How are the students using devices in 2018?

- 83.5% use an iPad as a primary notetaking device
- 6% listed a laptop as a primary note taking device

(In 2017, 60% of students listed laptops as their primary notetaking device)

- ECHO360 is used to review unclear parts of the lecture
- Apple Pencil allows for annotation of notes, drawing of previously inaccessible content (math/statistical content)

How are faculty integrating technology into the curriculum?

- Case-based learning
- Problem-based learning
- Student presentations
- Socratic questioning (PollEverywhere, Socrative)

Case Base learning has been presented via
- Traditional paper case
- E-module
- EPIC
- Escape Room

How has the curriculum changed since technology integration?

- Video has been incorporated into the curriculum through Canvas and the iPads
- Self-assessment and feedback have been added as components of assignments previously accomplished through chat discussion boards
- Learning is beginning to be put in the hands of the students

What are the added benefits?

- Universal device eases strain of technology support
- Ability to pushout content to students quickly
- Offer 24/7 Apple Care Technical Support to students
Interactive E-Learning

The E-Learning Program at UNMC offers faculty and students the opportunity to create innovative, online modules blended with interactive classroom activities that maximize critical thinking. E-Learning is an integral part of the university’s strategic implementation of more interactive curricula utilizing technology to better fit the learning style of millennial students. By engaging learners through these interactive modules, we aim to increase their retention and higher order thinking, ideally leading to improved patient care.

**Personnel Support**
- Instructional Design and Instructional Technology support provided for all colleges. This includes:
  - design and consultation for curricular and non-curricular faculty projects
  - monthly onsite support at Lincoln COD and CON campuses
  - 0.5 FTE allocation to COP iPad initiative
  - support of Canvas conversion

**Key Contributions**
- **E-Gallery**: 186 online modules available anytime, anywhere
  - [unmc.edu/egallery](http://unmc.edu/egallery)
- **RFA’s**: 8 awarded cohorts funding projects, resources, and expertise for creation of digital curriculum
- **Lab**: PCs, software, audio booth, laptops, cameras, and tablets, available for checkout to create multimedia content
- **OLC**: Hosted OLC Collaborate June 2017 providing 70 UNMC faculty and staff professional development in online learning

**Looking Ahead**
- **SCORM Cloud**: Pilot in progress to collect more robust learner analytics
- **Canvas Catalog**: Pilot in progress to deliver online content to learners external to UNMC
- **Continuing Ed**: Working with Office of Continuing Ed to support online CE

5,717 students impacted
219 modules created
Learning Environments

- Manage 694 learning environment computers.
- Support hardware in over 300 spaces (current AVSCA has identified 303 spaces across 4 missions)

$1,000,000+ in design / estimation work across 30 unique projects 2017 / 2018

$300,000 completed in-house classroom / conference room installations 2018.

Capital Project Management for:
- College of Nursing/University Health Clinic – Lincoln
- Davis Global Center
- Wittson Hall/Heritage Center

Learning Environment Services Include:
- System Design/Installation
- Preventative Maintenance/Hardware Support
- Campus Master Plan
- Product Evaluation/Research and Design

2018 Projects (equipment valued $5,000.00 or more)

- 23 Projects
- $144,000 Estimated Savings from in-house installation

Networking / Wireless Upgrades

The planned network upgrades would include all other buildings UNMC didn’t pay for during the last round of the Digital Campus. This includes ESH, both DRC’s and numerous administration building (admin center, BSC, ARS, etc), and as it was previously, this includes switches, wireless APs, wiring, and any other closet work required. It also includes having UNMC pay for their portion of South Data Center network lifecycle.
Video Operations

The distance learning rooms on the UNMC campus are supported by the video operations classroom engineers and multi-media technicians.

Classroom Event Support

- 9-7665 – Dedicated Customer Event Support Line
- 11 Classtechs Supporting Campus Events
- Pre-Event Checkout
- Monday-Thursday / 6 am - 6 pm, Friday 6 am - 5pm
- Immediate Dispatch for Issue Resolution
- Remedy Ticketing System
- 300 Conference / Classrooms
- 150-200 Events per week

- 60 High Definition
- Ad-Hoc IP Recording
- IP Video Ports used to Support H.323 VideoConferencing

Telehealth

9-8090 Distance and Telehealth Support

Archiving

Livestreaming

- 4 Concurrent Streams
- Web/HTML5

Video Conferencing

- Standardization Across All Campus Locations (UNMC, UNL, UNO, UNK)
- Decommission of Multiple Applications: Webex, Join.me, Adobe Connect
- Legacy IP Support

1,000
Webinar Participants

100
Participants per Account

500
Participants per Large Events

50
New Accounts Added

600
Meetings Hosted

200,000
Meeting Minutes

sync.unmc.edu

www.unmc.edu/oce/
Examsoft

ExamSoft is a secure, computer-based testing software that enables students to take exams on their own devices.

