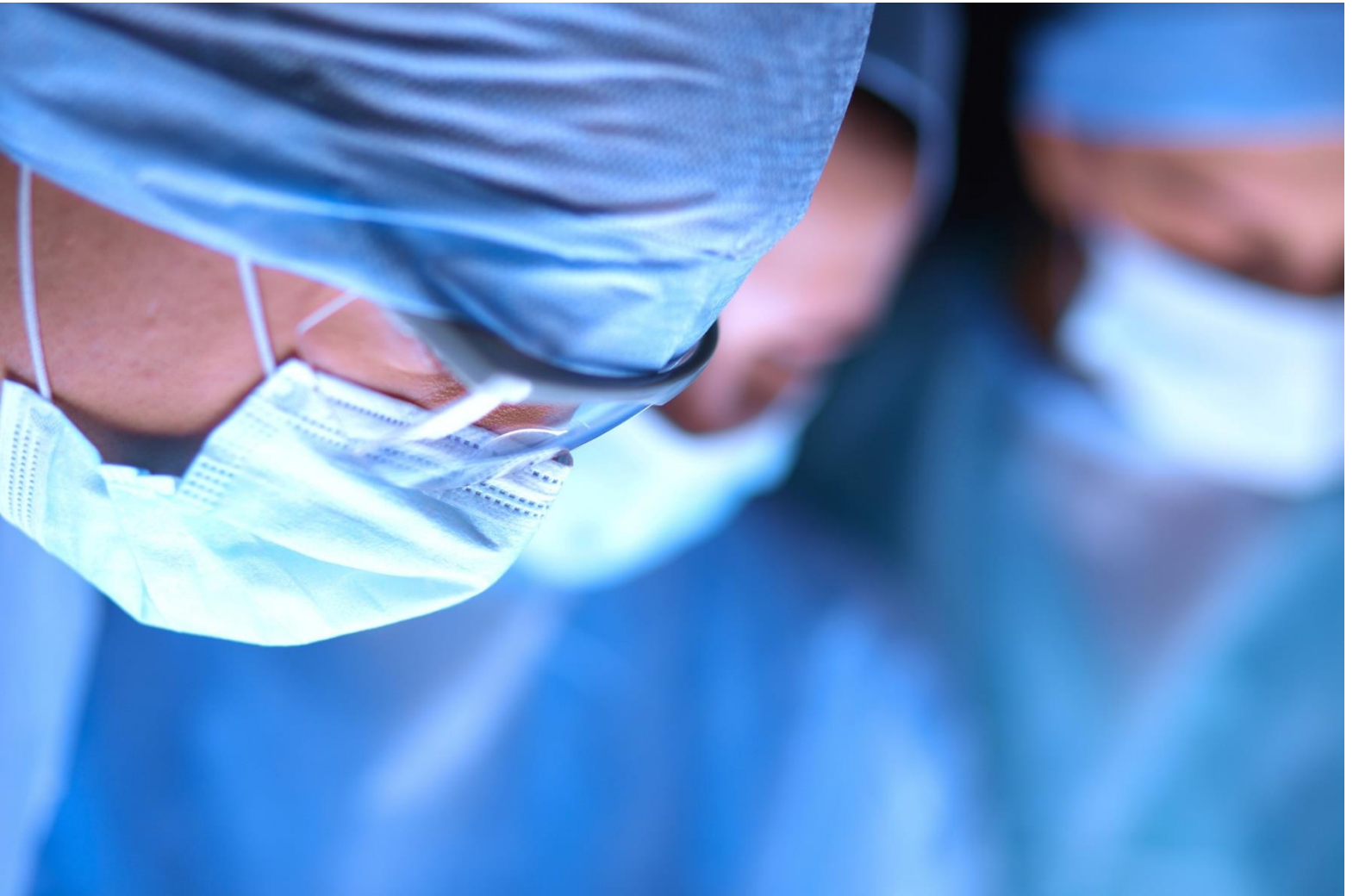




Wheeling Campus

WEST VIRGINIA NORTHERN COMMUNITY COLLEGE

THE DISCOVERY



At West Virginia Northern Community College (WVNCC), the Surgical Technology program requires students to learn all the skills required for a surgical procedure. This career involves gaining a mastery of skills along with the ability to understand many and sometimes complex instrumentation and procedures. Because of the complexity of this profession, it can become extremely overwhelming to the students.

