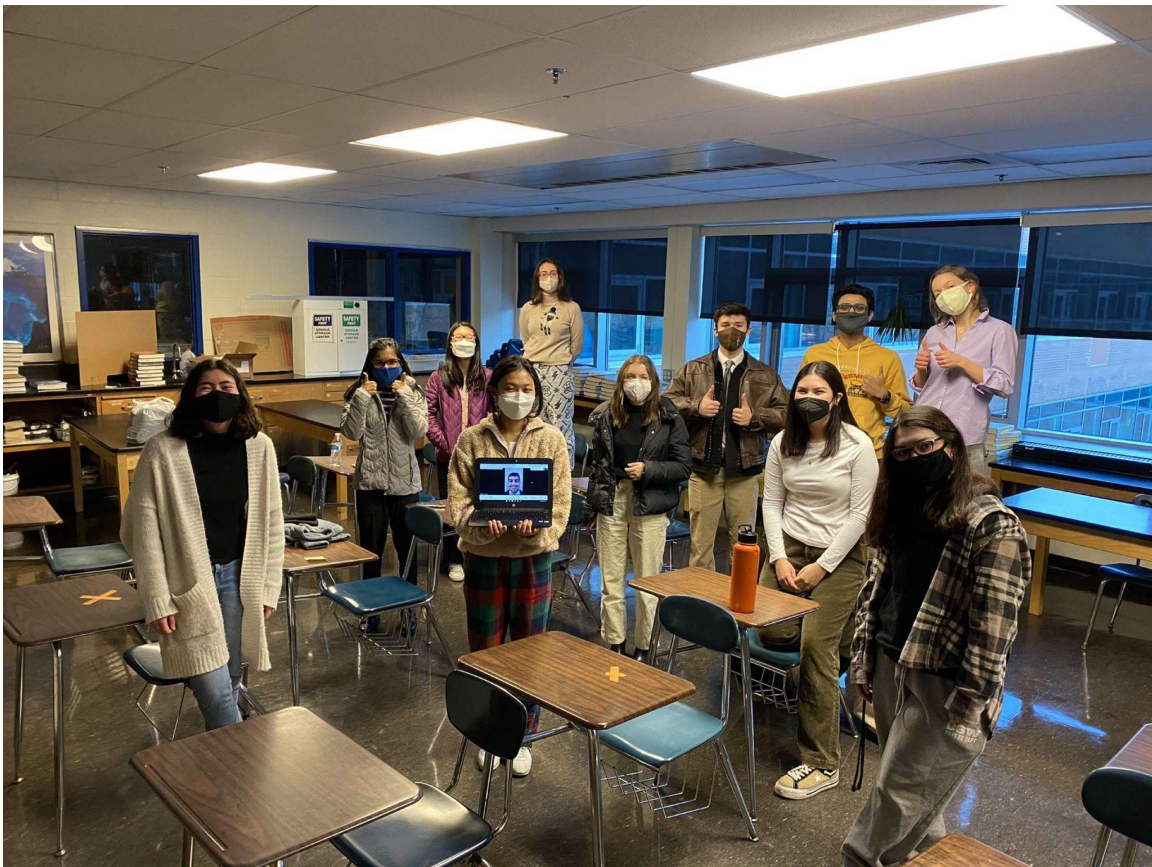




Innovation at The Charter School of Wilmington 2020-2021 School Year Overview



As a result of the global pandemic, The Charter School of Wilmington began the 2020-2021 school year with students and staff being fully virtual through December 2020. In January 2021, CSW shifted to a hybrid schedule.

Science, Technology, Engineering, Mathematics Focus and Collaboration with Cab

In 1996, a group of visionary leaders from the Wilmington business community, encouraged by then Governor Thomas R. Carper, joined forces with educational leaders from the Wilmington area and from the Red Clay Consolidated School District to form Delaware's first public charter school -The Charter School of Wilmington. The mission of The Charter School of Wilmington is to prepare students to thrive through world-class mathematics, science, and technology education.

