

Individual Adopter School - Brewer: Year 1 Case Study

Brewer Public Schools, Region 2 – Penquis

Background

Brewer Public Schools (“Brewer”) is a suburban school administrative unit (SAU) in the Bangor metropolitan area that serves approximately 1,400 students across two schools: Brewer Community School (grades pre-kindergarten [PreK]–8) and Brewer High School (grades 9–12). Brewer administrators characterized the community as “working class,” which aligns with socioeconomic data from the National Center for Education Statistics (NCES). The school district’s median annual household income (\$52,174) is slightly less than the Maine average, while the proportions of students who are economically disadvantaged and eligible for free/reduced price lunch are slightly lower than the state average (Table 1).¹

TABLE 1: SOCIOECONOMIC AND DEMOGRAPHIC CONTEXT

	SAU	Maine
Number of Students	1,355	178,860
Locale Classification	Suburb	N/A
Students Identified as White	87%	88%
Students Identified as Economically Disadvantaged	37%	41%
Students Eligible For Free/Reduced Price Lunch	38% (PreK-8) 33% (9-12)	44%
Students Identified with Disabilities	22%	18%
Student/Teacher Ratio	N/A	N/A
Median Household Income	\$52,174	\$57,918
Adults with a Bachelor’s Degree or Higher	40%	32%
Adults in Labor Force	94%	63%

Sources: Maine Department of Education, National Center for Education Statistics, and U.S. Census Bureau

Development of pilot project

In August 2021, Brewer received a Rethinking Responsive Education Ventures (RREV) award (\$249,892) to develop and implement its *Nu* program beginning in the 2021–2022 school year, which provides remote learning pathways for students. This educational model was initially developed by a pilot team of two—the director of instruction and technology and an 8th grade science teacher—during the Winter 2020 Innovative Mindset Pilot Development (IMPD) course. The team explained they did not have a preconceived idea about what type of educational

¹ School data was collected from the Every Student Succeeds Act ([ESSA Dashboard](#)) reported by the Maine Department of Education and the National Center for Education Statistics ([NCES Search For Schools](#)) database. SAU information was collected from the Maine [ESSA Dashboard](#), the [NCES Search For Schools](#) database, and the NCES Education Demographic and Geographic Estimates ([EDGE](#)) database. Information about the State of Maine was collected from the [ESSA Dashboard](#) and the [U.S. Census Bureau Maine Quick Facts](#) report. Note, the Students Eligible For Free/Reduced Price Lunch on a state level contains data from the 2018-2019 school year (the most recent publicly available data for the state), while both school and SAU contain data from the 2019-2020 school year. The SAU does not report student to teacher ratio data.

program they would develop when they entered the IMPD course, but they “truly went through that innovation process [to analyze] what are the needs [in our district] and what do we need to do to address them.” One member of the pilot team commented, “We had so many ideas . . . [and] where we ended up was truly an evolution” from their initial interest in remote learning. Both members of the pilot team credited the IMPD course with sharpening their thinking, especially because the instructor and their peers asked good questions and offered honest feedback. One pilot team member said, “I felt like my brain never got to relax,” which she found “eye-opening, scary, and wonderful” because it pushed her to be open to new ideas and feel confident in solving problems. Throughout the course of the class and in the months afterward, the Brewer pilot team refined their idea for remote learning into a plan for the *Nu* program. According to this participant, the IMPD course demystified innovation by showing it to be a process one can learn and apply to her context. In her words, “innovation was scary for me and now I’m not so scared.”

Program description

Brewer’s *Nu* pilot model (Exhibit 2) offers students in grades 7–12 the option to learn from home full-time while also having opportunities for in-person engagement, including field trips and participation in school-based activities. Specifically, Brewer’s RREV award provides funding for a full-time Remote Learning Specialist (RLS), who is responsible for developing and implementing a “highly personalized” educational program for participating students. School administrators described this role as a “case manager, part teacher, part guidance counselor, and part administrator.” The RLS teaches five remote, synchronous social studies classes (Sociology, Psychology, Government, U.S. History, and 20th-Century History), monitors student progress in asynchronous online courses, and holds individual in-person meetings with each student at least once per week for academic and social-emotional check-ins. The RLS also plans in-person activities such as field trips for the entire cohort and liaises with guidance counselors and teachers at Brewer Community School and Brewer High School about student needs, interests, and activities.

