



SUBMISSION FORM

All submission forms must include the following information. Separate submission forms must be turned in for each eligible program. **Deadline: July 1, 2021.** Please include this submission form with the electronic entry. If you do not receive an email confirming receipt of your entry within 3 days of submission, please contact [Gage Harter](#).

PROGRAM INFORMATION

County: County of Henrico
Program Title: Virtual Classroom
Program Category: Information Technology

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Program Overview

Managing change can be a challenge for school divisions. The coronavirus pandemic and subsequent interruption to in-person learning was one of the most difficult changes K-12 education has ever faced and required quick adjustments in approach for school divisions across the globe.

The Virtual Classroom project focused on the process to evaluate and implement a videoconferencing tool that enabled Henrico County Public Schools (HCPS) to support a seamless transition of teaching and learning from a physical in-person classroom to a virtual platform in a safe and secure environment.

Problem/Challenge/Situation Faced by Locality

The coronavirus pandemic significantly affected K-12 education toward the end of the 2019-20 school year. In March 2020, when the first school closure of two weeks was announced, videoconferencing was primarily used for staff-to-staff connections and adult learning online, with limited use by students. As the school closure lengthened, more teachers began utilizing videoconferencing tools to connect with students. HCPS staff had little knowledge of which videoconferencing resources provided a safe and secure environment for student and teacher interaction or experience in using such resources for a virtual class. Based on this limited understanding and experience, a variety of videoconferencing resources were being explored and implemented in the field, with varying levels of success.

This spotlighted the importance for HCPS to remain responsive to the evolving needs of this new normal and ensure that learning experiences could take place online in a secure virtual classroom environment. This Virtual Classroom project was developed to address

that challenge by implementing a recommended divisionwide resource for videoconferencing for the 2020-21 school year.

How Program Fulfilled Awards Criteria

HCPS' implementation of a videoconferencing product is a major initiative to provide staff and students with more flexibility and opportunities to connect as they transitioned from a physical in-person class environment to a virtual class environment. This innovative initiative represents a significant collaborative effort by multiple HCPS departments to keep education moving forward and successfully transitioning more than 48,000 students and 7,000 teachers from in-person classrooms to virtual classrooms in the face of unprecedented pressures. Henrico County Public Schools' vision is embodied within this implementation: breaking down barriers and closing gaps in order to provide all students with the access and connections to achieve in the virtual class environment, along with leveled, timely support for students and staff to succeed during this challenging time.

How Program Was Carried Out

The objectives of this program were to:

- Establish and conduct an internal review of videoconferencing products and present findings to division leadership to make an informed recommendation for stakeholders.
- Cultivate a shared understanding around the purposeful connection and intended use of HCPS's promoted digital learning resources for the virtual classroom (Schoology, Clever, Microsoft Teams and Google for Education).
- Develop and share communication with all stakeholders, including the rationale for change and supporting documentation for teachers.

- Establish the operational infrastructure for Microsoft Teams, set role permissions, and implement a process to sync school information data to Microsoft Teams.
- Create supporting materials for the HCPS recommended videoconferencing products for all stakeholders; design and provide a professional development plan for staff (leaders and teachers) and device-specific training resources to support students and families.

At the end of March 2020, school closures were extended due to the coronavirus pandemic. Across the country, users were reporting safety and security concerns with some videoconferencing products. This catapulted HCPS and many others into reactive mode, trying to find a way to effectively and safely facilitate learning and finish out the school year virtually.

Our first step was to conduct an internal review of the current videoconferencing applications in use (or contractually available for use) by HCPS staff and students. Several departments participated in this task, including Teaching, Learning and Innovation (TLI), Technology, and Legal Services. TLI explored the instructional viability of these options while the legal department conducted an initial review of the terms and privacy policy for each vendor. Technology conducted a security review. This department also focused on configuration decisions and setup needed for full implementation at the start of the 2020-21 school year.

