what happened with Chloe and Ben. Ben's family ranked Oak first and was denied a spot because of his priority status. However, after Ben was rejected for his top-choice school, he received full consideration at Maple (their second choice). Due to his higher priority status, he obtained a seat at Maple that had been tentatively assigned to Chloe, whose family ranked Maple first.

Chloe's family's strategy did not help them, and it wouldn't have helped them in any scenario. Worse, it could have resulted in them getting a less-preferred school. Consider, for example, what would have happened if Ana's family had used this strategy and ranked Pine first. They would have been placed in Pine rather than Oak (their true first choice). The algorithm assigns students to their highest-ranked school where there is a seat available to them. For Ana, who had a seat available in both schools, the algorithm would have given her a seat in a less-preferred school. By attempting to outsmart the algorithm, her family would have essentially taken themselves out of consideration at their favorite school.

MYTH 4: APPLYING AS SOON AS THE APPLICATION OPENS HELPS YOUR CHANCES.

It is extremely important that applicants complete all required steps to submit a Main Round application before the Main Round deadline.[3] Applicants have a better chance of getting a desired placement if they apply during the Main Round than if they wait until after the Main Round.

However, as shown in the illustration above, the Main Round placement process is ***not*** a first-come, first-served process. The placement algorithm considers all eligible applications that were received during the Main Round application window. Which student receives a seat in an oversubscribed school depends on which of those students has higher priority, not on which family applied earlier during the Main Round window.

Summary

The NCAP uses a placement algorithm to assign students to schools based on families' requests, seat availability, and students' priorities and lottery numbers. How these algorithms work can be hard to understand, and many people have expressed confusion or distrust. Researchers have observed parents adopting various strategies in hopes of getting the best possible placement. Many of these strategies seem intuitive, and some might succeed in settings with different placement processes.

However, with the current school placement algorithm in New Orleans, the best approach—with respect to getting a preferred placement—is perhaps the simplest. ***Applicants should rank schools in their true order of preference.*** They should rank as many schools as possible until they either: (a) do not have room on the application to list more schools, or (b) would not enroll in any schools they have not yet ranked. This is the only way for applicants to maximize their chances of getting a school they want.

[3]*Some schools have additional requirements that must be completed soon after submitting the application. This includes assessments at schools with academic or foreign language eligibility criteria.*