Besides the synchronous social studies courses taught by the RLS, students complete a curriculum of online courses through the Apex Learning Virtual School (“Apex”) platform. The RLS works with Brewer district guidance counselors to help students choose Apex courses that align with their interests and abilities and meet Brewer graduation requirements. All Apex courses are facilitated by a certified teacher and include multimedia content, practice skills, and a mix of computer-scored and teacher-scored activities and tests. Courses follow an 18-week semester model, although students can complete the course at their own pace within the context of course-specific deadlines. Throughout the year, students meet in person for monthly activities, such as field trips, service projects, and job-shadowing opportunities. Students are also welcome to join in-person classes, such as art or band, and participate in school activities including Chorus, Mock Trial, and Art Club.

Exhibit 2: Logic Model for Brewer's Nu Program

Resources	Strategies and Activities	Outputs	Short-Term Outcomes	Long-Term Outcomes	Impact
RREV program \$\$ RREV coach Remote Learning Specialist APEX Learning Platform District and school staff, including guidance counselors and Director of Instruction and Technology District facilities Community partners	Update district graduation requirements to include pathways for remote learning Collaborate with guidance counselors and teachers to identify students likely to succeed in virtual learning environment Outreach to parents and students identified as likely to succeed with virtual learning, including homeschool families Hire a Remote Learning Specialist (RLS) RLS supports students in the develop and progress through an individualized pathway Students participate in field trips, service projects, and job-	District graduation requirement policy updated At least 16 students enrolled, including at least 6 tuition-paying students Full-time RLS hired Individualized student academic plans developed. Students participate in monthly activities Students complete online and virtual coursework on schedule. Students participate in school-based activities	Families in the area have more schooling options Brewer staff improve their capacity to support students learning virtually Students have greater opportunities to set their own pace and pathway. Students who choose virtual learning have more opportunities to interact with their peers, teachers, and coaches across the district.	More families in Brewer and surrounding areas, including those who previously homeschooled, enroll in Brewer Schools Brewer staff are better able to recognize when students are likely to succeed in virtual learning. Student attendance improves Students demonstrate academic growth on NWEA MAP assessments and individual course assessments Students' socio-emotional well-being improves Increased graduation rates for Brewer students.	Brewer's school community includes more families with diverse needs and preferences. Brewer staff and leadership embrace innovative approaches to education. Students with diverse learning styles and interests succeed in Brewer Schools.

	shadowing opportunities				
	Students participate in school-based activities, including some in-person courses and extracurricular activities.				

Innovativeness and responsiveness of learning model

Brewer's *Nu* program is innovative and responsive for three main reasons:

1. **Students and families opt-in to virtual learning.** Students and families did not have a choice about virtual learning at the beginning of the COVID-19 pandemic, but as schools re-opened for the 2021–22 school year, Brewer administrators decided to offer the option of attending in-person or continuing to take virtual classes. As one administrator observed, some students realized during the pandemic that they thrived in an online environment and did not want to be forced back to in-person classes—just as all students had been forced into virtual learning the previous year. Importantly, Brewer administrators wanted students and families to make a considered decision, which is why they require an application and interview process, in which students describe why they prefer virtual learning and how they plan to stay engaged during school.
2. **Students receive individually tailored support for their academic, social, and emotional needs.** When developing the pilot, Brewer educators specifically sought to be “qualitatively different” than “broad online programs” where students take classes online but have limited interactions with teachers or peers. Brewer therefore built in structures and systems to engage students as individuals, including weekly check-ins with the RLS, a mix of synchronous and asynchronous classes, and in-person group activities, such as field trips and service projects. One administrator characterized the *Remote Learning Pathway* as “the most personalized educational program” she was aware of due to the level of individual attention paid to participating students. During a focus group, students credited the individual support they received from the program with

INNOVATIONS

Brewer *Nu* Program

- Students opt-in to virtual learning
- Individually tailored support
- Greater student choice in courses and pacing
- Options for in-person activities

helping them become more confident in themselves, which in turn helped them take more risks exploring classes and activities they otherwise might not have tried.

