ITS Annual Report 2018-19

Created by:

Dr. Sharyne A. Miller, Associate Vice Chancellor & CIO

Information Technology Services Management Team
I want to take this opportunity to thank you for your support and collaboration during the 2018-19 fiscal year. Information Technology Services (ITS) at the University of North Carolina Wilmington has implemented noteworthy improvements in support of the university’s mission and strategic goals. It is through continued collaboration with all constituents across the university that ITS was able to align our initiatives and efforts with those of the University Strategic Plan.

This report summarizes the 2018-19 fiscal year for ITS and our services. The challenge for ITS is to prioritize the work that matters the most to the university while delivering the greatest value to the UNCW community. We work to do this through our IT Advisory Council and direction from the campus community.

As you’ll see in the following pages, we’ve made significant progress including continued support of Teaching and Learning, growth in IT Security, and partnerships with Randall Library and Student Affairs like the Digital Makerspace and Tech Nest. We have placed a significant focus on optimizing our structure and enhancing our processes to best support the university in reaching its goals:

1. Investing in our people, including professional development for both technical and soft skills.
2. Solidifying the campus-wide technology infrastructure with a focus on business continuity and disaster recovery.
3. Making the ITS organization more flexible and agile to support the university’s mission.
4. Prioritizing initiatives through IT Governance and the Project Management Office.
5. Focusing on enhanced cyber-security demands in support of all critical university functions.

From the day I joined the university, three years ago, I was keenly aware it is the dedicated staff in ITS that truly make a difference, simply placing technology at the university versus having it become a true strategic asset. My thanks go out to all in the department who work tirelessly, day or night, rain or shine, holidays and summer breaks, to provide the best customer service and innovative technology infrastructure possible to UNCW.

Sincerely,

Sharyne
The 2018-19 fiscal year has been a very challenging one for ITS and the university as a whole. The campus was hit with a hurricane disaster which impacted the lives of our faculty, staff and students, and altered the semester in an unprecedented manner ultimately shifting projects and priorities.

ITS saw a demand for ITS services which far exceeded the supply of resources needed to deliver those services. To that end, we have been working diligently with our IT Advisory Council to develop a project scoring mechanism to help align project requests with the university’s strategic goals. We have been through several pilot activities and will continue throughout the year.

Opportunities for communication and collaboration to allow for better and faster dissemination of information resulting in more informed decision making were achieved through our technology enhanced collaborative space Tech Nest, the Tech Talk ITS newsletter, the IT Advisory Council, ITS Tech Bytes, additional courses within SkillPort, and the expansion of knowledge base articles in our Service Catalog. As ITS staff continue to work with and represent different areas of the university, we can collaborate to better anticipate needs and look for synergies across the university. This will also allow ITS to create a more informed roadmap forming the basis of a trusted partner relationship and allowing ITS to best serve the university more effectively with our existing resources.

Several key ITS staff members retired this past year, notably Steve Swart (Senior Solutions Analyst) after over 30 years of service, Holly Bowen (Assistant Director of ESS) and Don Sloan (Banner Specialist). These retirees represent decades of service to the UNCW community and will be greatly missed.

ITS is comprised of 95 staff members across 6 groups, employs approximately 50 student workers per semester, and has expanded our internship and shadowing opportunities over the past year.

NOTE: The ITS Org Chart is located at uncw.edu/itsd/about/documents/ITS_Org_Chart.pdf
Facilitate Organizational Effectiveness, Efficiency and Innovation

Project Scoring Process

ITS implemented a formal project scoring process and mechanism for ITS project requests. This process relies upon the IT Advisory Council for review and prioritization of requests, and ensures the campus community has a strong voice in selecting which IT-related initiatives ITS is putting resources towards.

Consolidation of Services

Our service catalog is designed with the client in mind. There are many benefits achieved by continually improving our service catalog to align with customer needs, such as, customer satisfaction, improved delivery processes, better communication and collaboration with our campus partners, and transparency of IT services. In an effort to ensure customer satisfaction the review and consolidation of forms is continuously considered and implemented.