Once all of the information was aggregated, it was shared with division leadership to inform their decision on the products HCPS would recommend for staff and students to utilize moving forward. We concluded the 2019-20 school year with an official recommendation of

Microsoft Teams as the primary resource, and Google Meet as a secondary resource for virtual class meetings. A division communication was shared, providing the rationale for change, outlining a timeframe for product transition and including teacher user guides for Microsoft Teams and Google Meet to support staff and families over the summer and the start of the 2020-21 school year. Division innovative learning coaches provided insight on the instructional needs facing teachers and developed supporting documentation for all stakeholders around the HCPS recommended videoconferencing products. These preparations for a possible virtual return to school in September continued throughout the summer.

Prior to HCPS' first day of school, several other school divisions around the country had already begun their school years using a virtual format. We began hearing reports of school divisions experiencing technical difficulties as they attempted to deliver instruction. To address these potential issues, a decision was made to continue to use Schoology as the launch point for the delivery of instruction and to use the Teams meeting integration within Schoology or Outlook to create virtual class meeting spaces for teachers and students to connect. Staff, students and families were familiar with Schoology and its functionality. As we moved forward, we leveraged every opportunity to "paint the picture" of how our physical school buildings translated to the virtual learning environment and to cultivate a common understanding of the intended use of the digital learning resources provided. The chosen approach also allowed us to postpone the school data sync until October to provide additional time to fully understand the impact of the sync and to gather data on the recommended approach for virtual class meetings, using ad hoc meetings scheduled through Schoology or Outlook.

In preparation for the transition to Microsoft Teams, professional learning was provided for HCPS staff members. This included documentation and guidance on facilitating virtual class meetings through Microsoft Teams while delivering instruction through Schoology. The ILC project team created resources for staff to enhance their ability to use technology through in-person learning, parallel hybrid learning and online learning using Microsoft Teams and Schoology as platforms.

To advance the understanding and ability of school-based leaders to support the virtual class, we provided a personalized approach of support by facilitating elementary and secondary specific workshops. This allowed administrators to explore Microsoft Teams, consider how they could model it's effective use and ask questions around implementation with their learning community.

Along with professional learning provided to support staff and students, TLI specialists set up a virtual command center during the first week of school for innovative learning coaches (ILCs), who serve as the main school level support for innovative and digital instructional delivery. The command center was an effort to provide a virtual space for ILCs to reach out with questions in resolving an issue with Microsoft Teams or connectivity. Supports were also available to students and families. Throughout the first two months of school, teachers, students and families built their knowledge and comfort in using Microsoft Teams for virtual class meetings and the influx of support needs decreased.

We experienced some unforeseen challenges during the first nine weeks, which we used to guide our research of class teams and the channel meeting experience to determine if this provided a better virtual class experience for staff and students. We found some great benefits to using channel meetings and some tradeoffs. We identified this as an option for teachers who wanted to have more management controls or if the current meeting

experience was not working well for them.

School leaders were made aware of the option for class teams and channel meetings and provided with resources to build understanding. This allowed schools time and space to learn more about the options and to make decisions in the best interest of their learning community. In early November, ILCs received training on creating class teams, managing class teams and channel meetings. The ILC project team also created a Google site to aggregate all the information available to staff to provide consistent directions and awareness across the division. Using the site and other support documentation, ILCs worked with school-based leaders to determine the best approach for their learning community. We continued to scale training to support teachers using class teams and channel meetings for virtual classes as needed. As Microsoft continues to evolve and expand the functionality of video conferencing in Teams, HCPS remains responsive to the evolving needs of our students and staff.

