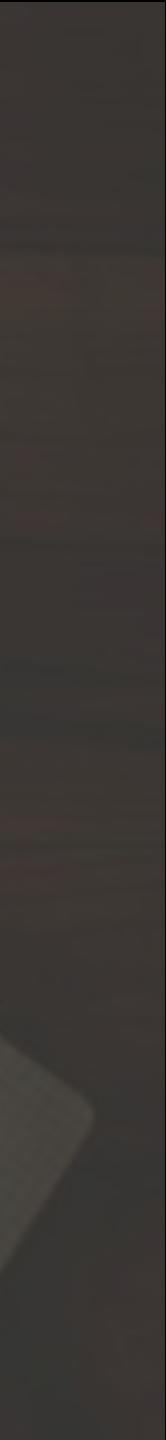
TECHNOLOGY S E FOR E E A RNING

STUDENT SURVEY 2017 - 2018



RESEARCH PURPOSE

UNDERSTAND STUDENT USE OF TECHNOLOGY FOR LEARNING



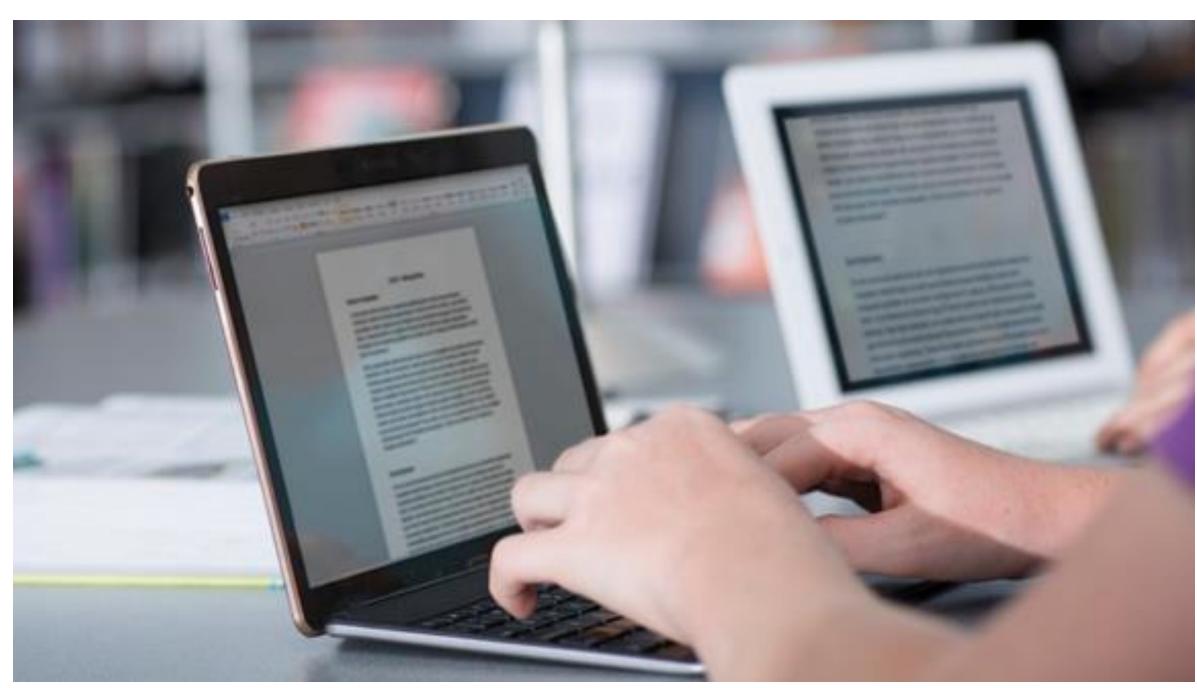
RESEARCH QUESTIONS

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

NADA DABBAGH DIRECTOR AND PROFESSOR OF LEARNING

TECHNOLOGIES DESIGN RESEARCH

ZHICHENG ZHANG

ASSOCIATE DIRECTOR, OFFICE OF INSTITUTIONAL RESEARCH AND EFFECTIVENESS