For example, we combined the three forms (listed below) into a single form allowing the customer an easier method to find and submit a request. We will continue to review services that appear redundant or confusing to the customer and remodel them to reduce duplication.

• Request a Guest UNCW Account
• Request Temporary UNCW Account for New Faculty & Staff
• Extend a Temporary UNCW Account for Faculty & Staff

Cybersecurity Updates

Over the last year the Office of Information Security in ITS has targeted both spam and phishing in a large scale effort to reduce their impact on campus. We have tightened our systems and monitored their effectiveness; added the ability to forward any suspected phishing email to phishing@uncw.edu for faster response to campus; provided security training in order to help catch the phish; and increased our ability to find threats before they arrive in UNCW inboxes. We also decreased our response times for incidents that do happen which limits their ability to spread.

We are continually investigating ways to help the campus spot phishing through “just in time training” techniques, more responsive filters, and increased intelligence in our systems through machine learning and user and event behavior analytics.

Blocked spam and phishing emails in 2018-19: 121 million+

Reduced the number of tickets generated for security events by more than half.
Accomplishments

Leadership

UNCW ITS has been recognized by other universities as a leader in certain IT Service Management Initiatives. We have been asked repeatedly to share our code, documentation and trainings so that others can base theirs off of what we have developed.

The following have all received such accolades:

- Knowledge Base
- Portal
- Statement of work

Online Student Orientation

The Online Student Orientation has created the opportunity for fully online students to complete an orientation and be presented with relevant information regarding their transition to being a UNCW student.

The project involved building out the content of the orientation and the process by which students would access and complete the orientation in order to receive advising and be able to register for classes. Accomplishing this was a campus wide effort including more than 9 departments and 30 team members. Since April 15, 2019, we have had more than 250 students complete the online orientation.

Campus Rec Management Software Project

As Campus Recreation continued to grow and offer new programming, it became apparent that there was a need to gain more efficiency and ease in managing their program offerings. Campus Recreation evaluated the recreation management software: Do Sports Easy (DSE). After the evaluation of DSE, it was determined that this software would allow Campus Recreation the ability to better serve the UNCW community. After Campus Recreation purchased the software, ITS worked closely with them to implement the system.

This project consisted of 3 components: Cloud Integration, Software Customization and Banner Data Feed Development.

The functionality offered by DSE allows Campus Recreation the ability to see the image of the UNCW patron upon check-in and at equipment check-out. It also allows the UNCW community the ability to sign up for personal training sessions, enroll in classes and events, and sign up for adventure trips, among other benefits. Overall, the DSE system creates operational efficiencies for Campus Recreation.
Theme Two

Enable Innovative Teaching & Learning

Horizon: A New Virtual Desktop Replaces Tealware

ITS introduced a new virtual desktop and application solution called Horizon to replace Tealware.

Horizon includes updated versions of the most commonly used applications in both stand-alone and desktop form. Students, faculty and staff can enjoy these features from a Web browser, or they may download the Horizon client and can also download the app on their mobile devices.

The Horizon client was installed in computer labs around campus and is also available for faculty and staff to download in the Software Center.

Tealware was retired after the Fall 2018 semester.

Skillport Enhancements

Skillport, UNCW’s online training portal, was enhanced so that faculty, staff and students can use their email credentials to access two new features: deep links and the Skillsoft learning app.

Faculty, staff and students can now use Skillsoft’s learning app which provides timely access to tens of thousands of videos, courses, books, audio books and summaries within Skillport. The app is available in Google Play and the Apple App Store.

Also, deep links go directly to the landing page of a course, video or book in Skillport. So, there’s no need to log in to mySeaport to use this feature.

<table>
<thead>
<tr>
<th>Course Accesses</th>
<th>Course Completions</th>
<th>Video Accesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>7,850</td>
<td>5,945</td>
<td>1,654</td>
</tr>
</tbody>
</table>

Digital Makerspace Collaboration

Information Technology Services/TAC and Randall Library are collaborating to run the Digital Makerspace (DMS), located in Randall Library. Our goal is to increase digital literacy on campus by expanding the types of technologies beyond what may exist for specific departments or majors.

