

The Case of Hickory Island School District (#NJ04)

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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 attrited, 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>

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The Case of Hickory Island School District

Hickory Township is located on a barrier island on New Jersey's Atlantic coast, and despite its reputation as a well-known summer tourist destination, it is sparsely populated for the majority of the year. The Hickory Island School District consists of one elementary, middle, and high school, and serves approximately 900 students from the township and neighboring local municipalities on the island. The middle and high schools share a building, each with its own floor, and is situated only a few blocks from the ocean. The high school has four science teachers, each of whom teaches a core course—biology, environmental science, chemistry, and physics— as their primary assignment.

The Hickory Island School District was selected for this study because it was able to retain all 3 of the science teachers it hired between 2007 and 2012 for a period of at least five years, making the district one of the most successful by this measure during the period examined in this study. In 2020 state reporting documents, the student population in the district was identified as 65% Hispanic/Latino, 24% White, and 11% Black. Over 20% of students were categorized as English language learners, and because nearly 80% of students qualified for free or reduced lunch, the district offered free lunch to all students regardless of income. Nearly 20% of families lived below the poverty line, more than double the rate of the county overall. Over 25% of the district's students received special education services. Given this student population, Hickory High School is classified as a "high-need school" by the federal government, a factor that influenced its selection for this case study. Given the goal of ensuring geographic diversity in site selection, Hickory was also one of the only schools meeting the study's main retention criteria in its region of the state. Additionally, as a small school district with only one secondary school serving a more diverse student population than the surrounding areas, Hickory Island provided a unique opportunity to examine retention in a close-knit, small town setting.

The research team conducted interviews with five individuals (two administrators and three teachers) at Hickory in the spring of 2021. Data were collected on three separate dates virtually (i.e. via Zoom), in sessions facilitated in cooperation with the administration. The primary goal of the (virtual) 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. All interviews were recorded and transcribed, and each was analyzed using NVIVO12 software. The four researchers, all of whom conducted interviews, collaborated on constructing the narrative of the case.

Findings

As a result of this virtual site visit and subsequent data analysis, we posit four interrelated factors that likely influenced the high science teacher retention rate observed in the district. These are (1) place-identity, (2) the affordances of a small school, (3) sense of contribution and

connection to the community and (4) science teacher autonomy. Each of these is discussed in more detail below.

Factor #1: Place-identity

In our discussions with the teachers and administrators of Hickory, it quickly became clear that the setting of the school and community comprised an important aspect of individuals' attachment to their work. References to the layout of the island community, the locations of housing and schools, and the natural and human-made features of the area all conveyed a sense of place that was woven into teachers' reasons for staying. Because of the way in which the physical environment of Hickory Island and the surrounding communities loomed large in our conversations with teachers and administrators, we have drawn upon the field of environmental psychology to label this factor *place-identity*.²

Hickory was noted by all of the interviewees as a great place to live and work, and those interviewed reported that the staff enjoyed the ability to take advantage of the school's location only a few blocks away from the beach. The size and tight-knit nature of the community is such that teachers frequently encounter students and their families in town, and some regularly join students on the walk to school. Further, the administrators reported that a substantial number of teachers in the district had grown up or vacationed in Hickory, and felt that these teachers conveyed a strong sense of wanting to give back to a community that had shaped them.

One administrator noted that Hickory Island had a public reputation as unsafe because of its high crime rate. In the past year, a popular Internet site known for baiting readers with sensationalized stories had named the seaside town one of the most dangerous in the state. The article's author had divided the summer crime reporting statistics from the annual influx of tourists (in the millions) by the year-round population (about 5000), creating a vastly overinflated measure. The administrator reported frustration with the stigma such an association carried, and made a point of addressing it directly with students: "I think it's important to really have those type of conversations...we believe in our kids and we believe in our town and sometimes you have outsiders that come in and, unfortunately, give you a bad reputation."

This advocacy on behalf of the community was also evident on the part of the teachers, and those who grew up in Hickory reported that this was a source of deeper connection with the students. Living in such a unique environment apt to be misunderstood (even by neighboring communities) provided them with an understanding of the students and what they go through. One science teacher who had grown up on the island and attended a nearby parochial high school elaborated:

I have a connection to the area. I think that also helps with having a connection with the students. I'm understanding where they come from, even if they're from a completely

² Proshansky (1978) defines place-identity as: "those dimensions of self that define the individual's personal identity in relation to the physical environment by means of a complex pattern of conscious and unconscious ideas, feelings, values, goals, preferences, skills, and behavioral tendencies relevant to a specific environment," (p. 155).

different background than myself, I know what it's like to live here where it's crazy in the summer and you have to work a bunch of jobs and then it's completely dead in the wintertime.

