TECHNOLOGY USE FOR LEARNING
STUDENT SURVEY 2017 - 2018
RESEARCH PURPOSE

UNDERSTAND STUDENT USE OF TECHNOLOGY FOR LEARNING
RESEARCH QUESTIONS

STUDENT USE OF TECHNOLOGY

What learning technologies do George Mason University students use most frequently?

What learning technologies do George Mason University students value?

How effective are technologies in supporting learning?
KNOW OUR TEAM

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In October 2017, a survey was sent to a stratified representative sample of 10,928 George Mason University students. The response rate was 6% (N=622).

In this section, we explore the participants who represented the university as a whole.
RESEARCH PARTICIPANTS: ACADEMIC YEAR

- Freshman: 18%
- Sophomore: 18%
- Junior: 18%
- Senior: 26%
- Master's: 2%
- Professional: 10%
- Doctoral: 98
TECHNOLOGY USED FOR LEARNING

IN THIS SECTION
What learning technologies do George Mason University students use most frequently?

What learning technologies do George Mason University students value?
WHAT HARDWARE DO YOU USE TO LEARN?

- 98% | Laptop
- 72% | Smartphone
- 33% | Desktop
- 26% | Tablet
- 13% | Other
HOW IMPORTANT ARE EACH OF THE FOLLOWING DEVICES FOR YOUR LEARNING?

- **Laptop**: 97% Important/Very important
- **Smartphone**: 64% Important/Very important, 21% Moderately important, 15% Not at all important/Not very important
- **Desktop**: 55% Important/Very important, 17% Moderately important, 28% Not at all important/Not very important
- **Tablet**: 31% Important/Very important, 19% Moderately important, 50% Not at all important/Not very important
- **Streaming Devices**: 8% Important/Very important, 13% Moderately important, 80% Not at all important/Not very important
- **Wearable Tech**: 6% Important/Very important, 10% Moderately important, 85% Not at all important/Not very important
WHAT SOFTWARE DO YOU USE TO LEARN?

- Search Engines: 99%
- File Sharing Tools: 90%
- Digital Libraries: 88%
- Videos: 85%
- Wikis: 73%
- Learning Management Systems: 65%
- News Sites: 63%
- Texting And Chatting Tools: 52%
- Web Conferencing Tools: 44%
- eBooks: 42%
- Social Media Tools: 40%
- Screen Capturing Tools: 35%
- Mobile Apps: 34%
- Design Tools: 25%
- Blogs: 22%
- MOOCs: 17%
- Podcasts: 15%
- Other Tools: 1%
### How Important Are Each of the Following Digital Tools for Learning?

<table>
<thead>
<tr>
<th>Digital Tools</th>
<th>Important/Very Important</th>
<th>Moderately Important</th>
<th>Not at all Important/Not Very Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaboration Tools</td>
<td>82%</td>
<td>12%</td>
<td>6%</td>
</tr>
<tr>
<td>Progress Tracking Tools</td>
<td>62%</td>
<td>19%</td>
<td>19%</td>
</tr>
<tr>
<td>Visualization Tools</td>
<td>58%</td>
<td>22%</td>
<td>20%</td>
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<tr>
<td>Experience and Resource Sharing Tools</td>
<td>56%</td>
<td>21%</td>
<td>23%</td>
</tr>
<tr>
<td>Resource Management &amp; Organizational Tools</td>
<td>55%</td>
<td>20%</td>
<td>25%</td>
</tr>
<tr>
<td>Design Tools</td>
<td>50%</td>
<td>20%</td>
<td>30%</td>
</tr>
</tbody>
</table>
PERCEPTIONS OF TECHNOLOGY EFFECTIVENESS FOR LEARNING

IN THIS SECTION
Previous research indicated that students were interested in technology that facilitated Discussion, Collaboration, and Interaction; Experiential Learning; Personalization; and Organization, Planning, and Resource Management.
TECHNOLOGY USED FOR LEARNING HAS ENABLED ME TO...

- Discussion, Collaboration & Interaction (DCI - 9 items)
- Experiential Learning (EL - 8 items)
- Personalization (P - 8 items)
- Organization, Planning, and Resource Management (OPRM - 10 items)
DISCUSSION/COLLABORATION/INTERACTION

Technology used for my learning has enabled me to...