CSW believes that critical thinking, problem-solving skills, and collaboration promote innovation. We also strive to develop an ethical learning environment that creates good decision-making, habits, and virtues. To appreciate all the unique differences within an interconnected and multicultural world community, CSW places a high priority on cultural awareness. Although our focus is on Science, Technology, Engineering, and Mathematics, Charter students in collaboration with Cab Calloway School of the Arts, are enrolled in art, drama, concert band, jazz band, marching band, chorus, and other musical groups.

CSW's organizational structure and climate (culture, atmosphere, standards), support our curriculum. The roles, responsibilities, and expectations of the administration and faculty are clearly defined. Administration, faculty, and support staff are qualified to provide a top quality educational experience. Our instruction focuses most heavily on developing our students' higher order skills: analysis, synthesis, and evaluation. We reach our objectives through a combination of traditional and innovative instructional techniques. Our educational objectives focus on developing students who are technologically literate and able to understand and make use of computers and laboratory instruments.

With virtual learning beginning in March 2020 due to the pandemic, our online resources expanded exponentially through the 2020-2021 school year. Teachers continued to diversify their technology and software options using Google Meet Plus, Google Classroom, Pear Deck, Duolingo, Nearpod, NoRedInk, Quizlet, Quizziz, Gimkit, Edpuzzle, Logicly, Flipgrid, Desmos, YouTube, Kahoot!, and Khan Academy.

Our school offers a challenging, college preparatory curriculum. To graduate from The Charter School of Wilmington, students earn a minimum of 24.5 credits, compared to the State of Delaware's requirement of 24 credits.

DATA:

CSW was named a [2019 Blue Ribbon School](#) with a group of 362 other schools. CSW was first recognized as a National Blue Ribbon School in 2013. As an Exemplary High Performing School, CSW is among Delaware's highest performing schools as measured by state assessments and nationally normed tests.

[State Report Card](#)

[School Profile](#)

[Fact Sheet](#)

[Clubs and Activities at CSW](#)

Diversity, Equity, and Inclusion (DEI)

The Charter School of Wilmington is committed to providing an innovative, rigorous academic program that simultaneously addresses and values student's health and well-being. We believe in providing the support necessary to ensure successful outcomes for all CSW students.

During the 2020-2021 school year, CSW continued to collaborate virtually with US², a consulting agency focused on social justice and educational equity and increasing awareness in the areas of bias and privilege. US² encourages the idea of self-reflection to ensure participants walk away with knowledge of themselves as well as knowledge of others with a goal of improving productivity and workplace culture.

DEI training sessions were held for the Leadership team throughout the 2020-2021 school year. Student Unions were created during the school year to ensure the representation of CSW's diverse voices and viewpoints. Administration meets monthly with our Asian Student Union, Black Student Union, Latinx Student Union, LGBTQ+ Student Union, and the South Asian Student Union.

The Social Studies Department examined and analyzed their entire curriculum to determine effectiveness in the areas of race, ethnicity, religion, gender, and social class with an emphasis on the analysis of diversity and equity. After the year-long examination and analysis, they are implementing changes and revisions needed to reflect an appropriate curriculum that addresses diversity and equity in the way we teach and our students learn.

CSW stakeholders participated in community conversations via school assemblies and Town Halls. With the onset of virtual learning due to the pandemic in March 2020, CSW continued scheduling virtual Town Halls focusing on DEI topics with our Social Justice Alliance (SJA), students, faculty, and parents. A diverse group of students supporting social justice formed the SJA in June 2020. The CSW administration has also continued its bi-weekly meetings with the Student Government leadership team. These meetings allow the administration to hear concerns and ideas of all students and fosters a positive working relationship between the student body and the administrative team.