Financing and Staffing

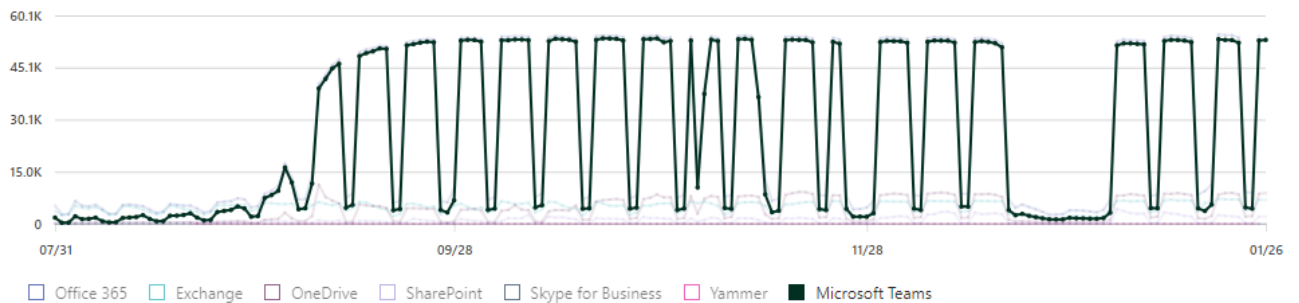
HCPS currently has a contractual agreement with Microsoft to support all Microsoft solutions, including Microsoft Teams. Therefore, there was no additional funding needed to implement this program, which allowed HCPS to dedicate federal CARES Act funds to other virtual learning needs.

There was a significant time investment by teams from the Department of Technology and the Department of Teaching, Learning and Innovation. These departments scoped and designed HCPS' Microsoft environment along with developing the professional learning materials provided to all stakeholders.

Program Results

HCPS depends on its ability to build a technology infrastructure and create a culture of teaching and learning that allows for large scale video conferencing. The infrastructure has become an instructional tool that supports social-emotional learning, builds relationships, improves communication and supports the achievement of learning goals. The supporting resources and professional learning provided to HCPS stakeholders have successfully advanced understanding and usage of videoconferencing with Microsoft Teams. We have seen high adoption rates for Microsoft Teams, and usage data indicates that the strategies used to develop and implement videoconferencing for virtual class meetings at scale was successful. We have consistently and successfully supported more than 50,000 active users in Microsoft Teams since the start of this school year. The graph below shows active users daily for Microsoft Teams from July 2020 to late January of 2021.

Active users



We also saw success with the option to create a class team for virtual class meetings. During the 2020-21 school year thus far, there are 7,829 active groups with class teams. This represents substantial usage for the first year of optional implementation.

Brief Summary

In March 2020, as schools closed and learning shifted to a virtual format, more teachers began utilizing videoconferencing tools to connect with students, most for the first time in their careers. A variety of videoconferencing resources were being explored and implemented in the field, with varying levels of success. It quickly became apparent that such resources needed to be vetted with recommendations made for division-wide tools and provisions for training.

The goals of the Virtual Classroom initiative were to:

- Establish and conduct an internal review of videoconferencing products and make an informed recommendation for use.
- Cultivate a shared understanding around the purposeful connection and intended use of HCPS's promoted digital learning resources for the virtual classroom
- Develop and share communication with all stakeholders.
- Establish the operational infrastructure for Microsoft Teams, set role permissions, and implement a process to sync school information data to Microsoft Teams.
- Create supporting materials for the HCPS recommended videoconferencing products for all stakeholders; design and provide a professional development plan for staff and device-specific training resources to support students and families.

Through a collaborative effort involving multiple departments, these goals were achieved with supporting resources and professional learning provided to HCPS stakeholders and successfully advanced understanding and usage of videoconferencing with Microsoft Teams.

Virtual Classroom

Supplemental Materials

[Microsoft Teams Site for Henrico County Public Schools](#) - This site was created to aggregate and deliver consistent supporting documentation and resources to all staff around using Microsoft Teams to facilitate virtual class meetings.

Resources for Innovative Learning Coaches (ILCs):

- [Troubleshooting Tips](#) - for ILCs to use as a reference with students, staff and families.
- [Teams - PL intro slide deck](#)
- [Teams Facilitator Guide \(8/20\)](#)

Supporting Documentation for Students (Schoology Course Modules)

- [Virtual Class Tips for Students](#)
- [ES Modules](#)
- [SEC Modules](#)

Supporting Documentation for Families

- [Virtual Class Tips for Students](#)
- [Overview of Microsoft Teams](#) - Shared through the HCPS virtual learning page.

Virtual Learning Support



Device Support Clever Support Schoology Support TEAMS Support G-Suite Support PowerSchool Support

[Virtual Class Tips for Students](#) [The Connection: Online Services](#) [Schoolology Family Access](#)

- Experiencing an Issue? Contact the Help Desk -