HELENFAKE PHD CANDIDATE AND USER EXPERIENCE DESIGNER AND RESEARCHER



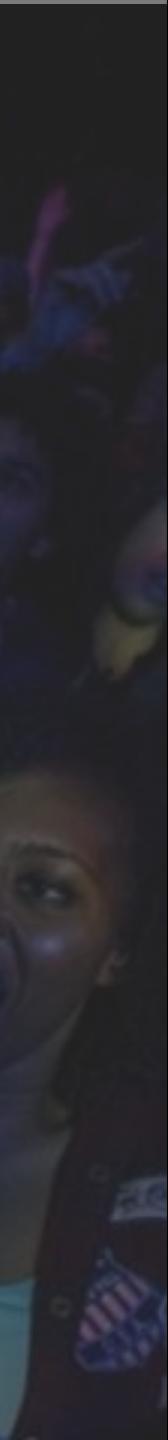
THULASIKUMAR

ASSOCIATE PROVOST, OFFICE OF INSTITUTIONAL RESEARCH AND EFFECTIVENESS

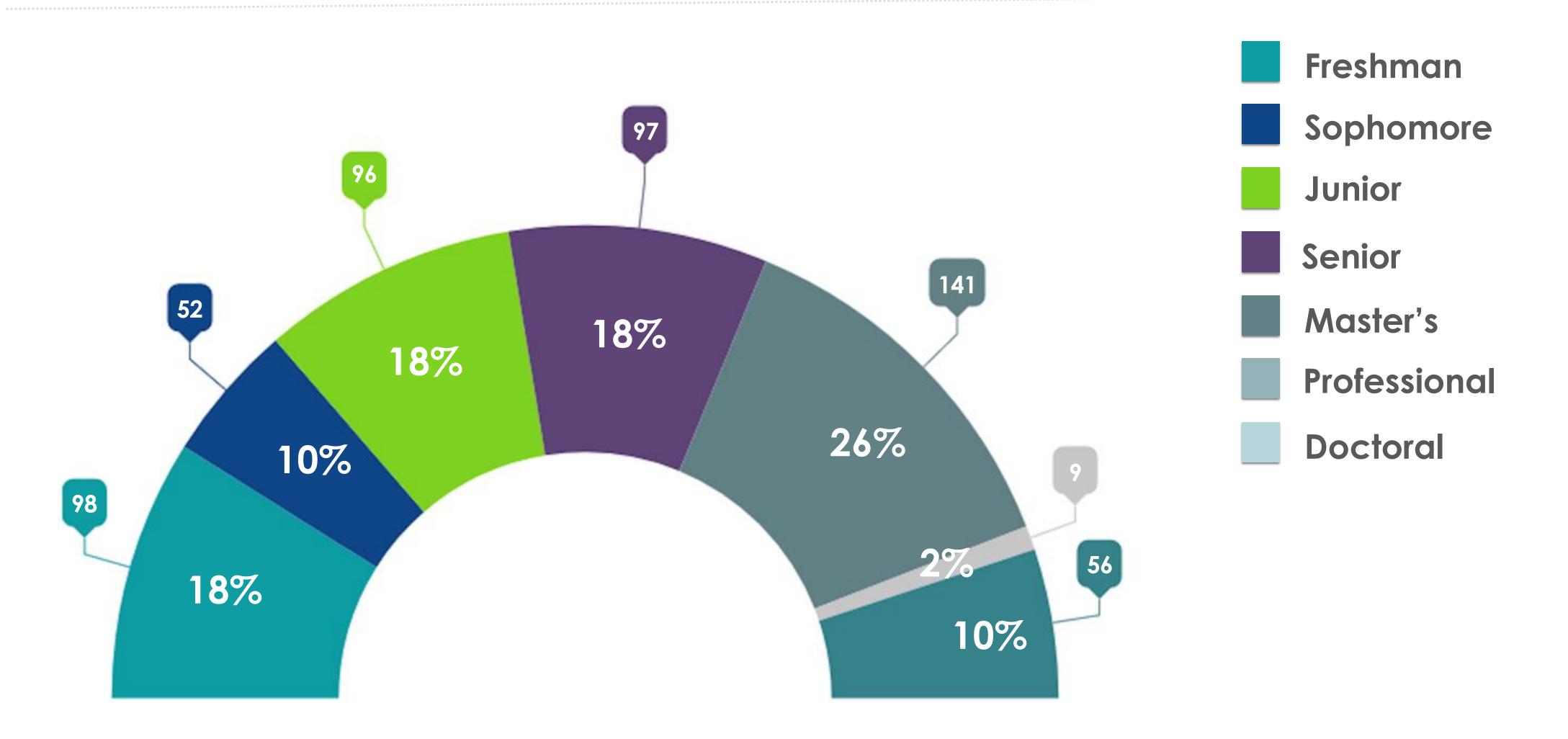
SURVEY PARTICIPANTS

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. N=622 out of a sample of 10,928 *95% reliability (Q5, Q7 - Q11)



RESEARCH PARTICIPANTS: ACADEMIC YEAR





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?