CSW Faculty/Staff/Administration Professional Development

The Charter School of Wilmington is committed to creating a welcoming culture and inclusive environment that reflects and supports the diversity of our community. We support a school environment free from discrimination and harassment on the basis of

race, color, religion, gender, sexual orientation, gender identity or expression, national origin, age, genetic information, or disability.

During the 2020-2021 school year, staff:

- Attended professional development the week of August 31, 2020, to ensure the proper skills for using Schoology and Google Meet and share best practices for delivering instruction online
- Participated in various virtual Professional Development opportunities including Pear Deck week and College Board/Advanced Placement conferences
- Attended workshops on teaching strategies
- Completed new and ongoing certifications in their content areas
- Incorporated new technology in their classrooms
- Collaborated to create real world formative and summative performance tasks scenarios around unit can-do statements

Diversity, Equity, and Inclusion (DEI) Staff Training Sessions continued along with Facilitation Days (with Committee and for Coaching Support). Individual coaching with leadership was also offered as an option.

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CSW Re-Entry Planning

In May 2020, CSW formed a COVID Working Group to address the impact of the COVID-19 pandemic on our plans for a safe 2020-2021 school year. CSW began the 2020-2021 school year with students and staff being fully virtual through January 2021. [CSW Virtual Learning Central](#) was created to warehouse our schedule, COVID-19 guidelines, the student handbook, technology help, and policies.

The sub-working groups, which included teachers, school staff, and medical health care professionals, along with members of Instruction Partners, an education nonprofit, focused on six key topics: distance learning and professional learning; technology needs; mental health and wellness; maintaining the culture of CSW; and facilities, equipment, and health guidelines.

The larger working group was divided into four sub-working groups of 90 members (21 students, 48 parents/guardians, and 21 staff). Team members brainstormed about logistics

lists for teaching and learning, collected current online learning plans that were used by other states, developed different semester schedule scenarios, and created surveys for students regarding their online learning experience from March 2020-May 2020. This research was stored in a COVID Google shared drive. The working group made presentations at the May and June board meetings prior to the release of the Re-Entry plan in Fall 2020.

DATA:

[Standard Operating Procedures](#)

[CSW Student Standard Operating Procedures](#)

Curriculum Adjustments and Schedules

CSW created a virtual schedule where Mondays (Anchor Days) were designed for agenda-setting, relationship building, student help, re-teaching, and some instruction. Specific social, emotional, learning activities took place during homerooms or on Mondays. When the hybrid schedule was introduced in January 2021, Anchor Days shifted to Wednesdays.

During each week of 100% online learning, teachers provided a minimum of 75 minutes of synchronous instruction. This was 50% of the instructional minutes per week. Synchronous instruction occurs when classes take place in ‘real time’ online. Teachers and students attend class live and interact with each other during the delivery of instruction. This format allows for instant feedback and real time interaction with teachers. Asynchronous instruction occurs when classes or assignments are completed at any time. These assignments are self-paced and allow students more flexibility. Asynchronous learning times can be adjusted to best accommodate students’ needs. Asynchronous work is graded and must be turned in before the next synchronous or asynchronous class, or as otherwise requested by the teacher. CSW used Schoology and Google Meet as our learning management platform for all classes both synchronous and asynchronous.

DATA:

[Virtual Schedule 2020](#)

[Hybrid Schedule January 2021](#)

[Extended Day Hybrid Schedule](#)

Student Counseling and Wellness

Throughout the school year, our school counselors, Special Services Coordinator, and staff focused on students with formal learning plans (IEPs and 504s).

- 1:1 Google Meet was used when CSW was in full virtual mode for students with IEPs and selected students with 504 Plans.
- Students with IEPs were surveyed to measure their interest and availability for in-person learning in the Library that began in October 2020.
- College visits were held virtually for 11th and 12th grade students.
- In February 2021, a virtual panel discussion was held to support student wellness.
- Math Intervention occurred 1:1 when needed and small group online support was available for students in need of additional math support.
- Google Meet & Chat was available during school hours. Students, teachers, and families maximized Schoology Resource Folders by graduating class (programs, scholarships, testing support, and more).
- Freshman, sophomore, and junior movie nights were held outside.
- A special calculator class was held outside for freshmen in October 2020.