Yet, an alternative explanation for teacher retention based on wishing to stay in Hickory was put forth by a teacher who noted that for those who want to stay in the area and hold a science degree, not many other job options existed locally:

I think that in this county, jobs that are year round for someone with a college degree, there aren't many other options than working in the schools or in the county offices and the state offices, that sort of thing. People do like living here, and people who grew up here or spend their summers here, a lot of them like to stay.

Factor #2: The Affordances of a Small School

One teacher described the Hickory school district as, “a small close-knit community of teachers and students who are involved in each other's lives inside and outside of school,” a description that was supported by every person we interviewed. Hickory's small size emerged as a factor affecting teachers' desire to remain at the school. As a small school, teachers and administrators highlighted the ability of staff and students alike reported being able to fully integrate into the school community and provide personalized experiences and solutions for students. One administrator told us:

We tell our kids, you're not just going to be in the theater guild—you are going to be in the theater guild and you're going to play basketball... You are playing football *and* in the marching band. At halftime, we have kids in football uniforms beating the drums because that's what you have to do.

According to documents submitted to the state, the Hickory Island School District's student-to-teacher ratio was well below the state average. Consequently, science classes in the high school were maintained at relatively small sizes, with advanced courses often having only four or five students. One science teacher noted:

My biggest class is 15 kids, and that's probably an overload. In most cases, I get 6-9 kids per class. So my ability to kind of focus, get to know where they're at and then kind of take them along as a herd and get to know them personally, get to know them as a student and kind of figure out what their aspirations are and build on those, is a lot easier here than it is [in other districts].

The low student-to-teacher ratio also appeared to have an impact on the ways in which teachers viewed their ability to teach. One teacher commented on the impact a single teacher in a small

school is able to have on students, saying, “For me personally, the smaller school, having a direct impact on the students really makes working here and staying here not a hard choice.”

Though the district’s small size often required teachers to be flexible, administration reported making every effort to ensure that teachers were supported with their teaching assignments. An administrator gave the example of recently needing to assign a group of teachers to middle school language arts in order to cover a medical leave. Because of the specific literacy program being used, the teachers were provided an informal mentor and offered targeted professional development. Within the science department however, teachers did not report having to teach any out-of-field subjects.

Another effect of the district’s small size appeared to be the responsiveness of administration to any issues faced by teachers. As one administrator noted:

One of the consultants that we’ve been working with for years talks about being nimble and being able to react to what you need to react to and give people what they need, and we do. We pride ourselves on that. It’s a lot easier for us because we’re so small.

An example of this occurred recently in the district’s response to the COVID-19 pandemic, as the district pivoted to a hybrid model of instruction. To better suit the needs of the students and teachers alike, instructional time was pushed back to 10:00 a.m. every day, giving teachers two hours each morning for planning and professional development.

A science teacher relatively new to the district compared the support they received when starting in Hickory to a district they taught in previously:

The other thing I noticed, which I really enjoy about [Hickory] is that the administration’s there to help you. I’ve been in environments where they’re perhaps not as helpful or a little more adversarial, they’ll have their group that they like and the rest of us didn’t fit. Here, it’s you’re part of the team. It’s a small group. Their doors are open and if you have ideas, you can bring it to them.

The culture at Hickory High School is one of involvement and support that extends from school staff to students and families. While reflecting on this, an administrator said:

I look at who my teachers are as people. You know they're not just teachers, they're involved in the after school program, they're involved coaching multiple sports, because you have to, because we are a small school because we have a small staff population, you're going to do everything.

Teachers mentioned not only advising clubs and coaching sport teams, but also taking it upon themselves to organize activities that furthered students’ science education by exposing them to areas and activities they had never experienced despite living in such close proximity. One

teacher mentioned bringing in members of the Coast Guard to speak to students and taking classes crabbing and boating, activities many of them had never participated in. Another took advantage of some free time during a field trip in New York City to take their students to Central Park for the first time.