Technologies include virtual reality and 3D printing, among others. The services and technology in the DMS will be continually evolving based on identified needs.
New Tech Nest Interactive Space

In 2018, Tech Nest opened in the Fisher University Union. This interactive area was named by the students in Dr. Persuit’s COM431 Integrated Marketing Communication class. The space was designed with UNCW’s students, faculty and staff in mind and can be creatively used for a multitude of purposes.

Features of Tech Nest include:
- 6 Mac computers that can be dual booted to accommodate all types of small group training, office hours, student group meetings, presentation rehearsals and more.
- Virtual reality.
- Interactive smartboard and huddle table for small group collaboration.
- Studio station and lecture capture station where faculty, staff and students can create, capture and take recorded video with them.
- Emerging technologies showcase.
- Adobe, Office and SharePoint training.
- IT outreach – including workshops and more!

Check out more information on Tech Nest by visiting uncw.edu/technest.

Zoom Replaces WebEx

UNCW adopted a new collaborative meeting tool for Web conferencing, online meetings and synchronous Distance Education classes called Zoom. Zoom replaces UNCW’s instance of WebEx.

Zoom has all the features of WebEx but has the added benefit of a simplified and more intuitive interface which makes it easier to use. In addition, Zoom has single sign-on access, so all students, faculty and staff can launch the platform using their UNCW domain name and password.

Fiscal Year 2018-19 Zoom Stats:

<table>
<thead>
<tr>
<th>Participants</th>
<th>Classes/Meetings</th>
<th>Minutes/Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>36,000</td>
<td>8,307</td>
<td>1,799,197</td>
</tr>
</tbody>
</table>

New Feature: Chat with the TAC

This year, the TAC implemented Chat with the TAC, easily available to students, faculty and staff via the TAC home page.

In addition to making the TAC even more accessible to the campus, this feature also logs chat information directly into an individual’s support ticket.

View Chat at uncw.edu/tac.
ITS Job Shadowing Program

The ITS job shadowing program began in October 2018. The program allows students the opportunity to learn about different careers in IT and follow ITS staff members throughout their work day. Interested students complete an application and submit a resume to be considered for the program. Priority is given to ITS student workers. In addition to being helpful to the students, the job shadowing program is also beneficial to the ITS staff “shadow hosts” as they get to mentor and build relationships with students.

We had 4 students go through the Fall 2018 program and 1 student in the Spring 2019 program. The students and shadow hosts all thought the program was valuable. We plan to offer the program in Fall 2019.

Comments from students in program:

I really enjoyed the shadowing program, and I am very thankful that I was given the opportunity to participate in it.

I learned from my shadow host that communicating with clients in a clear and concise way is important to avoid misunderstandings, especially when working with the computers that power their work.

I hope to improve on listening to clients and understanding why they request the things they do from their consultants.

Canvas Replaces Blackboard

The Associate Vice Chancellor of Distance Education formed a Learning Management System (LMS) evaluation committee to identify UNCW’s changing academic needs for an LMS. The committee’s deliberations indicated that Canvas, a cloud-based system, offered significant improvements over UNCW’s self-hosted Blackboard instance.

These improvements were recognized by faculty, students and staff. The advantages included increased reliability, greater ease of use, user-friendliness for mobile devices, plus the flexibility and adaptability in meeting the growing needs of faculty and students.

The transition to Canvas began immediately after the spring 2018 pilot ended. ITS co-led the pilot and migration with over 215 faculty one-on-one trainings and 223 faculty staff participants in group trainings. A process was established and managed by the LMS team for course migrations. Training sessions were implemented throughout the migration in conjunction with the Office of eLearning.

In May 2019, UNCW’s Blackboard instance expired and Canvas became the exclusive learning management system of the university.