DATA:

[Quick Link to CSW Counseling Virtual Office](#)

[Supporting Student Wellness Program Resources](#)

[Support Student Wellness Video/Panel Discussion](#)

[Mental Health Presentation](#)

The CSW COVID Response Team

The CSW COVID Response Team, under the leadership of our COVID Coordinator, meets weekly and when positive cases arise in our community; they are in regular contact with the Delaware Division of Public Health (DPH). When a member of our school community has a confirmed COVID exposure, depending on the situation, the School Nurse or the Athletic Trainer contacts DPH per our [DPH procedures](#). DPH epidemiologists provide recommendations to the team which is shared with CSW administration. A communication based on DPH guidelines is then sent to the community. Details regarding isolation or quarantine procedures from DPH are sent to the affected individuals and their parents/guardians on a case-by-case basis. Student confidentiality is of the utmost importance. DPH takes the lead with Contact Tracing and assigns contact tracers to notify identified close contacts.

DATA:

Freshmen Mentoring Program

In September 2020, Freshmen students were introduced to CSW at an in-person orientation in August, which included building tours, assemblies, and workshops. They were paired with a senior mentor who meets with them throughout the school year. Freshmen also participated in seminars/assemblies focusing on study skills, healthy habits, and stress management.

Junior Research Program and Science Fair

The CSW Junior Research program gives high school students with an interest in math and science an authentic, in-depth experience in scientific research. The Junior Research Presentation Day was held virtually on April 1, 2021. Introduction to Science Research class is a sophomore class requirement that teaches basic research and laboratory skills. The class fully prepares students for topic selection, background research, experimental design, data collection, and data analysis. Upon completion of the class, students will be ready to conduct the experiment for their topic, collect and analyze data, and draw conclusions. The experimentation and data collection will take place over the summer.

Data analysis, paper writing, and poster and oral presentation will take place in the Fall of the student's junior year. Students are often matched with mentors and in some cases, practicing science professionals, as they research and actively investigate a specific scientific topic. The project can give every student at The Charter School of Wilmington the opportunity to experience long-term learning practices that build self-reliance and confidence. The addition of the Junior Research Science project as a high school requirement by CSW has been hailed and embraced by the local science community (i.e., Christiana Care, Astra Zeneca, Verizon, Delmarva Power, Ashland Inc., DuPont. etc.) All students are also required to participate in the Science Fair during their 11th grade year.

DATA:

The U.S. Department of Education visited the Junior Science Fair in January 2020 and [created a video to highlight the event and our Junior Research program](#). CSW was one of only five high schools in the nation to receive this additional honor.

Nanotechnology Lab

In 2014, CSW created a Nanotechnology Lab to support a Nanotechnology class thanks to the generosity of the Longwood Foundation and Christiana Care Health Systems. Students have access to a scanning tunneling microscope, a scanning electron microscope, an atomic force microscope, a manual sputter coater with pump, and a benchtop vibration isolator platform. A magnetic Resonance Imaging (MRI) and NMR (Nuclear Magnetic Resonance) Teaching System was also purchased. CSW students may

use the lab for their Junior Research project or independent research. Local grade and high school students learn about nanotechnology by visiting our lab for workshops, special class events, and summer camp sessions.

DATA:

[CSW's 2019 Blue Ribbon Webpage](#)

[CSW's Science Fair and Junior Research Video](#)

[National Blue Ribbon Best Practices Page \(featuring CSW\)](#)

[Video Reflection Guide](#)

Community Outreach - Signature Programs (These programs were postponed due to the pandemic.)