- Communicate and collaborate on learning tasks (86%)
- Ask others questions associated with my learning
- Receive feedback about my learning performance
- Feel connected to experts
- Discuss my learning with others
- Feel connected to other learners
- Explain my thought process to others
- Meet learners with similar interests* (UG)
- Develop relationships outside of my immediate community (50%)
Technology used for my learning has enabled me to...

- Work with others on a project (88%)
- Build relevant skills that are useful outside the classroom
- Connect formal course materials and real-world experiences
- Reflect on how to improve a project in the future
- Complete tangible projects that could be highlighted in a portfolio or resume
- Assume new roles and try new skills
- Experiment, iterate, and test different solutions to real-world problems
- Feel confident about tackling real-world tasks (68%)
Technology used for my learning has enabled me to...

- Learn anytime, anywhere (91%)
- Access learning materials that interest me
- Learn at my own pace
- Select how learning materials are presented to me (e.g., video or text)
- Customize the user interface or visual display to suit my learning needs* (UG)
- Access learning materials based on my previous web activity
- Reduce obstacles to learning when compared to a formal setting
- Minimize distractions (31%)* (G)
RESULTS

ORGANIZATIONAL/PLANNING/RESOURCE MANAGEMENT

Average Level of Agreement (OPRM)

- Strongly Disagree/Disagree: 7%
- Neutral: 17%
- Agree/Strongly Agree: 76%

Technology used for my learning has enabled me to...

- Document my work and projects (92%)
- Organize my learning resources
- Aggregate all of my information in one place
- Monitor my progress towards achieving a learning goal* (UG)
- Evaluate my learning performance* (UG)
- Prioritize learning tasks
- Determine strategies to help me complete learning tasks* (UG)
- Reflect on my learning performance* (UG)
- Set learning goals for myself
- Manage my time (65%)
IMPLICATIONS
Laptops were reported as the most valued devices for learning (97%).
DESIGNING LEARNING EXPERIENCES

- Fewer learners are using desktops suggesting the need for “on the go” resources
- Only 34% of participants reported using mobile apps for their learning
- Based on this feedback, is it better to leverage existing mobile apps for learning instead of developing new ones?

Interestingly... Only 34% of participants reported using mobile apps for learning.
The top five types of software used for learning suggest that:

- Learners are taking self-directed approaches to their learning using **information seeking tools**
- Learners may need support analyzing the quality of the sources they find
- **Should we rethink the LMS? Learning Experience Platforms? Program Experience Platforms?**
New learning tech segments have arrived

1. Learning Experience Platforms
   - Degreed, EdCast, PathGather
   - Jam, Fuse, Porchπlo, Cornerstone
   - Vulasis, Tridbridge, ...

2. Program Delivery Platforms
   - Intrepid (Vitsource), NovoEd
   - EdX, Eversite, OpenEdX, Blackboard
   - Instructure, ...

   - Axonify, Areial, Growo, Qstream, Practice
   - Rehearsal, Jubil, Westall, Minditicle
   - Trivie, Echo, EduMe, etc.

4. Assessment, VR, Development Tools
   - Video Authoring, Intelligent assessment, spaced learning
   - Gaming, virtual reality, collaboration, simulations, ...

5. Content Libraries
   - Udacity, Coursera, EdX, Udemy, Pluralsight
   - SkillSoft, General Assembly, O’Reilly, CrossKnowledge, hundreds of others

6. LMS and Content Platforms
   - Traditional: Cornerstone, Saba, SuccessFactors, SumTotal
   - Modernized: Workday, Oracle, SAP, Bridge, D2L, Limes, Intellium, Docebo, others

7. Learning Record Store
   - Grassblade, Learning Locker, Sattbox, Yet, Watershed

Source: Bersin by Deloitte, Deloitte Consulting LLP
Collaboration tools were perceived as the most important to learners however, technology's effectiveness in supporting DCI was ranked at 69% (“Agree” or “Strongly Agree”) suggesting high expectations.

Area for future research?
Graduate and Undergraduates had different experiences with technology effectiveness.

Undergraduates tended to feel that technology supported them better in their learning than graduates.
New Learning Landscape:

- **Untethered, on-demand, collaborative, empowered**
- Deliver a more personalized and data-driven learning experience using seamless technologies similar to consumer-like technologies (natural)
- Distributed Learning Platforms
WHAT NEXT?
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