Adobe Creative Jam

All UNCW students have access to Adobe products for free. This year Adobe hosted a competition called Creative Jam in February 2019. Interested students were broken into teams, and Adobe did a workshop to teach all of the participants how to use one of their many products. The Adobe tool selected for UNCW’s Creative Jam was Adobe Premiere Rush (video editing software), and the topic was “Wilmington Strong,” which focused on Hurricane Florence - the devastation it caused as well as the support the university community provided to those affected.

Students divided into teams and produced videos that were shown in Lumina Theater and voted on. It was a great learning experience for all involved.
Modernize Information and Business Systems

Banner Upgrade

ITS upgraded Banner 8 INB to version 9. This new version provides a number of important enhancements, including a modern user interface, enhanced navigation and process management tools, and new functionality across the student, HR and finance functions. It also gives us greater flexibility, as we are now able to run Banner on any browser and on tablets. In order to prepare for the new Banner 9 interface, ITS offered instructor-led and online navigation training to UNCW faculty and staff.

Storage Migration

Having come to the end of the lifecycle for UNCW’s existing storage platform, ITS conducted a thorough review of existing storage technologies and decided to proceed with a hyperconverged infrastructure. This consolidates the storage and compute, putting the data closer to the processing power to increase performance as well as decrease complexity in the Network. In addition, it unifies the purchasing process by which ITS procures equipment for the core server environment.

After standing up the new hardware and software and testing for performance, functionality and resiliency, ITS mapped out a process by which existing systems would be migrated. Large portions were completed over pre-planned maintenance weekends, wrapping up in August of 2018, prior to the start of classes. As we look forward, the new technology has a non-disruptive upgrade process to enable ITS to replace hardware and upgrade software with no impact to campus. It also has better integration into cloud services for disaster recovery and enables UNCW to continue to migrate critical services to the cloud.

UNCW Website Upgrade

In keeping with the ITS strategic plan to modernize information and business systems, ITS migrated the UNCW website from an on-campus server to the Azure cloud in February 2019. The cloud was thoroughly tested and vetted before the seamless transition was made. This change was undetectable to the public and to content managers, with everything continuing to function as before. Migrating the UNCW website to a cloud environment reduces the need to shut down our Web presence during inclement weather or other campus emergencies.

ITS also collaborated with the Office of University Relations and the vendor to refresh top-level pages on the UNCW website, as requested by the Chancellor.

Select Survey Upgrade

The campus-wide survey product, Select Survey, was upgraded to the latest version (V5.0) in May 2019. Both survey creators and responders have found the new version easier to use because of these features: a significant facelift; GDPR compliance; true responsive design; and a variety of customizable themes.

Select Survey V5.0 has all the survey and reporting functionality that users are familiar with and is a more user-friendly product.

300+ Clients use Select Survey.
New Tenants

ITS has engaged a number of organizations across UNCW to participate in the consulting and implementation of their own ticketing application, hosted by our enterprise system, TeamDynamix. Utilizing the IT Service Management framework has helped these non-IT business partners by enhancing their ability to track requests, and to provide better customer interactions and robust reporting functionality.

The following organizations are either current tenants or in the “build” stage of implementation:

- Printing Services
- Office of e-Learning
- Resource Management (IT)
- Financial Systems
- Financial Analytics
- Human Resources (Data Governance)

DegreeWorks Upgrade

ITS recently assisted in upgrading DegreeWorks, a browser-based tool that helps students track and monitor their progress toward their degrees. Using information about a student’s chosen degree program(s), DegreeWorks displays completed and in-progress coursework and shows students exactly which classes they need to complete their degrees and graduate on time. It also helps academic advisors guide students regarding what courses to take and when.

The DegreeWorks upgrade included several enhancements that make it easier to support the application for campus. In addition to the application now being single-sign-on enabled, a new component of the application called Composer allows ITS to more easily create and manage UNCW-specific customizations for the application. This includes several “wish list” customizations that campus advisors requested.

Wasp Inventory Control Implemented

In spring 2019, ITS implemented Wasp Inventory Control. With Wasp Inventory Control, the office of Housing and Residence Life is able to better manage their inventory from the time it enters the warehouse to when it leaves to go to a Residence Hall on campus. In the past, inventory records have been kept manually, but now the inventory is tracked using software and a scanner, and the records now update in real-time.