CSW students have engaged with the community over the past decade in several outreach programs that are having a positive and continuing impact:

1. *Science Ambassadors*: Bringing positive enthusiasm to elementary students about science, with regular after-school activities at Shortlidge, Harlan, Elbert Palmer, Baltz, Lewis and Highlands as well as Eastside Charter and Edison Charter. (established 2005)
2. *Science Expo*: Originally hosted at the CSW campus, this event is now hosted at The Delaware Children's Museum's (DCM) in order to facilitate access for students in city communities. CSW students encourage an interest in science through the use of science kits and participation. (established 2005)
3. *Multiplying Good*: Formerly named the CSW Jefferson Council, Multiplying Good members teamed up with The Andrew McDonough B+ Foundation once again for the 9th Annual Charterthon in 2021. All funds raised for Charterthon support families that have children with cancer and to fund cutting-edge research. Due to the pandemic, a virtual Charterthon was held and team members raised \$39,672.

Community Partnerships

New partnerships are being formed and the collaboration is extraordinary, ensuring The Charter School of Wilmington remains on a steady course and remains an innovative educational force in Delaware, and a national leader in Science, Technology, and Mathematics initiatives.

We are thrilled to be a partner with The LYTE program (Leading Youth Through Empowerment). Adult and teen volunteers mentor and tutor talented students and organize school visits, field trips, and summer programs. The directors search for advanced curriculums for their programs and are familiar with Delaware's high school landscape because they are constantly building relationships. The LYTE program helps

scholars apply to area public and charter high schools through SchoolChoice.org and assists with the independent and parochial school's admissions process as well. LYTE scholars visit CSW for Nanotechnology tours and summer camps.

Block Schedule, Study Halls, Homework Help, and Activity Periods

With block scheduling, CSW is continuing to provide study halls and activity periods, helping to reduce student stress, and allow student participation in over 100 clubs and activities. We also continued with our after school Homework Help program. Throughout virtual and hybrid learning, study halls, activity periods, and homework/tutoring help was provided.

DATA:

[Virtual Schedule 2020](#)

[Hybrid Schedule January 2021](#)

[Extended Day Hybrid Schedule](#)

Fluid Mechanics Course

Charter offers a Fluid Mechanics course with a PumpLab™ Centrifugal Pump and Process Control System modeled from a 3rd year University of Delaware class. Created as an independent study course in 2012, the class evolved into a semester class in 2013 due to its popularity.

Advanced Placement Offerings, Advanced Courses and Electives

The Charter School of Wilmington uses an Integrated Math curriculum. Students may enroll in twenty AP classes.

Post Advanced Placement course opportunities include Optics, Fluid Mechanics, Modern Physics, Embedded Systems, Calculus 3, and Differential Equations, typical college level courses.

We offer a dual enrollment Anatomy & Physiology class with Delaware Technical Community College.

Students may opt to take electives such as Math and Art, International Relations, Criminology, Nanotechnology, Bioethics, Biochemistry, Neuroscience, Genetics, Epidemiology & Public Health, Organic Chemistry, Microbiology, Biotechnology, Robotics, Computer 3D Modeling, Mobile Applications, Data Structures, Computer Software Engineering, AI Theory and Practice, Video Game Design, and Data Science.

DATA:

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Academic Competitions

CSW students competed virtually in inter-scholastic and academic competitions and placed in the top ranks at state, national, and international competitions. These events are inclusive of varied disciplines; Science Olympiad, Delaware BioGENEius, Brain Bee, Math League, Odyssey of the Mind, Regeneron Science Talent Search, Envirothon, U.S. Physics Team, Mock Trial, Youth in Government, Boys State, Girls State, Delaware Young Playwrights Festival, and Model United Nations. CSW writing and reading performances regularly receive state and national recognition.

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Athletic Success

Our growth has provided the school an opportunity to excel beyond the academic arena. The athletic programs have grown in size and scope as well. CSW enjoys the highest rate of student participation in interscholastic athletics in Delaware. CSW teams have earned several conference and state championships in a variety of sports.

DATA:

CSW received the 2020 DIAA State Sportsmanship Award.

Forcessports.com