3. **Students can choose from a broad array of courses and can take them at their own pace.** During a focus group, students reported that the individual attention, paired with the greater array of possible courses online than they could take in-person, empowered them to pursue courses that interested and challenged them. By contrast, if they were only in-person, they would not have access to as many courses as available with Apex, and if they were only taking online courses without the broader support of Nu, they would not have the confidence to explore more challenging or interesting courses. A parent also commented that the *Nu* program “is so much better for (my child’s) style of learning because she has more control over when she does the school work and what subject she’s going to work on. I think it really helped with her anxiety because if she’s feeling overwhelmed she can take a break.”
4. **Students have opportunities to join certain in-person classes and activities at their home school, such as art, theater, or sports.** Brewer administrators pointed out there are many reasons why some students may prefer virtual learning, and in some cases their preference for virtual academic work may be in tension with their enjoyment of activities or clubs that involve in-person engagement. For example, a student may prefer virtual learning in core subjects because she likes to set her own pace, but also wants to participate in art or theater with her peers. In the absence of Brewer’s *Nu* program, such a student could choose to attend in-person school but sacrifice her opportunity to learn at her own pace or enroll in a virtual school that does not offer in-person activities. Brewer’s pilot program resolves this tension by allowing students opportunities for both virtual and in-person activities, and thus can reach more students who could benefit from virtual learning.

Implementation of learning model

Student identification and recruitment

When Brewer first drafted the pilot plan, they anticipated offering the *Remote Learning Pathway* to any 7th or 8th grade student who expressed interest, with a maximum of 15 students in 2021–2022. However, during the summer of 2021, district leadership made two changes to the model. First, they decided to limit enrollment invitations during the first year to specific students who were identified by guidance counselors, teachers, or families as likely to succeed in virtual learning based on their performance during school-wide virtual learning during the pandemic. According to the director of instruction and technology, the decision to change from open enrollment to invitation-only was made to underscore that the *Nu* model would be qualitatively different from the district-wide virtual education of the pandemic, especially with its focus on personalized attention and support. The decision to identify and invite specific students to enroll contributed to the second major change, which was to offer enrollment to high school as well as middle school students. District leadership explained that conversations with guidance counselors, teachers, and families uncovered high school students who fit the profile for success in the *Remote Learning Pathway*. By the end of the first semester, 14 students were in the program: 5 middle schoolers and 9 high schoolers. This figure increased to 20 students during the spring semester, of whom 7 were in middle school and 13 were in high school. This enrollment was higher than Brewer initially planned, especially because the district chose not to

publicly advertise the Nu program during the first year. However, they observed strong word-of-mouth discussion of the program among students and parents, prompting more students to apply than they expected. One educator remarked that they “have a hard time saying no” to students who seek out the program and align with its student profile.

Staffing

The Brewer pilot plan describes the RLS as a “full-time, multi-age teacher for instruction,” and the salary, benefits, and professional development for this position constitute almost 90 percent of the Year 1 budget for the RREV award. Brewer posted advertisements for this position in May 2021 and filled the position in August 2021. The individual hired as the RLS was working as a teacher for an alternative education program in Lewiston (Impact Academy) and previously had served in both teaching and administrative roles for 16 years. This person said he was attracted to the Brewer RLS role because it “looked like an opportunity to start [something] brand new and build it from the ground up. The idea of being able to come in at the beginning was very exciting.”

A second RLS will join the Nu program for the 2022-23 school year. This person was hired during the Spring 2022 semester, but finished the 2022-23 year as a teacher at Brewer High School and will be starting full-time in the Nu program over the summer of 2022.

