The Case of Birch Charter High School (#NJ02)

By Suzanne Poole Patzelt, Douglas B. Larkin, Liz Carletta, and Khadija Ahmed
Corresponding Author: Dr. Douglas Larkin, larkind@montclair.edu

Introduction to the cases

The case presented here is drawn from a larger national study investigating the 5-year science teacher retention rates in four U.S. states (New Jersey, North Carolina, Pennsylvania, and Wisconsin).¹

This study has two distinct phases. In the first phase, researchers used publicly available staffing data from 2007-2018 to construct a 5-year retention map for six cohorts of novice science teachers in each state. This approach differs from sample-based retention studies because full data permitted our team to map the career trajectories of each individual science teacher for a more comprehensive picture of teacher retention, mobility, and attrition. For example, in sample-based studies, the departure of a teacher at the end of one year might simply be categorized as attrition. In viewing a 6-year trajectory, we were better able to identify teachers who left a position in a given year not simply as attritted, but possibly as having transferred to a different district (mobility) or taken a year off and then returned (such as for parental leave.)

After analyzing individual teachers’ career trajectories, we calculated the 5-year retention rate of newly hired science teachers in each cohort for the years 2007-2012 for each school district. This analysis informed the second phase of the research, in which five districts per state were identified for a more detailed case study on the factors influencing science teacher retention. Districts were sorted initially for higher-than-average rates of retention, and we focused on those in the top 10% in the state. We then attempted to diversify our selection of districts by looking at factors such as school size, location within each state, type of community (urban, rural, suburban,) and relative wealth of the district. We also looked for districts that had hired (and retained) teachers of color and teachers whose teacher education programs had been funded by the National Science Foundation’s Noyce Teacher Scholarship Program, which was created to meet the need for well-prepared STEM teachers in the United States.

The district described here was one of those selected in the state of New Jersey, and a separate NJ state teacher policy case study covering the time period of this study is available on the project website. The district name is presented as a pseudonym for purposes of confidentiality. The names and position titles are similarly obscured in this case, and also in the larger study, in order to preserve internal confidentiality as well.

For further information about the study, please visit: http://www.montclair.edu/IMPREST

¹ This material is based on work supported by the National Science Foundation under Grant #1758282. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of the National Science Foundation.
The Case of Birch Charter High School (#NJ02)

Located in a thriving urban center in the northern part of the state, Birch Charter High School is situated at the edge of the mid-sized public university that led its establishment nearly two decades earlier, and with which it continues to be affiliated. The school itself is located in a renovated industrial building that previously housed a commercial laundry operation, and the historic brickwork skeleton of the structure provides a charming contrast to the 21st century design of the rehabilitated space. The open floor plan and industrial design elements seem like they would be appealing to students, and the research team learned that students were indeed involved in the selection and design process for the building.

In the state of New Jersey, individual charter schools operate essentially as autonomous school districts, and the NJ State Board of Education serves the role that a local school board might serve in non-charter public schools. In the annual reports published by the NJ Department of Education, small schools like Birch Charter have their data listed alongside those of the most populous districts in the state. Birch Charter High School serves just over 400 of the city’s 6,000 secondary students, the rest of whom attend one of the city’s other public secondary schools. For historical reasons related to the contested nature of charter schools in the state, Birch is the only charter school in town that serves secondary students, though there are a number of other elementary charter schools.

With a total of forty teachers, five of whom are teachers of science, Birch Charter High School has a student-to-teacher ratio of 11:1, a figure comparable to the city’s other public secondary schools. Additionally, teachers at Birch average eight years teaching in the profession, and 35% of teachers have taught for four years or more. Like the other districts in this study, Birch was selected for its higher-than-average retention of science teachers in the state. Our selection process also identified Birch as a notable outlier among charter schools in the state with a much higher rate of novice science teacher retention, a finding that contrasts with the wider literature on teacher retention at charter schools, which suggests that charter school teachers leave at a higher rate than their public school counterparts (Renzulli et al., 2010).