Factor #3: Sense of Contribution and Connection to the Community

Teachers reported feeling supported by both the district and the community in their work. As one teacher noted, “It’s a great small-knit community, and you get a lot of support from the town. They’re kind of always looking out for you and they want the best for their kids so they’re always trying to help.” It became apparent in the writing of this case that the people we interviewed made little distinction between the school community and the wider community of residents on the island. In a way, these were interchangeable because the activities of the school and those of the community were inextricably linked. One teacher said bluntly, “We don’t have that many teachers that are clock-in/clock-out.” An administrator framed it the following way, “If you’re going to be a part of this school, you’re going to be a part of this community, there’s no choice about that.”

Teachers did not participate in these activities out of a sense of obligation, but rather a genuine desire to be a part of the community and provide meaningful experiences to their students. In talking about other teacher colleagues, one teacher stated:

A lot of them are involved in the community of the school and do as much as they possibly can to help any of the students that need help in school. And again, it's not because there's any type of direction for us to do it, just most people that are hired are just naturally doing that. So that's another reason why I do enjoy it here, because many of the people here are very like-minded.

An administrator remarked on the way this involvement was evident during the COVID-19 pandemic:

I believe that our staff, the energy and the effort that they put out, I think it transfers into students and they realize this is what we have to do, and you know it was so evident when the pandemic hit. They went above and beyond, knocking on doors, you know, doing welfare checks. And I do that as an administrator, but you have teachers that are doing this.

Teachers and administrators reported enjoying their work with the students in the district. One described their students as “kind and more accepting of students with differences” than their peers in other districts. Disciplinary issues were reportedly few and far between, and staff felt they were able to form meaningful connections with students and their families. Each teacher

interviewed emphasized how much they appreciated working and building relationships with the students, and were invested in providing quality education in ways that the students enjoyed.

One teacher described an example of this relationship-building in his work with the students who migrated seasonally between Hickory Island and a specific town in northeastern Puerto Rico, who would share their stories on the difference in the educational quality of their two schools with this teacher. “I kind of catch them up on the side, and then we start like they were never gone. I tried to make it so there was no gap, it was, you were in class and then I didn't see you for a little while, oh you're still in class. It's just that's the way I approach it.”

A lingering question from our site visit concerned the role that the demographics of the district played in the lives of the teachers in the school. Over the past few decades, there had been a slight demographic shift in census categories from majority White to majority Hispanic among the student population. This shift was not mirrored in the teacher population, however. In the most recently available staffing data to include race/ethnicity descriptors, only 8 of the total 116 certificated staff in the district (7%) did not identify as White. If in the coming decades, the homegrown makeup of the Hickory teaching force continues, one might expect a shift in the demographics of the teachers as well. One administrator spoke bluntly about these changes: “I always tell people... if you want to know what your college is going to look like, if you want to know what your world is going to look like. Come to [Hickory].... Right now, I have two kids who are Hispanic that are in my building today as substitutes, they're still in community college.”

Factor #4: Science Teacher Autonomy

All of the science teachers interviewed made clear that the freedom and autonomy they were afforded was a strong contributor to their retention. Though this autonomy was likely a consequence of the district's size, it became clear in our interviews that it was also a distinct factor in science teacher retention. Because Hickory only employs four science teachers at the secondary level, and each teaches a core subject, they effectively act as one-person departments. Though all followed an approved curriculum, the science teachers interviewed invariably enjoyed the freedom to teach their courses their own way without much outside input, something they saw as unique to their department. As one teacher noted, “I basically have control over my own classroom so I can teach the science the way I want to teach the science, and nobody tells me any different.” Another echoed, “I don't have a lot of pressure to be on a specific path. Obviously I follow what I have to do, but I get to do it in my own way, which is kind of nice.”

School administrators were described as trusting and supportive of science teachers in teaching the curriculum according to their own personal style. As one teacher described:

There's nobody in administration that has had a science background, so they just defer to us to take the lead. And most of us that are here, we do take the lead, we take the initiative and I think they appreciate that, and they let us do what we think is best in our classrooms.

Teachers reported that classroom observations were not stressful or intimidating, noting that the feedback that emerged from them was typically positive and constructive. Discussions were collaborative and aimed to build up skills rather than simply provide a list of transgressions.