Field Trips and Team-building activities

There were fewer field trips and team building activities than originally envisioned. Nu leadership explained that continued effects of the Covid-19 pandemic made it difficult to plan field trips to museums and other places of interest. Nu leadership was optimistic they would implement this component of the program model in future years.

District graduation requirements

District leadership described an ongoing process for updating graduation requirements to include pathways for remote learning. As noted earlier, a key component of the innovative model is the opportunity for students to choose from a wider array of courses than would be available at the high school, and to take them at their own pace. The high school principal and guidance counselor observed that this flexibility poses administrative challenges because they need to align the Apex courses with an approved high school course. The pilot plan identified updating district graduation requirements as a key activity, but Brewer High School leadership said they were “still figuring out” how to integrate online courses through Nu with their requirements.

Outcomes

Families in Brewer and the surrounding areas have more schooling options. The 20 students who completed the school year in the Nu program indicate progress toward this outcome because all these students would otherwise attend in-person school or be home schooled. Brewer High School does have an in-person alternative education program called the Alpha program, but this program serves a different type of student than Nu. Although both the Alpha program and the Nu program serve students who do not thrive in the traditional classroom, they have different reasons for and needs from an alternative program. The profile of a Nu student – self-motivated and able to work independently, even as some but not all experience social anxiety - is fundamentally different than that of a student served by Alpha,

who often struggle with motivation or behavioral challenges. For example, one student commented that she looked into the Alpha program, but “I take a lot of advanced classes [so Alpha] wasn’t really the best option for me.” In short, the Nu program provides an alternative that was otherwise not available to this particular type of student. On a family survey (Exhibit 4), a majority (86%) of Nu parents stated that it was “very important” or “moderately important” that schools offer responsive education activities, and 70% agreed that Brewer offered more such activities in 2021-22 than in the past school year. All parents stated that they would recommend the Nu program to other families.

Exhibit 4 Summary of Parent Survey Results (n=7)

Question	Results
How important is it to you that schools offer responsive educational activities?	Very important – 56% Not at all important 14% Moderately important – 28%
How satisfied are you with the availability of responsive education activities offered through your child’s school?	Very satisfied – 56% Neither Satisfied nor Dissatisfied – 28% Somewhat dissatisfied (14%)
Compared with last school year (2020-21), how much opportunity has your child had to participate in responsive educational activities this year?	A lot more opportunity – 42% Slightly more opportunity – 28% About the same as last year (28%)
Would you recommend this program to other parents	Yes – 100%

Brewer staff have greater capacity to support students with virtual learning. Another intended outcome of the Brewer program was to grow staff capacity to support students with virtual learning. Staff who work directly with the Brewer program described professional growth in their capacity to support students with virtual learning, especially through proactive communication and relationship-building with students. In particular, the RLS commented that his experience this year helped him develop more tailored approaches to supporting students in the program. For example, he noted that some students benefit more from more direct questions about their progress in virtual classes, whereas others do better when they lead the conversations. One parent described feeling reticent about allowing her child to participate in remote schooling because she “didn’t want to have to constantly monitor her progress, but found it reassuring her child “has a teacher that works within the district and is involved and monitoring her progress as well as teaching one of her classes.” Even as the staff directly involved in the Nu program showed greater capacity to support students with virtual learning, however, there was limited exchange with teachers outside the Nu program. Although the RLS is in regular communication with school leaders and staff at the Community School and High School, these exchanges focus on logistical issues or identifying students who could benefit from Nu, but so far have not involved intentional efforts to disseminate lessons learned from the Nu program to traditional classroom teachers.