At the time of selection, Birch Charter High School had retained two of its novice science teachers hired in the 2007-2012 period examined in our analysis. Although this number may appear lower than other districts we have included in our study, its small size was taken into consideration. Out of the two teachers retained in our study population, one teacher identified as a teacher of color. The current teacher population at Birch identifies as 47% White, 23% Hispanic, almost 30% Black or African American, and less than 3% Asian, differing only slightly from the teacher population in the city’s public schools, but differing significantly from the demographic profile of the state, in which the vast majority of teachers (83%) identify as White.

Birch Charter High School is classified as a Title I school, with about 80% of students receiving free or reduced lunch. In 2019, the median household income in the city approached $70,000, with a poverty rate three percent higher than the national average. The student population at Birch High school for the 2019-2020 school year was recorded as 58% Black or African American, 30% Hispanic, 9% Asian, and 4% White, with over 80% of students listing English as the primary language spoken at home. It is notable that the school does not serve any students classified as English language learners, unlike the city’s public schools, which classify

---

2 For Birch, retaining two teachers is analogous to a median-sized school in the state retaining nine science teachers.
nearly 15% of all students as English language learners. The percentage of students with disabilities at the school is slightly greater than the surrounding district.

The research team interviewed 6 individuals in the Birch district, including the main administrator,3 the curriculum supervisor, two novice science teachers, and two retained science teachers, one of whom was also a mentor in the school’s induction program. The curriculum supervisor served in an administrative role in the school—analogous to a vice principal—and also served to coordinate the school’s new teacher induction program. The primary goal of the site visit was to better understand the factors that may have influenced teacher retention during the focus period of the data (2007-2018) and to also investigate current practices around the mentoring and induction of new science teachers. Other data collected included publicly available district documents and documentation related to the mentoring and induction efforts provided by the Birch Charter administrators.

**Findings**

As a result of this site visit and subsequent data analysis, we posit three factors that likely influenced the high science teacher retention rate observed in Birch Charter School. These are (1) school size, (2) teacher autonomy, and (3) the close affiliation with the local university, which we refer to in the remainder of the case as Garden State University. In this section we detail each of these three factors, followed by a brief description of current mentoring and induction efforts at Birch Charter School.

**Factor #1: School Size**

Throughout our interviews at Birch, the theme of school size was ever-present. Teachers and administrators alike reported that by being small, the school possessed a sense of family and closeness. However, even when the size of the school was not explicitly referenced, teachers and administrators pointed to other factors influencing teacher retention at Birch that were connected to the size of the school. These included features like small class sizes, strong relationships with their students, and individualized support from administrators.

When asking the participants why they chose to stay, it became clear that being part of a close-knit community was important. According to the main administrator, teachers choose to stay because “We’re like family, we’re so small, we're like a tight knit family.” With only 25 classrooms, new and experienced teachers alike reported feeling as though they knew everyone in the building. One novice science teacher had interned at Birch for her teacher education program for the school two years prior. She reported that after only 3 years in the building and only one year as a teacher of record, she feels “very close to a lot of coworkers.” She associated this closeness with what she described as a “very small community.”

The experienced science teacher assigned as her mentor also expressed that the small community of the school was the reason she had remained a teacher at Birch charter school, traveling over 75 miles from her home to teach every morning. “I love charter schools,” she told us. “They don't pay much but I love the small size schools. Yes. It's like a family school. You get to love others because you get to know them more. Students and teachers and administration and parents.” This teacher had grown up and started her career outside of the United States, and prior to coming to Birch, had worked at a private religious school in the area until it had closed.

---

3 This individual had an unconventional title that would likely compromise confidentiality of the research if stated here, but the position was analogous to a building principal. Given the deliberate decision of the school not to use the title of principal, we simply refer to this person as the main administrator of the school.
She also suggested that two other former science department colleagues felt the same way that she did. “What made me stay here is not the pay, it is that I like the school size and community, and I believe it was the same for Mr. — and Mr. —.” These two teachers, now retired, were referenced by others we interviewed as well, who valued the informal mentorship they provided. One current teacher expressed that they felt like father figures to him.