Tami Pitcher, CST, AAS, BLA, Director of Surgical Technology at WVNCC, constantly searches for better ways to fully engage the students. In June 2019, the Surgical Technology department held an annual advisory meeting at WVNCC. Erika Smith, Operating Room Nurse Manager at Wheeling Hospital and advisory committee member, learned about PeriopSim at an AORN meeting she had attended. She shared how the product could benefit the Surgical Technology students and encouraged WVNCC to do some further research.

Tami reached out to Dave Foster, COO and Co-founder at Conquer Experience in November 2019 to further explore the program. Angela Robert, CEO at Conquer Experience, emailed her back and Tami instantly fell in love with PeriopSim. She instantly had a vision on how to integrate and implement PeriopSim into the school environment.

Both Tami and her team member, Erin Carr, CST, Surgical Technology Adjunct Faculty Instructor was proud and beyond excited to be the first ever Surgical Technology program to use PeriopSim. They could hardly wait to receive the PeriopSim VR demo. Even with this being the first ever educational demo, Tami claimed, **“the set-up was simple and it was ready to go in minutes.”** Erin was also thoroughly impressed with the software.



Students utilizing PeriopSim VR

The first and second year students also had a chance to use it and were asked about how this software would enhance their learning and their thoughts on it. After using PeriopSim VR, students expressed how much of an advantage it would be when being in the operating room for the first time as a lot is unknown. One student had stated,

“With the filming, it shows every step (of the procedure). Sometimes when you’re scrubbed in as a student, you don’t always get the chance to see what they’re doing.”

Another student said,

“I wish we would’ve had this last year!”

Angela Robert (CEO) of Conquer Experience and Dave Foster (Co-founder and COO) were available to answer any questions during this time. Angela also met with Tami immediately afterwards for feedback to see how Conquer Experience could improve the process. During the demo week, the Division Chair of Allied Health, the Provost and the College President were also invited. Tami wanted to ensure they understood why PeriopSim should be added to the curriculum when asking for funds to purchase the program.

In March 2020, due to COVID-19, the Surgical Technology program students were being pulled out of clinical practices as well as laboratories and had to move 100% of their curriculum to online. Existing virtual learning options were not enough. Many complex skills, procedures, and surgical knowledge still needed to be learned by the students. WVNCC had to find an alternative way to deliver specialized training in the best way possible and was exploring game based, simulation and immersive education.

Also at this time, during the early days of the COVID-19 pandemic, Conquer Experience looked for a way to deliver the PeriopSim educational experiences beyond the Virtual Reality and iPad platforms. Conquer Experience was able to deliver PeriopSim to schools that enabled students to use the software online with the use of a tablet, computer, or chrome book device. This allowed students to familiarize themselves by performing surgical procedures and polishing their skills in simulation experiences. The Surgical Technology Program wrote a foundation grant and it was awarded to WVNCC to purchase the software.



Wierton Campus

In April 2020, Tami received an email from the college that WVNCC had leftover Perkins Funds that were unable to be used on professional development due to COVID-19. She was asked to make any request that could directly help their students. As a result, Tami requested PeriopSim VR for not just one but two campuses; one for the Wierton campus and one for the Wheeling campus. The request was accepted along with the cost of the software for current students and arrived at the colleges in mid-June, 2020.

THE SOLUTION



PeriopSim is a surgical training and assessment platform that combines virtual simulations, neuro education and game based learning to save time. When experience is in short supply or too expensive/challenging to attain, simulation training is an ideal option. Pilots have been using simulation for decades and it is a gold standard for certifying and re-certifying competence to fly some of the most complex planes in the world. Healthcare education is catching up.

A National Simulation Study (<https://www.ncsbn.org/685.htm>) was conducted and the study provides substantial evidence that up to 50% simulation can be effectively substituted for traditional clinical experience in all prelicensure core nursing courses under conditions comparable to those described in the study. It is a study that we use as a foundation in describing how PeriopSim can benefit educators in terms of flexibility in education and timesaving. Additionally, we have been the subject of a number of research

studies that you can find more information about here: <https://www.periopsim.com/research/>

PeriopSim takes live video footage of a one hour long procedure and creates a Virtual Simulation that is 10 minutes long giving a 6x in time savings for that experience. 1 Experience Hour = 10 minutes in simulation with PeriopSim.

