Category II: Best Practices in Distance Learning Programming for Videoconferencing Distance Learning

Kenai Peninsula Borough School District (KPBSD) Classroom WithOut Walls (CWOW) Program

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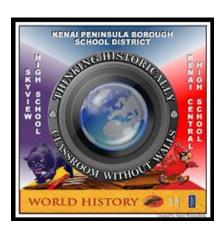
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Program overview. Alaska's Kenai Peninsula Borough School District (KPBSD) spans more than 25,000 square miles – an area larger than West Virginia. Some schools, separated by wilderness or seawater, are as much as three hours apart. All that distance makes collaboration among schools vital, but it also makes it extraordinarily difficult.

The Classroom WithOut Walls (CWOW) project, created by three KPBSD high school teachers: Greg

Zorbas at Kenai Central High, Rob Sparks at Skyview, and (now retired) Gregory Weissenberg from Soldotna High. CWOW collapses the distance between KPBSD schools and the children who attend them.

The program enables students to use the digital devices and mobile technologies that are already an integral part of young



peoples' daily lives. In doing so, CWOW creates an environment that enables and encourages students to regularly collaborate with their counterparts in other high schools, and even participate in classes and presentations from home, while on vacation or on a school trip, from the bus, or from the district's remote, one-room schoolhouse.

The program not only enables us to efficiently share teaching duties across multiple schools, but it also provides a way for students to discuss important historical events with people who actually lived through them and even influenced them. Other CWOW events have put students in the same "room" with topic experts from around the world.

In the past two years, CWOW programs have included:

- A course on Orwell's "Animal Farm" enhanced with a virtual field trip to visit a survivor of a Soviet Gulag, or forced labor camp. Watch the video: http://staff.kpbsd.k12.ak.us/staff/gzorbas/prisoner of stalin.htm
- A face-to-face meeting (for students at Kenai Central and Skyview high schools) with Kenyan freedom fighter Field Marshal Muthoni Kirima, who led the fight against British imperialism in the 1940s, in a class that capped a unit on African literature. Watch the video:
 http://staff.kpbsd.k12.ak.us/staff/gzorbas/mau_mau_rev.htm
- High school students visiting with their peers in Israel and Afghanistan. (Due to concerns about the safety of students in Afghanistan and Israel, these sessions could not be recorded for later playback.)
- Live classes from the Manhattan School of Music hosted for sophomores at Kenai Central, Skyview and Soldotna high schools. Students watched and listened to lessons created and delivered just for them from the Manhattan School of Music. Watch the video: http://dl.msmnyc.edu/archive/2012/april/26/music_and_nationalism
- Kenai Central and Skyview high school music classes performed live for a children's hospital in New Jersey.
- A year-long program connecting students at Kenai Central and Skyview High schools with a high school in Sana'a, Yemen.

How it works. CWOW combines videoconferencing with texting, mobile computing and other tools to deliver an experience that transcends traditional classroom instruction.

We take turns leading a lesson among their history and social studies classes. Students in all classes can see and hear each other via small group videoconferencing technology (VTC). They participate in the same exercises, projects and discussions, use their mobile phones to ask questions via text messaging, and share content via interactive smart whiteboards.

Throughout the various instruction units, students make continuous



Some units involve research projects that culminate in a final project. Here, students in Rob Sparks' class at Skyview High school present their final project with two guest participants from the professional world.

use of technology systems, from room-based and mobile videoconferencing and instant messaging to tools like Prezi and video editing platforms. They're expected and encouraged to select and employ the technologies they find most helpful and attuned to their learning styles. Frequently, students troubleshoot the technologies to enable anytime, anywhere access to content and learning partners.

Some units involve research projects that culminate in a final project. Using WWW research, Google Docs and other digital tools, students plan strategies to guide their inquiries, synthesize information based on established ethical use practices, and process their data and present the results. We generally employ a flexible model for final projects, giving students the ability to present their research as a traditional paper, a presentation, a documentary, play, musical presentation or other instructorapproved format.

Program goals. We developed CWOW to:

- Engage students in classes using the technology they already know and rely on (such as mobile phones and tablets) and interactive learning experiences (such as virtual field trips to museums or universities, or remote lessons on music's role in shaping public opinion) that are typically not available in a traditional classroom setting.
- Make history and social studies topics more relevant to students by bringing them face-to-face with individuals who lived through the historical event, and by enabling students to research topics and deliver presentations and projects in formats that best suit their talents and interests.
- Promote critical thinking and motivate students to formulate lines of inquiry and research into topics being studied.
- Enable teachers to teach to their individual strengths, while simultaneously giving students the benefit of learning from content experts.
- Meet or exceed established standards in World History, U.S. History, Russian language, Alaska Studies, Government and English Literature.
- Through CWOW, students collaborate closely with other students at their own school, and with students at other schools within KPBSD. They use the digital technologies and devices they already rely on - including mobile devices and computers - to share and develop content, research topics,

product final projects, and even attend class remotely while sick

- Provide access to large-school educational experiences for students in KPBSD's small, remote
- Expose students to the collaboration tools, from videoconferencing and cloud-based applications like Google Docs and Prezi, that they are likely to use in college and later in the workforce.

schools, including a one-room schoolhouse located in the tiny hamlet of Cooper Landing, Alaska.

at home or on vacation.