Birch administrators made clear their commitment to maintaining small class sizes, which are capped at 20 students. The curriculum supervisor saw small class size as a key factor in the stress level of new teachers across the school, and other teachers at Birch we interviewed cited small class sizes as an important aspect of the school. Additionally, teachers mentioned that having smaller class sizes improved classroom management and made it easier for administrators and disciplinary staff to assist in handling any behavioral issues that may arise. The shared consensus around classroom management practices and student discipline seemed to emerge in many of the interviews we conducted at Birch. Small class sizes were clearly a valued part of the school’s identity.

One experienced teacher expressed the importance of being able to get to know the students well, and valued her ability to build relationships with them, a goal we found was shared by many of the staff. Such a task seemed manageable given the small class sizes and small school environment. She went on to explain that it is the student-teacher interactions she had at the school that kept her coming back.

The curriculum supervisor explained that the induction program made explicit efforts to encourage new teachers to engage with the students, their families, and the surrounding community. One way of doing this was using one of the new teacher meetings as an opportunity to do something in the community instead of meeting formally:

One of the things that I've done the last couple years in lieu of having a meeting in November, because November's a short month and there's always so much going on, is that instead of meeting I ask the new teachers to go do something in the community where they might have the opportunity to interact with the students and their families in some other setting.

This community-building is also built into the school organization; teachers are contractually obligated to complete a service-learning project each year. The curriculum supervisor described the nature of this service-learning:

The students research an issue, they decide something to do about it, and then they carry out that plan. And then the key part that distinguishes service-learning from community service is that they then present their findings to some outside group, even if it's another class in the school. And then they reflect on what they learned from the experience.

A third feature teachers ascribed to the school’s small size was increased support from administrators. The curriculum supervisor explained that since Birch is small, the administrators

---

4 As noted above, Birch Charter High School reports a student to teacher ratio of 11:1, whereas the city’s public schools report 13:1, and the state average is 12:1. New Jersey reports an average class size of 21.9 students. The majority of the research on class size has focused on student achievement. Ingersoll (2003) notes “Class size reduction was also frequently suggested by teachers as a step to increase retention, although interestingly, it was not frequently given by departing teachers as one of the sources behind turnover related to dissatisfaction” (p. 20).
“can offer personal support.” One of the novice teachers told us that the administration provided positive feedback when performing classroom walkthroughs and evaluations. Teachers also stated feeling comfortable going to administration for advice and voicing their concerns. One of the novice teachers noted that this support extended to requests for teaching materials. “They are very supportive in supplies,” the teacher noted, and connected this to the administration’s responsiveness to their needs. Teachers also expressed that school-wide social events provided opportunities for the administration to show their appreciation to teachers.

**Factor #2: Teacher Autonomy**

At Birch Charter School, teachers expressed how important it was for them to have their own classrooms and plan their own lessons. As a small school, many of the science teachers were the sole instructor for a particular content area, relieving many (but not all) teachers of responsibility for coordinating instruction with one another. According to the main administrator, one of the reasons so many teachers had chosen to stay was because of the “ownership over the curriculum and the freedom to do what you want.” This sentiment was later echoed by one of the novice science teachers who stated, “You can really own both the curriculum and the teaching of that course.” This level of autonomy was also accompanied by adequate support from colleagues and administrators.

One of the novice science teachers illustrated this autonomy by describing a conversation between herself and her mentor:

> I feel like I can be myself without [there] being someone ahead of me controlling me, like, “Hey, do this or that.” Yes, there's always check my lesson plan, give me feedback and, keep me on track. But at the same time, I have a lot of freedom.

In addition to curricular autonomy, there was a second type of autonomy valued by the teachers and administrators by virtue of Birch being a charter school. According to one of the retained teachers:

> The system over here at this school isn't overly ... I wouldn't say toxic, no. What I mean is I've heard tale about some schools where there’s so much paperwork, so much administrative work for the teacher to do that it's really inundating in terms of them being able to do their job.

The administrators also described feeling free of “bureaucratic red tape” and “removed from politics,” which they felt gave them more control over managing the school’s budget and resources. The main administrator explained his view that this larger autonomy from the more onerous requirements placed on larger public school systems might contribute to teacher retention at his school. Even though salaries may be higher in non-charter schools, teachers might be “scared to take the jump,” because of the uncertainties inherent in maintaining one’s employment there. “I think that people don't feel as threatened, and they stay.”