Students described positive experiences in the Nu program. Students provided uniformly positive feedback on an anonymous survey about their experience in Nu. All student respondents agreed that they were glad they participated in Nu, that the program helped them learn, and that they liked their experience overall (Exhibit 3). In response to an open-ended question about their overall experience, one student commented that they “used to dread going to an in-person school at all,” but now “looks forward” to the school. Another student wrote that

it in the past, they “never got...to feel comfortable with my teachers and classmates [but] that has changed a lot for me” since starting the Nu program. Students elaborated on these responses during a focus group, during which they described feeling simultaneously supported and challenged in the Nu program. For example, one student explained that the individual attention she received through the Nu program helped grow her confidence, which in turn made her feel capable and excited about taking more difficult courses. Parents offered similar feedback. For example, one parent commented that her daughter “feels very accomplished and has even added an additional class when she finished...ahead of schedule.” This parent observed that her daughter is “a much happier child” since joining Nu.

Exhibit 3 Summary of Student Survey Results (n=8)

To what extent do you agree or disagree with the following statements	Strongly or somewhat agree	Neither agree nor disagree	Somewhat or strongly disagree
I am glad I participated in the Nu program this year.	100%	0%	0%
The Nu program helped me learn this year.	100%	0%	0%
Overall, I liked my experience with the Nu program this year.	100%	0%	0%
This year, I had more opportunities to learn outside a traditional classroom than in	100%	0%	0%

Students have demonstrated academic growth and greater social-emotional well-being.

Among the 20 students in the Nu program in 2021-22, 10 students took NWEA assessments in the fall and spring, and 9 of these demonstrated growth in their RIT score on at least one NWEA assessment. The mean number of credits earned was 5 per student, and the average GPA was 81.4 out of 100. During a student focus group, students drew connections between their social-emotional well-being and their academic performance. For example, one student commented that “my grades went up because I didn’t feel insecure” because she was not attending classes in person. Another student stated that learning online helped her focus on her academics because she was less “distracted and nervous” than she used to feel during in-person schooling. One student directly stated that “I wouldn’t be graduating this year if it weren’t for the program.”

Future Plans

Brewer district leadership intends to expand enrollment through greater outreach. Brewer District leadership affirmed their commitment to the Nu program and to its expansion in the coming years. Program leaders observed that they were not awarded funding until August 2021, so they were not able to conduct substantial proactive outreach before the first year, and space was limited because they only hired one RLS. Nonetheless, the program grew from 14 to 29 students between the first and second semester, and Brewer plans to again double the size in 2022-23 when the second RLS joins the program. Nu program leaders also observed that the lessons learned during their first year have sharpened their understanding for what makes a successful Nu student. Going forward, they will use this information to communicate with school leaders in sending districts and with home school families to boost enrollment from these

sources. They also plan to supplement this outreach by placing a notice on their website about the program and working with the guidance counselors at Brewer Community School and Brewer High School to attract more in-district students.

Nu program leadership plans a greater focus on peer relationships through whole group activities. During a focus group, students commented that they did not feel very connected to other students in the Nu program. One student observed that her participation in school activities does provide for some socialization, she feels like she interacts with students less now that she is in Nu. Many students perceived this as a benefit because it reduced their anxiety, but students in the focus group did express desire for more activities with their fellow Nu students. For example, one student commented that she “definitely wished we had more field trips,” this year, although she understood that the pandemic made these more difficult. Nu leadership agreed that there were fewer in-person activities such as field trips as they planned, but were optimistic there would be more opportunities in the future.

Lessons learned

Offering opportunities for in-person activities can broaden the appeal and reach of remote learning. Brewer administrators initially expected the *Remote Learning Pathway* to attract families who had decided to home school their children, but over the course of their outreach they realized the program’s structure—especially its promise of in-person activities—appealed to a more diverse group of students. According to the director of instruction and technology, interest in the program “spread like wildfire” as students learned about how the program would work. One Brewer staff member suggested that the *Remote Learning Pathway* could dispel the outdated idea that alternative education like remote learning is just for “the jean jacket kids . . . who listen to European heavy metal,” and instead could reach a wider range of students who prefer to work independently or have some social anxiety, but still want to participate in some school activities like theater, art, or sports. In fact, all 14 participating students in Fall 2021 were involved in some school-based activity.