Promote digital citizenship by educating students on the proper use of technology and research tools, and on collaboration and videoconferencing etiquette.

The CWOW videoconferencing environment. The CWOW environment is built around 18 standard definition (SD) and high-definition (HD) videoconferencing systems installed in classrooms at several schools. Systems are connected through a bridge operated by KPBSD's IT department.

- **Production environment.** Classrooms are well lit to ensure that the teacher or presenter is viewable, yet the lighting is balanced to enable students to see what's projected on screen typically a large flat-panel monitor mounted on a wall at the front of the room. Desks are arranged to face the center of the room so students are easily visible to their counterparts. Microphones are placed strategically so both students and teachers can be heard when speaking or asking questions. Our IT department managed network traffic, reliably providing us with at least enough bandwidth to host classes without noticeable video or audio degradation. (Please see sample videos for a more detailed look at the CWOW production environment in use.)
- **Program development.** CWOW instructors have learned from trial and error how to present to both in-class students and those who are attending via videoconference. We always make an effort to engage remote students in discussions and make them feel they are fully integrated in the process. We work to make eye contact with the camera, speak clearly, and solicit feedback throughout a lesson.
- Wrap around experience. Depending on the lesson, teachers often develop project guides and organizers that help students get the most value from the CWOW experience and ensure that they pursue independent avenues of research, critical thinking and ideation.

Content. We establish the curriculum prior to each semester, and we offer the opportunity for both students and parents to participate in multiple special events throughout the year. The following links demonstrate the World History curriculum for the 2012-2013 school year, including syllabi and archived video links, and a sample of the daily schedule and the types of lesson plans and evaluation rubrics we use to teach students in a collaborative CWOW environment:

- 1st Semester Syllabus: http://staff.kpbsd.k12.ak.us/staff/gzorbas/cwow_schedule_2012.pdf
- 2nd Semester Syllabus: http://staff.kpbsd.k12.ak.us/staff/gzorbas/cwow schedule 2nd sem 2012.pdf
- Sample daily schedule: http://staff.kpbsd.k12.ak.us/staff/gzorbas/time-schedule.pdf
- Videos demonstrating World History assignments and papers delivered via CWOW: http://staff.kpbsd.k12.ak.us/staff/gzorbas/notes and papers.htm
- "Thinking Historically" lesson plan: http://staff.kpbsd.k12.ak.us/staff/gzorbas/cwow_usdla_lesson_plan.pdf
- "Thinking Historically" unit evaluation rubric: http://staff.kpbsd.k12.ak.us/staff/gzorbas/cwow_usdla_submission_page.html

Participation statistics. In the current Spring 2013 semester, 225 students are involved in the CWOW program. These classes represent a total of eight sections of World History.

Measuring the impact: *Survey data*. We frequently use rubrics to assess students' ability to complete an instructional unit, master the content at hand, and meet the objectives of the class. As an example, here's the evaluation form we used to assess student progress for a four-week unit focused on the Renaissance and Reformation: View the Unit 3 Rubric.

We also regularly survey students to gauge the effectiveness of the CWOW experience. In a survey conducted in May 2012, more than nine out of every 10 students surveyed said videoconferencing made World History more interesting, helped them better understand course content, think CWOW should incorporate more VTC-based teaching, and believe the CWOW experience will help them be more comfortable using videoconferencing in the future. Read the results here: http://staff.kpbsd.k12.ak.us/staff/gzorbas/cwow_survey_results.pdf

Measuring the impact: *Anecdotal data.* We also have a growing body of anecdotal evidence that illustrates the positive impact CWOW is having on students. For instance, some students have asked to participate in classes and presentations while they're away on vacation. And one student in Rob Sparks' classroom moved to Texas over the winter holiday, but still wanted to remotely participate in a yearlong collaboration with students in Sana'a, Yemen (coordinated via Global Nomads Group).

And in our end-of-year student survey from 2012, several students provided comments that speak to the impact of the program:

- (CWOW) allowed me to be able to understand how to cooperate with other people and figure out the best way to make the project work in a productive way.
- (Using videoconferencing in other classes) would greatly contribute to understanding a lesson.
- It would be nice to see a different approach of teaching the subject. That might help me understand it better.
- (Would like to see videoconferencing used in) language arts, anatomy, choir, math, Spanish.
- Talking to doctors or other teachers in other colleges for anatomy would be so incredibly amazing.