**Factor #3: Relationship with Garden State University**

Though some states allow universities, non-profit organizations, community organizations, and even for-profit companies to operate charter schools, in the state of New Jersey only the Department of Education is legally permitted to grant charters. Nonetheless,
Birch Charter High School is historically affiliated with a nearby university, which was involved in the school’s initial charter application to the state, as well as in the location and design of the building. At its inception, individuals from the university sat on the advisory board of the school.

There is a great deal of convincing evidence for this partnership, most notably the agreement for the university to accept and provide a 4-year scholarship to any Birch Charter High School student who graduates with a GPA of 3.2 or higher. Teachers and students are permitted to use university facilities, including the library, gymnasium, and science labs. Birch Charter High School pays the university for facility maintenance and public safety costs. The main administrator likened the relationship as one of a landlord and tenant with “fringe benefits.”

Beyond the relationship between the students at Birch High School and the university, of greater interest to our study is the possible relationship between the university and teacher retention at Birch. Another feature of the partnership with the university was that teachers could take a total of six graduate credits each semester without cost. According to the curriculum supervisor, teachers valued the convenience and advantage of engaging in professional development opportunities with adequate financial support, which often led to opportunities:

Having relatively easy access to graduate work opens the doors to getting your Supervisor Certification and things like that. Because we're such a small school, leadership positions open up pretty quickly. So, it's like where me or someone else have found themselves being the department lead after being here for two or three years. So, I think because there is sort of the ability to move up to some extent and take on leadership roles.

In addition to providing teachers with opportunities to take on prospective roles within the school, the Masters programs have also helped to provide necessary professional development to teachers. The curriculum supervisor explained that since many of the teachers at Birch received certification through an alternate route program, the university has served to supplement support of teachers’ pedagogical knowledge and professional development opportunities.

Aside from providing teachers with graduate level courses at no out-of-pocket cost, the university has also regularly provided teacher interns (i.e. student teachers) to the school. This internship, which begins in the third year of a bachelor’s degree program, is different from traditional student teaching in several ways. Undergraduate education majors gain paid experience with an in-service teacher. This opportunity is separate from their mandatory cooperative education requirements. Interns also participate in professional development uniquely designed by a liaison at the school they are interning with. In the case of Birch, the curriculum supervisor has assumed this role. By partnering with the university, teachers who have participated in the intern program at Birch High School have gone on to complete their student teaching hours with them as well, sometimes with the same teacher. Some of these same teachers have gone on to become teachers of record at Birch. The curriculum supervisor described this network as “synergistic relationship,” appearing to be a mutually beneficial arrangement. Unique university partnerships like this one, that allow for more purposeful student teaching opportunities, have been shown to improve mentorship and teacher practices in the classroom (Zeichner, 2009).

---

5 This agreement was recently modified, and the GPA threshold for a 4-year scholarship was raised to 3.8 or higher.
6 Since the study’s site visit, the university has restricted the number of teachers who can take graduate courses under the tuition waiver agreement in a given year.
Such an experience has allowed new teachers to gain insight into the school community and culture prior to becoming a teacher of record and provides an opportunity for new teachers to develop relationships with their future colleagues. The curriculum supervisor explained that she is now encouraging their high school students to apply for the internship program, bringing the university-school partnership full circle.  

Two of the teachers interviewed were participants in the National Science Foundation’s Robert Noyce Teacher Scholarship Program at the university. This program provides funding and support to undergraduate and graduate students in the field of STEM to pursue K-12 education in high-need schools. One of the Noyce graduates described this opportunity by saying “It was really good. We were really groomed to work in this environment, an urban environment, that helped prepare us.”

**Mentoring and Induction at Birch Charter High School**

At Birch Charter High School, mentoring and induction were systematically developed with attention to the needs of the school’s first-year teachers. The curriculum supervisor, who coordinated the induction program, noted that much of the program was necessarily about the logistics of working at the school:

[I try to] set a balance between logistics and expectations. And so the logistics are sort of the basic technology stuff, like PowerSchool, the lesson plan, the website we use for lesson plans, how to get into it, what the lesson plan template is, what's expectations when they're due, that kind of stuff. And then how to get access to the copier, who's who in the school. Tips and tricks about how to deal with different situations. And then stuff about okay these are the school policies.