The allocation of the school's annual budget further illustrated the freedom afforded to Hickory's science teachers. Though the district is classified in the lowest socioeconomic district factor group by the state, teachers reported receiving ample equipment and supplies, which perhaps says something about the state aid provided to the district.³ Science teachers in particular were given a larger budget for their materials and classroom supplies than teachers in other departments. In discussing the annual budget, an administrator said: "It's having a conversation with all my science teachers and saying, 'What do you need for your labs?' Because I think the hands-on learning gets kids excited about science." This provided an added layer of creativity to science classes, allowing teachers to design labs and activities without being tightly restricted by the budget. Teachers were also given access to yearly funds for professional development opportunities outside the district. Teachers reported using these funds for items ranging from courses at local universities to camps and workshops for science teachers in the county.

Although the administration gave teachers almost complete control over their courses, it was mentioned that they were always available when the teachers needed them. Teachers were not hesitant to pose questions, and felt comfortable bringing issues to the administration. Teachers also reported feeling comfortable working with their colleagues in other departments to brainstorm ideas or share strategies on working with certain students. In this sense, teachers were provided just enough autonomy to not necessarily feel isolated within the school.

One of Hickory's more experienced science teachers entered the profession through the state's alternate route program, something they connected to their sense of autonomy as well:

I really think as a science teacher, you have to think outside the box to keep things fresh and not get bored. I find that a lot of teachers that I talk to in science and other subjects, they tend to get bored, and those are the teachers that I see leave. Being an alternate [route] teacher, I think that gave me a different perspective on how to come to the classroom, and that has definitely been beneficial. I do things a little differently than my colleagues who went to school and graduated with a teaching certificate.

It is worth noting that in the state's alternate route certification program, teachers are first hired by a district and then earn their certification over a period of approximately two years. The 5-year retention rate for alternate route science teachers in the state is significantly lower than that of traditional route science teachers, so it is worth hypothesizing that this teacher's retention in

³ Despite its presence in District Factor Group "A", the Hickory Island School District was not one of the New Jersey districts named in the 1984 *Abbott v Burke* decision that mandated equitable school funding across the state. However, it does seem to have benefitted from the subsequent litigation that has continued to enforce that decision since that time. In the most recently available public reports, state aid accounts for about 30% of the district's operating budget.

the district for more than ten years may have been influenced by experiencing some of the strong contextual factors described above during their first years of teaching in the district.

Mentoring and Induction in Hickory

All teachers new to the Hickory School District, regardless of prior teaching experience, participate in a district induction program shortly before the start of the school year. Teachers new to the profession are paired with an experienced mentor in addition to participating in the induction program. The school principal oversees the induction and mentoring program with the assistance of other administrators as needed, and the program appears to generally follow the state guidelines for mentoring programs.

The induction program consists of three day-long sessions over the summer. The first two days are an orientation for new teachers, familiarizing them with district protocols, databases, and expectations. During the final day, all teachers are invited back to receive their keys, laptops, and login information as well as go over the faculty handbooks. Due to the district serving a population more diverse than seen in nearby districts and the relative homogeneity of the staff, an emphasis is placed on understanding the students and understanding the differences between equality and equity. Therefore, orientation also includes workshops on these topics in addition to effective elements of instruction.

Though one of the goals of induction is for new teachers to “buy-in” to district culture, there was little mention of this formal process in our conversations, and most people seemed to see district induction in Hickory as typical of the onboarding received in any new job. Yet, some of Hickory’s retention factors noted above resonate with the aims of this program. Some teachers reported giving presentations during new teacher orientation with the goal of building relationships with new teachers right away, so that new teachers feel comfortable coming to them later for help. Prior to the pandemic, newly-hired teachers were taken on a driving tour of the island by the principal in order to learn more about the local community. “I used to drive a teacher around the town if they weren’t familiar with [Hickory],” he told us. “I drove around - here’s what we call the projects. I would go in there and knock on doors and introduce people, because they know me. No shame in doing that, and really taking new teachers into what the community is.”

Conclusion

The overwhelming impression made on the research team was that the affordances of a small school environment and community in a place like Hickory Island gave the teachers a tangible sense of value and effectiveness in their work as teachers. Regardless of whether they grew up in or around Hickory, the quality of life, paired with work they enjoyed, served as compelling reasons for teachers to remain in the school. The strong sense of community and school culture emerged as a main driver of retention, and permeated all other factors mentioned. Hickory’s small size lent itself to the ability for teachers to connect with each other and their students on more personal levels as well as provide the science teachers specifically with the

freedom to teach however they were most comfortable. Working so closely with students and being able to have a noticeable impact on their lives made the work more meaningful, particularly for those teachers who grew up in the town. The support of the greater community and school administration added to the notion that the teachers were valued as professionals.

References

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