Prior to the COVID-19 pandemic, PeriopSim has been used by Educators in Departments of Surgical Services in hospitals across Canada and the US for the last few years. Educators use PeriopSim to improve confidence and competence of perioperative Registered Nurses (RNs) and Surgical Technologists (STs) during their orientation curriculum. PeriopSim can be combined with other learning tools such as AORN's Periop 101, videos, live simulations and preceptor job shadowing. PeriopSim is used to bridge the gap between classroom and the OR.

There are over 35 Virtual Simulation Experiences on the platform and over 15,000 of these experiences have been completed by learners at our customer sites. To build these Experiences, we partnered with our customers at leading healthcare facilities to record the procedures, capture instrumentation and materials. We combine these assets with evidence based guidelines from leading sources including AORN and ORNAC. The Educator and Surgeon working with us confirm the quality of the module prior to release. We currently have a large pipeline of modules that are at different stages of development and we provide releases on a regular basis.

Surgical Training and Assessment for the Operating Room Team



When COVID-19 impacted healthcare education more abruptly in mid-March 2020, we had some conversations with leaders in the Surgical Technology area as well as with our customers across the US and Canada in hospitals and we knew we had to act quickly and do something.

PeriopSim was designed to be used on iPad and in Virtual Reality with HPs WMR Reverb Headset or HTC VIVE. This would not work for Surgical Technology Programs that now had West Virginia Northern Community College

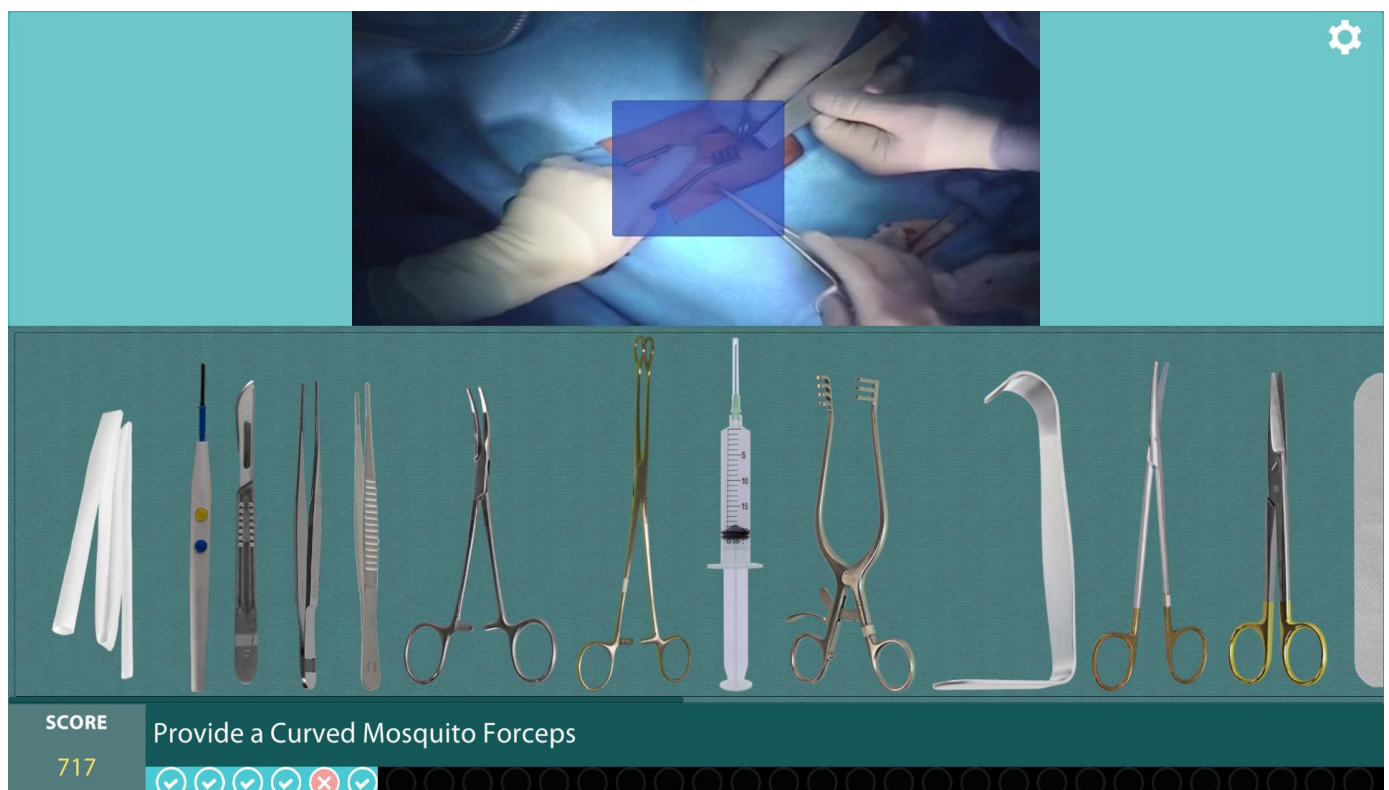
to move to 100% online learning. Students did not have access to iPads or Virtual Reality at home. We shifted our entire focus to launching PeriopSim on PC/Mac/ Chromebook and Android/Windows Tablet as quickly as possible.