Additional benefits. CWOW offers benefits that extend well beyond learning core curriculum, including:

- Collaboration skills. Students work together in small teams using shared computer applications
 to create current events projects and present them via video. A recent innovation was to spread
 workgroups across schools, with students using desktop videoconferencing software installed on
 classroom laptops to work face to face with fellow group members. In essence, we are using
 collaboration tools to teach students to work together.
- **Dissolving rivalries.** An unexpected benefit of the program is that our students are managing to set aside the feverish high school rivalries that seem to separate them from kids at other high schools. At a cross-country skiing event in 2012, some students introduced Mr. Sparks as their history teacher which is true, except that Mr. Sparks teaches at Skyview, and these students attend Kenai Central. CWOW is unifying kids across the district.
- Anytime, anywhere teaching. Using
 videoconferencing software installed on his laptop,
 one teacher added a couple of extra days onto his
 Spring Break vacation and still taught a class on Peter
 the Great from his sister's house in Oregon. He
 connected to his first period class and presented live
 while recording the session for the substitute teacher
 to use for the next five classes. In addition, the
 teacher's son used an iPad equipped with mobile
 videoconferncing softaware to connect to class while
 on vacation.
- Lifelong learning. We have observed students



A KPBSD high school student demonstrates how she can attend class or collaborate with another student using an iPhone.

grasping the notion that learning doesn't stop when you close the book or turn in the final. It is rewarding to see kids excited to come to class and excited to be learning. We see how the experience of CWOW is helping to create lifelong learners.

Recognition. CWOW has earned recognition and accolades on multiple fronts.

- In 2011, the program won a \$30,000 technology grant from <u>Artifacts for Alaskans by Alaskans</u>, a state competition hosted by the Alaska Department of Education and Early Development.
 CWOW was recognized for its innovative use of technology to enhance the educational experience of KPBSD students.
- In 2013, a CWOW course unit was recognized as a top 15 finisher in the <u>International Society for Technology in Education</u> (ITSE) "Learning on the Go" Contest for lessons that incorporate mobile technologies.
- CWOW instructors have presented at numerous distance learning conferences such ASTE, internet 2 and USDLA 2012. KPBSD has also been invited to showcase the CWOW program and student collaboration to individual schools, Globally.
- CWOW has been widely publicized for its innovative approach to promoting collaboration as a
 way to enhance learning. These include a feature story in <u>Redoubt Reporter</u>, a detailed <u>case</u>
 study and technology company <u>press release</u>, along with a <u>feature article</u> on the KPBSD site.
 CWOW has also been featured on AKLN, Alaska's Learning Network.
- CWOW is such a success that KPBSD is looking to expand the concept to more departments and schools.
 - Already, KPBSD is sharing content with other school districts, with students from the Bering Strait and Aleutians East Borough School Districts attending our class on Vitus Bering, the Danish explorer and namesake of the Bering Strait and Bering Sea.
 - At KPBSD's Sterling Elementary, Tiffany Grey's class collaborated with students in the Lower 48 and the Czech Republic.
 - At Kaleidoscope, Jan Darch and Keli Stroh connected their students with an expert on marine life from New Jersey.
 - Physical Training teachers from KPBSD are using VCT technology to share the same training program and use it to motivate students from the different schools. They also use it when students can model proper lifting or exercise technique.
 - Three Kenai Middle School teachers now regularly teach students from the one-room school house in Cooper Landing.
 - Anatomy and Physiology teachers used CWOW's HD systems to participate in a live interactive knee replacement surgery.

Testimonials.

- "(Being in Alaska), we just can't drive down to wherever it is to do something like this. Technology is a tool. The purpose of technology is to increase connections, which supports the purpose of teaching. We are connecting a novel to history and to today's students. This is a tool in widening our window to who we can connect with and talk to, which I think is remarkable." Terri Zopf-Schoessler, Language Arts Teacher, Skyview High School
- "The Classroom WithOut Walls has allowed not only students to work together utilizing technology, but also it has allowed teachers to collaborate with each other. Teachers at the secondary level often teach in isolation. The CWOW program has led to improved educational experiences for student because the teachers are regularly able to observe the lessons and teaching of their colleagues and provide feedback to one another." Alan Fields, Principal, Kenai Central High School

Supplemental materials. Additional materials and videos are available on our USDLA Award Nomination Packet page:

http://staff.kpbsd.k12.ak.us/staff/gzorbas/cwow_usdla_submission_page.html Judges are also encouraged to visit the CWOW home page:
http://staff.kpbsd.k12.ak.us/staff/gzorbas/cwow_usdla_submission_page.html