Implementation Timeline

January 2017

- 88,000+ questions banked
- 2800 student users
- 2100 exams administered through Examsoft
- 3 colleges completing Examsoft implementation COM, COP, CAHP

August 2022

Impact

- Learning objectives / competencies, accreditation standards, etc. can be mapped to exam questions.
- ExamSoft can capture real-time student performance on exams, and this aggregate data can be used to determine how successful students are at mastering specific learning objectives.
- Exam outcomes data can be used in future strategic and curricular planning.
Nebraska National Guard visited iEXCEL to explore training opportunities.

CareerRockit hosted 3 events for high school-aged students interested in exploring health and IT careers.

### Notable Events

- **EON Reality VR/IA**
  - Launched June 2018
  - Diverse Backgrounds: Journalism, Psychology, Web Programming, Video Production, Computer Programming, Information Technology, Musical Production, Pharmacy, Education, Chemistry and Chemical Education
  - Education Range: High School Diploma - Pharm.D.
  - Desired Outcomes: Safety, Humanistic Programs, Educational Applications, Entrepreneurship, Game Design

### Visualization / Year End / July 1, 2017 - June 30, 2018

<table>
<thead>
<tr>
<th>Activity Category</th>
<th>Q4</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational Events</td>
<td>8</td>
<td>60</td>
</tr>
<tr>
<td>Government Tours</td>
<td>5</td>
<td>43</td>
</tr>
<tr>
<td>International Tours</td>
<td>12</td>
<td>30</td>
</tr>
<tr>
<td>Military Tours</td>
<td>2</td>
<td>21</td>
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<tr>
<td>Recruitment Events</td>
<td>0</td>
<td>28</td>
</tr>
<tr>
<td>Training</td>
<td>0</td>
<td>7</td>
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</tbody>
</table>

Other activity categories included philanthropic, industry, internal faculty and staff, and alumni.

### Visitors

<table>
<thead>
<tr>
<th></th>
<th>Q4</th>
<th>Total (2016-Present)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visitors</td>
<td>980</td>
<td>4,659</td>
</tr>
</tbody>
</table>

© 2018 iEXCEL
Sorrell Simulation Lab / Year-End / July 1, 2017 - June 30, 2018

- **750 Events**
- **15,898 Learners**
- **2,473 Hours**

**Categories**

<table>
<thead>
<tr>
<th>Category</th>
<th>Events</th>
<th>Learners</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Medicine</strong></td>
<td>316</td>
<td>8,443</td>
<td>1,003</td>
</tr>
<tr>
<td>M1, M2, M3 and M4 students</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Outside Users</strong></td>
<td>117</td>
<td>1,139</td>
<td>387</td>
</tr>
<tr>
<td>ATLS, ABLS, FLS and FES testing, ECMO Conference, College of St. Mary's PA program, Clarkson College NP program</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>NMC Employees</strong></td>
<td>50</td>
<td>903</td>
<td>142</td>
</tr>
<tr>
<td>MDs, Nurses and Respiratory Therapists</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Allied Health</strong></td>
<td>79</td>
<td>2,614</td>
<td>374</td>
</tr>
<tr>
<td>Physician Assistants, Physical Therapy, Medical Nutrition and Diagnostic Medicine Students</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Pharmacy</strong></td>
<td>40</td>
<td>1,084</td>
<td>141</td>
</tr>
<tr>
<td>Pharmacy and Pharmacy Tech students</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>GME</strong></td>
<td>148</td>
<td>1,715</td>
<td>426</td>
</tr>
<tr>
<td>Residents and Fellows</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Year-End Tour Information**

- **107 Tours**
- **1513 Visitors**

**Notable Events**

- COM new block curriculum incorporating medical simulation to first year students including POCUS, physical examination, and procedural skills
- Nebraska Medicine nursing staff participated in numerous simulation events including cardiac care, code drills, and critical care scenarios

“I enjoy simulating real life situations in a controlled environment”
-- TNMC staff nurse

*May include repeat learners attending a new event
ADVANCING THE DIGITAL CAMPUS

Note: FY is June 2018 - June 2019

Digital Commons Downloads

- 31% increase from 2017 to 2018

Citation Management Software

- RefWorks license supports 7,378 UNMC accounts.
- EndNote license supports 733 UNMC accounts.