New teachers are required to attend new teacher meetings which take place monthly and cover topics the curriculum supervisor has selected, focusing on general needs rather than science specific subject area training. Novice teachers are also strongly encouraged to observe the classrooms of their colleagues as part of induction activities during their prep time.

All novice teachers are assigned a mentor teacher. When matching mentors to novice teachers, the curriculum supervisor considers both the subject area as well as teacher effectiveness. She also explained that historically, the process of being selected as a mentor has been very informal, driven by “who’s willing, who’s available, who’s in that subject,” however she is currently working on formalizing the process by requiring an application.

Mentor teachers at Birch are required to meet with their mentees at least once a week and receive hourly payment, a practice that goes beyond the state-mandated provisional teacher program requirements. One mentor teacher described these meetings taking place either during a shared lunch hour or after school. During this time, she addresses lesson plans and the implementation of “hands-on and online activities.” When speaking to her mentee, it was clear that she provided both professional and personal support, even outside of the mandatory meeting time. Her mentee told us:

I think we developed this very closeness . . . for me she's like a mother . . . Her age and my age, she's like a mother, she's like a sister, a friend. She does not just help me with

---

7 Such a model shares many features with so-called “grow-your-own” teacher education programs (e.g. Gist et al., 2019).
what happens in the school, but she also talks about my personal life, her personal life. So we share so many things.

She later told us that because she began as an intern, she and her mentor have been able to establish a 3-year relationship, a possibility rather unique to the novice teachers at Birch and stated “she's also the one that makes me stay as well.”

At Birch Charter High School, mentors are provided with mentor training which aims to address the specific needs of the mentees. The curriculum supervisor did highlight feedback as one area of focus. She encourages mentor teachers to begin “thinking about what types of feedback are effective for that mentee. And how to . . . separate their thinking between how they do things and then helping the new teacher improve their practice.” According to the mentor teacher, when she was first selected to be a mentor under a different administration, it was not by choice. However, although she still identifies the mentor position as “a big responsibility,” she enjoys it and she “make[s] sure they learn different strategies to be used in class.” She also expressed that the current administration has been supportive and “provided me with all that I need.”

Most recently, in addition to assigning mentors to first-year teachers, the administration has also elected to provide informal mentors to teachers who are new to the school but not first-year teachers, impacting two of the science teachers we interviewed. According to the second-year teacher we spoke to, she and her informal mentor meet monthly and focused mainly on her professional development plan.

In addition to official mentors assigned through a novice teacher induction program, many of the teachers at Birch discussed the importance of informal mentorship from individuals inside and outside of school who have provided them with mentoring over the years, attributing this as a reason they have chosen to stay. In some instances, this mentor started off as their assigned formal/informal mentor but they have chosen to maintain a mentoring relationship. For example, one of the science teachers who was not new to the profession but new to the building, told us that her mentor “has always told me if you have any problem, you can always come.” Another retained teacher expressed that during his first year at the school, although his formal meetings with his mentor were beneficial, he expressed that informal lunchtime meetings provided him with the necessary support for addressing the issues most important to him. He also described mentorship outside of the district that may have led to his retention, one being a family friend who also worked in education and the other being the mentor assigned through the Noyce program.

**Conclusion**

When asked why they stay at Birch, most teachers cited their close-knit community, which fosters a feeling of family. Teachers expressed that small class sizes were influential in building strong relationships with students as well as reducing disciplinary concerns and allowing for more individualized administrative support. As a small school, teachers often were the only teacher in their subject area, allowing teachers a sense of autonomy and ownership over their teaching and their curriculum. Another important feature noted as a reason for retention was Birch’s unique partnership with the nearby university. This partnership affords teachers opportunities for professional development, teacher interns, advancement, as well as the potential to develop a type of grow-your-own future teacher program. Finally, while mentoring and induction is provided through a well-developed program, informal mentorship is not only valued but encouraged and cited as a key reason as to why teachers remain at Birch.
References