At the same time we had to come up with a low cost pricing package that would be easy to understand and make sense for schools in the short term as well as in the long term. We created our Educational Institution Package with limited pricing for COVID-19 and went live with communications. This allowed for the early leaders to share the information and get the innovative schools onboard and making simulation for procedures accessible within weeks.

We were incredibly impressed by the resilience, grace and energy from both the educators and learners in this new education configuration. The technical aptitude and speed at which they adopted PeriopSim was incredible and it was an honor to see this unfold.

A key aspect of PeriopSim that didn't require any adjustment is the learning data system that does assessments on learners. C or a D means they are learning and focusing on accuracy rather than speed. A and B means that they are focusing on speed and delivery because they are already accurate. Incomplete means that they haven't done more than 3 simulations which is required to get an assessment. The effort it would take to do these detailed assessments is near impossible without technology like PeriopSim.

For more information see here: [https:// support.periopsim.com/learner-competency-levels](https://support.periopsim.com/learner-competency-levels)



THE OUTCOME

To help implement the new VR program into the school system, Jumana Mascati, the Customer Success Manager at Conquer Experience, scheduled an appointment with Tami and Sara Walters (Wheeling Campus) and their IT team. Along with Conquer Experience's co-founder, Dave Foster, they completed the onboarding and set up for both campuses with PeriopSim VR during a virtual video call.



Students utilizing PeriopSim VR at the Wheeling Campus

All students had access to a device to perform these simulation experiences that provided them with the skills they needed to perform during clinical placements. The students also completed a clinical case journal on these simulations according to the specialty that they were studying to further their critical thinking skills. This enabled a space for improvement, while also promoting a more clarified, advanced version of the program.

“When students were unable to go to the hospital to get required experience, PeriopSim offered a platform where students can experience a live surgery instead of making one up in a book.”

With students learning so many skills across a variety of surgical specialties along with the surgical knowledge, Tami could not stress how happy she was to have finally found something to help assist her in this challenging pandemic. She highlights how,

“PeriopSim VR is the closest experience to being in the actual operating room.”

Students start clinical in the second semester of the program. But with the vast amount of information and necessary skills to learn, time is extremely limited. Therefore, WVNCC has proposed to change their curriculum to give students 2 full semesters in school labs before being placed in the operation room. This allows students to get 2 full semesters tackling modules and utilizing PeriopSim.

Tami says that using PeriopSim helps save time in doing a procedure that is six times faster than the actual procedure where a 1 hour procedure in real life takes 10 minutes in PeriopSim. PeriopSim also helps create an interactive environment for students, making it fun when learning different modules. One of the main reasons PeriopSim was selected was due to the interactive aspect in motivating and making the content fun for students to learn. Tami adds their program strives to make learning fun for their students.

Additionally,

“The experience modules allow for repetition in the procedures, which results in students gaining the confidence they need to succeed. “

Another huge benefit of PeriopSim is that it helps track the learners' progress. It records and documents the student's improved time which is challenging to quantify in a real life situation. The Experience Portal shows the graded results right after procedures are performed to both students and instructors, making it very convenient. The layout is also extremely easy to comprehend for instructors and the information is easy to access. It also allows instructors the flexibility to rearrange groups and students if necessary. Overall

“PeriopSim takes learning to a whole new level!”

THE FACULTY



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**Director of Surgical
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