D!BS Room Reservations

Study rooms reservations using our digital reservation system, D!BS (available online and via the app). Number of reservations and hours used.

E-books

- 209% increase from 2016 to 2017
- 36% increase 2017 to 2018

Instruction

Between Jan 1 2013 – Aug 31, 2018, librarians conducted 1,600 education sessions total, reaching a total of 37,849 people.

- UNMC Faculty: 262
- UNMC Staff (including house officers, residents): 307
- UNMC Students: 900
- Other UNMC: 81
- Visitors and general public: 258

10 digital literacy sessions taught in 2017

1,600 education sessions

37,849 people reached

https://www.unmc.edu/library/
January 2018
UNMC | SYNC launches, piloting five Student Legacy Groups; Building onboarding processes; All Students managed in database by UNMC IT.

September 2018
UNMC | SYNC enters publicity campaign with group and individual trainings. All Faculty/Staff added to UNMC | SYNC. Email Communications.

2019 and Beyond
UNMC | SYNC to upgrade from OrgSync to the Engage platform. All users will be maintained by UNMC IT. Work connections with UNO. Use UNMC | SYNC to onboard new students using Pathways. Student Senate weekly digest via SYNC.

August 2018
UNMC | SYNC debuts card swipe for the general UNMC community use at the Welcome Back BBQ. The open use of events and publicity begins. Debut announced in UNMC Today article.

November 2018
UNMC | SYNC continues to expand users. IT upgrade planning initiated. To date, 135 events have been logged in the system. Most events are taking place on campus by student groups.

UNMC | Sync Portal Registration Types
- Administrative (6.25%)
- Student (54.17%)
- Community (2.08%)
- College/Department (37.50%)

UNMC | Sync User Profiles by College
- College of Dentistry (4%)
- College of Public Health (9%)
- College of Pharmacy (13%)
- College of Allied Health (14%)
- College of Nursing (15%)
- Graduate Studies (16%)
- College of Medicine (27%)
- Munroe-Meyer Institute (2%)

7,514 Total Users
48 Active Portals
3,801 Involvement Hours
ADVANCING THE DIGITAL CAMPUS

Variety of digital resources used by and for Faculty Development and the Academy

Enhanced digital learning options across the NU system

Interactive live streaming events
for entire UNMC 500-mile campus, as well as UNK, UNL, and UNO

Enduring video capture
of over 84% of all Faculty Development sessions, recorded via Echo, IP video, and Zoom

Independent learning opportunities
via Blackboard, Canvas, iLearn Online, and ConnectED Portal (global resource)

Ongoing support and promotion of digital innovation

Digital collaboration
on local, regional, and national levels utilizing tools in Office 365 and video conferencing via Skype and Zoom

Social media
to promote events and disseminate digital learning resources

Twitter: Since joining Twitter in 2016, Faculty Development now has over 360 followers

Digital tracking
for event registration and sign-in

31% of all Faculty Development sessions comprise education in the digital world

1,060 faculty & staff registered for Faculty Development education in the digital world

55 presentations by academy members at education in the digital world

46 hours of enduring training provided on education in the digital world

84% of distance connectivity was utilized in all Faculty Development sessions

84
55 presentations
by academy members

The Digital Campus has encouraged instructors to create interactive learning experiences to guide students as they gain critical thinking skills.

Teresa (Teri) Hartman, MLS
Academy member since 2016
Associate Professor
McGoogan Library of Medicine
### Piloted 2017 | Implemented 2018

- Observational Assessments & Analytics
- Interprofessional Practice (TeamSTEPPS)
- Post Education Performance in the Clinical Learning Environment (CLE)
- Mock Codes
- Infection Control
- Pain Assessment
- Patient Experience
- Coaching – Manager to employee

### Fiscal Year 2019+

- Assess the CLE
- Resident Milestones
- IPE → IPP
- Education Deployment
- Micro learning
- CE & CME

### Implemented 2018

- **12,000** Licensed Learners
- Nebraska Medicine Employees, Providers, Students and Contractors
- **477** unique Events / Sessions completed
- **568** unique eLearning modules completed
- **166** unique Curriculums completed

### Fiscal Year 2019+

- One Corporate LMS (UNMC/Neb Med)
- Curation
- ecommerce
- Rural/Community