This process alerts users when inventory is low and needs to be reordered. This software also allows for easy reporting to show users what items are used most frequently/infrequently and where the items are going. In general, it allows for a more organized, cost-effective and efficient warehouse.

Banner and Watson College of Ed

ITS has been facilitating the migration of the Watson College of Education’s Student Placement and Internship processes from a third-party solution (that was not meeting their needs) to live within our Banner environment. This move takes advantage of capabilities currently available within Banner without the need to purchase additional modules. It also creates efficiencies between multiple departments.
ITS Outreach to Isaac Bear Early College

On January 30, 2019, women from UNCW’s Information Technology Services (ITS) and other IT-related career fields visited the Women Empowered through Education Club (WEE) at Isaac Bear Early College to discuss their careers in Information Technology.

The club’s mission is to empower young women to believe in themselves, to set high goals and to reach these goals. They invite speakers once a month to share their stories and advice, and they usually highlight an interesting job that is not always a stereotypical job for women. Several ITS women spoke to the club last year, and when Mrs. Hall asked the students who they wanted to invite this year, they said, “the IT Queens!”

Each speaker shared their unique perspective as they spoke about their education, why they chose their profession and obstacles they encountered along the way. It was a very rewarding and enlightening experience for everyone involved.

D.C. Virgo Preparatory Academy

ITS is proud to be involved in the opening of D.C. Virgo Preparatory Academy, a K-8 year-round public school that was opened by UNCW in July 2018. The school, located in downtown Wilmington, offers a family-friendly environment, with a focus on the whole child and opportunities that extend to the UNCW campus and broader community.

ITS assisted in getting the school up and running. We replaced and implemented the wireless network and also worked with MCNC (Internet provider for public schools) to implement Z-Scalar which is a Web content filtering/security system. Additionally, our consultants helped set up computers, labs and Chromebooks. ITS also collaborated with the school principal to set up Skillport courses for teachers to help meet their Continuing Education Unit requirements. Topics included Adaptability, Confidence, Communication, Leadership, Technology, Organization and more.

Christmas Tree Project

In December 2018, ITS completed the second year of its Christmas Tree Project. Two days a week during the holiday season, ITS employees spent their lunch hours purchasing and decorating miniature Christmas trees. The decorated trees had small gifts added to their packaging—hats, socks, gloves, etc.

ITS donated 140 trees to the organizations serving senior citizens in parts of Brunswick and Pender counties, which distributed the trees and gifts to senior citizens receiving Meals on Wheels.

Senior citizens receiving the trees made comments about their gratitude:

- “My first Christmas tree in 8 years because I could not afford one.”
- “You are over the top, thank you!”
- “Thank you for the Christmas tree. It lifted my spirit.”
Coffee and Conversation

Beginning in 2017, ITS has been hosting “Coffee & Conversation” events as an opportunity to join in fellowship and learn about some of our colleagues’ exciting initiatives. Since then, we have opened these events to other IT professionals from across campus to share in the camaraderie. These events are intended to be introductory conversations in an effort to inform one another about other service areas’ endeavors.

Then, depending on the subject matter, ITS branched out to include complimentary events called “SmallTalk with SMEs” (Subject Matter Experts), which is a deeper dive of the original topics. Some examples of the recent topics have included ITS Project Scoring, Multi-Factor Authentication, Sharepoint Online and Teams, as well as SCCM. Also, we began hosting these events using Microsoft Teams and Zoom to improve accessibility and encourage involvement. Through the course of these events, we have been able to engage, inform and involve others in building better teams.

BBQ at Hugh McRae Park

On April 29, 2019, ITS staff met at Hugh McRae Park to share innovative insights followed by team building. The sunny weather was perfect for playing yard games like corn hole and Frisbee, flying kites and taking long walks. Others enjoyed the chance to congregate and talk with co-workers under the picnic shelter. All enjoyed a BBQ lunch and homemade desserts. The afternoon was a success and was enjoyed by all.