Establishing a structure for individualized student support can help students maintain academic and socioemotional engagement. While designing the *Remote Learning Pathway*, Brewer administrators were concerned the students who would be most drawn to the independence and self-pacing of remote learning would also be those who needed more support in other areas, especially mental and emotional well-being. As administrators refined the *Remote Learning Pathway* model during and after the IMPD course, they focused on resolving this tension by developing structure within the model to care for students’ mental and emotional needs, while also affording them the independence that attracted them to remote learning in the first place. The centerpiece of this structure is the weekly one-on-one meeting between the RLS and each student, which offers students a regular opportunity to connect and talk about any issues or concerns, including academic or non-academic challenges they may be experiencing. Educators and students both commented that the individual student support helped unlock the possibilities of virtual education because it empowers students to choose from a wider array of courses, including some that they might consider too challenging were it not for the individual support they receive through the program. The RLS emphasized that “each student has a face and a voice in this program and they are not a faceless member of a larger population.” An important aspect of these meetings is that they are predictable and regular, and not ad-hoc or in response to student requests. This approach takes the onus off students, who

may not be comfortable asking for help, and also contributes to the rapport that can help students open up about their concerns and aspirations.

Students in virtual settings have different needs and expectations for individual support, and even students who like to work independently benefit from one-on-one support. The weekly meetings between the RLS and each individual Nu student constitutes a key component of the Nu model, but the nature of these meetings varies from student to student. The RLS commented that some students seek out more in-depth support each week, with substantive discussions about their academic progress, mental and emotional well-being, and future plans. Other students work more independently or are more reticent about sharing their feelings, and if not for the regularly scheduled weekly check-ins they may not voluntarily reach out for support. However, the RLS emphasized that these students also benefit from the individual meetings, but sometimes need more time to build trust and talk about their lives in general before opening up about their experiences in the Nu program.

The RLS role requires an individual who can manage multiple and varied responsibilities. Even though Brewer has established systems and structures for the *Remote Learning Pathway*, the success of the program still largely depends on the person in the RLS role. Brewer administrators observed that this person needs a diverse skillset, including teaching, administrative, and interpersonal skills. The RLS at Brewer said his experience has been “professionally challenging and rewarding,” and noted he drew on his experience in both administration and alternative education. As the first person in this role at Brewer, the RLS established the shape and expectations for the role, and everyone interviewed agreed he set a high bar. The skills and experience required to succeed in the RLS role, and the centrality of this position to the overall success of the model, mean that schools seeking to replicate the *Remote Learning Pathway* model should carefully consider the job description and focus on finding the right candidate.

The model requires time and commitment from staff at Brewer Community School and Brewer High School. The integration of *Remote Learning Pathway* students with the in-person school communities lies at the heart of Brewer’s innovative model, which means that Brewer staff, especially school counselors, are expected to make time available to support the program. The RLS explained, “it is very, very important that the *Remote Learning Pathway* [be] viewed as an integral piece of the school culture” and not as a separate program. In practice, this integration includes weekly calls between the RLS and school counselors to review the progress of all *Remote Learning Pathway* students as well as an “open-door policy” in case more urgent needs arise. One administrator commented that the flipside to the freedom to choose from more classes, and to take them at their own pace, added burden to guidance counselors and high school administrators because they have to assess every course and determine if and how it aligns with eligibility for school activities and graduation requirements.

Further COVID-related disruptions could bring challenges and opportunities for the model. Brewer staff has made a point to distinguish the *Remote Learning Pathway* from the remote learning that occurred during 2020–21 in response to COVID-19, for reasons discussed earlier. However, if there are further disruptions from the coronavirus, this could pose challenges to the *Remote Learning Pathway* model, especially if it limits opportunities for in-person elements that distinguish the model from more typical virtual learning models. Moreover, COVID-related disruption across the district could add even more stress on teachers and guidance counselors, which could strain the regular and open communication channels that

underpin the model. Conversely, a short-term return to widespread remote learning could help more students realize they do well in a virtual environment, and thus in the long run make the *Remote Learning Pathway* model more sustainable.