Chili & Crock-Pot Cookoff

Each year in the month of October, ITS staff are encouraged to bring their best chili or crock-pot dish to be enjoyed – and judged – by all at the Annual ITS Chili & Crock-pot Cookoff. Those who don’t bring an entry are encouraged to bring desserts or other dishes to share. It is a great opportunity for fellowship with co-workers.

Recent past winners are:
2018 – Carey Gibson
2017 – Patty Thompson
2016 – Cindy Kaiser
2015 – Patty Thompson
2014 – Tami Mansur

ITS Hallway Photo Project

The ITS Hallway Photo Project began this year and provides ITS staff members with the opportunity to decorate the second floor hallway in Hoggard Hall. Those interested submitted photographs that they took themselves for consideration. Photos were then reviewed by a committee of ITS staff.

To-date we have had dozens of photos submitted and have selected four to be printed on canvas and hung in Hoggard. Additional submissions are also displayed on a digital display on a revolving basis. Dr. Sharyne Miller has graciously sponsored the ITS Hallway Photo Project.

Photos from ITS staff hang in Hoggard.
The following comments were captured in TeamDynamix, our project request and ticketing system. They come from various faculty, staff and students in the campus community.

“I am very appreciative of the assistance and support I consistently receive from IT. They are patient, informed and always available. Thank you.”

“Thank you for having courteous and knowledgeable people working in your department! It is always a pleasure to get direct and fast help immediately!”

“If I ever need assistance again, you can forget about Geek Squad, I will be stopping by the TAC in the Randall Library. Thank you again for all the support and experience provided. I will be recommending your services to other Seahawks!”

“As a new and remote faculty, it was great to have a person respond to my needs. I don’t mind searching for answers but I needed help quickly and I needed to avoid needless rabbit holes. Thanks to all who gave assistance and helped my course get on track!”

“I have always received fast, friendly and exceptional service from the UNCW IT team.”

“I love the push-button in the classroom. Someone has always answered right away and walked me through my problem.”

“My over-the-phone experience with my TAC representative was great and immensely helpful. She kept working to find a solution until we got it resolved. I was very impressed with her patience, knowledge, and great attitude.”

“The service was excellent! Thank you for having the best IT service reps. It is always a pleasure to work with them.”

“Our reporting needs are always met in a timely manner and we enjoy working with the report team.”

“Just want to say that the tech team is so so good. I get great service... I think your shop is the most efficient thing on this campus if not in North Carolina, if not in the USA...”

“The professional attention, resources, specific information/visual directions, and quick response to this request and others are greatly appreciated! IT is a reliable and valued professional resource and service, helping me to be effective and efficient in my work.”

“The technician went way beyond expectations to resolve my issue. He was stellar.”

“I am very grateful for TAC! My technician was very kind and answered my questions. Knowing that TAC is available gives me a lot of comfort.”
Almost **17,000** unique devices connected to wireless Network over fall move-in weekend.

Security Tools blocked **351,000+** emails per day.

**Over 36 million hours** spent on wireless Network with 3.1 pedabytes of data transferred.

**325+** personal computer repairs by TAC Repairs.

**16,935** TAC Tickets.

**120+** applications managed.

**50+** student workers employed per semester.

Approximately **346** Knowledge Base articles.

**36** custom courses available in Skillport that cover a variety of topics.

**205** Software & Service requisitions in uShop vetted by ITS.

**30,065** total HTML page reads in Skillport.

**891** TAC chat sessions.

**82** Project Requests in project management office.

**1,447** courses migrated from BB to Canvas.
The University of North Carolina Wilmington, the state's coastal university, is dedicated to the integration of teaching and mentoring with research and service. Our commitment to student engagement, creative inquiry, critical thinking, thoughtful expression, and responsible citizenship is expressed in our baccalaureate and masters’ programs, as well as doctoral programs in areas of expertise that serve state needs. Our culture reflects our values of diversity and globalization, ethics and integrity, and excellence and innovation.