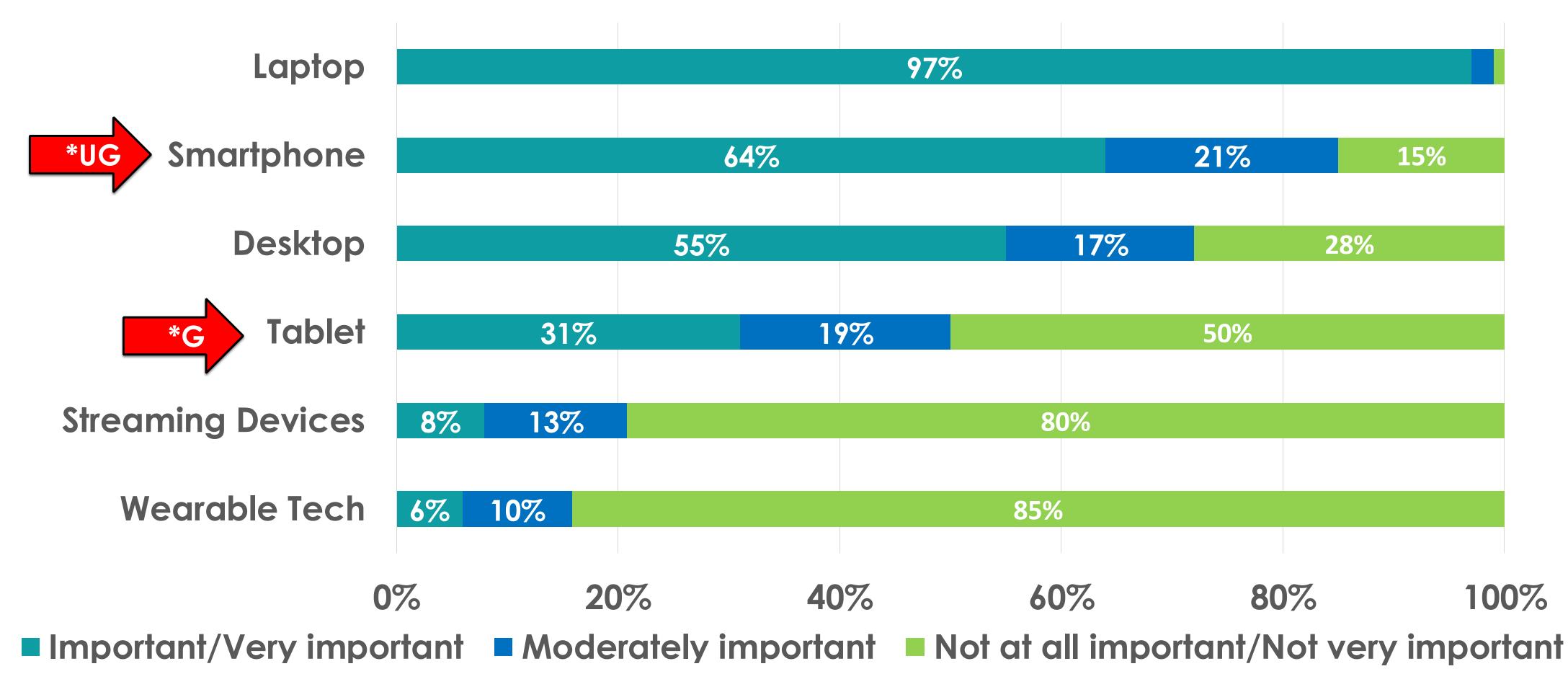


WHAT HARDWAR DO YOU USE TO **FEABN**

98% | Laptop 72% | Smartphone 33% | Desktop 26% | Tablet 13% Other



HOW IMPORTANT ARE EACH OF THE FOLLOWING DEVICES FOR YOUR LEARNING?





WHAT SOFTWARE DO YOU USE TO LEARN?

	99 5
	90% Fi
	88% Dig
	85% Vide
	73% Wikis
	65% Learning Man
	63% News Sites
	52% Texting And Chatting
	44% Web Conferencing Tool
	42% eBooks
	40% Social Media Tools
	35% Screen Capturing Tools
	34% Mobile Apps
	25% Design Tools
	22% Blogs
	17% MOOCs
	15% Podcasts
1%	Other Tools

- **Search Engines** ile Sharing Tools
- gital Libraries
- eos
- agement Systems
- g Tools
- S



HOW IMPORTANT ARE EACH OF THE FOLLOWING DIGITAL TOOLS FOR LEARNING?

Collaboration Tools

Progress Tracking Tools

Visualization Tools

Experience and Resource Sharing Tools

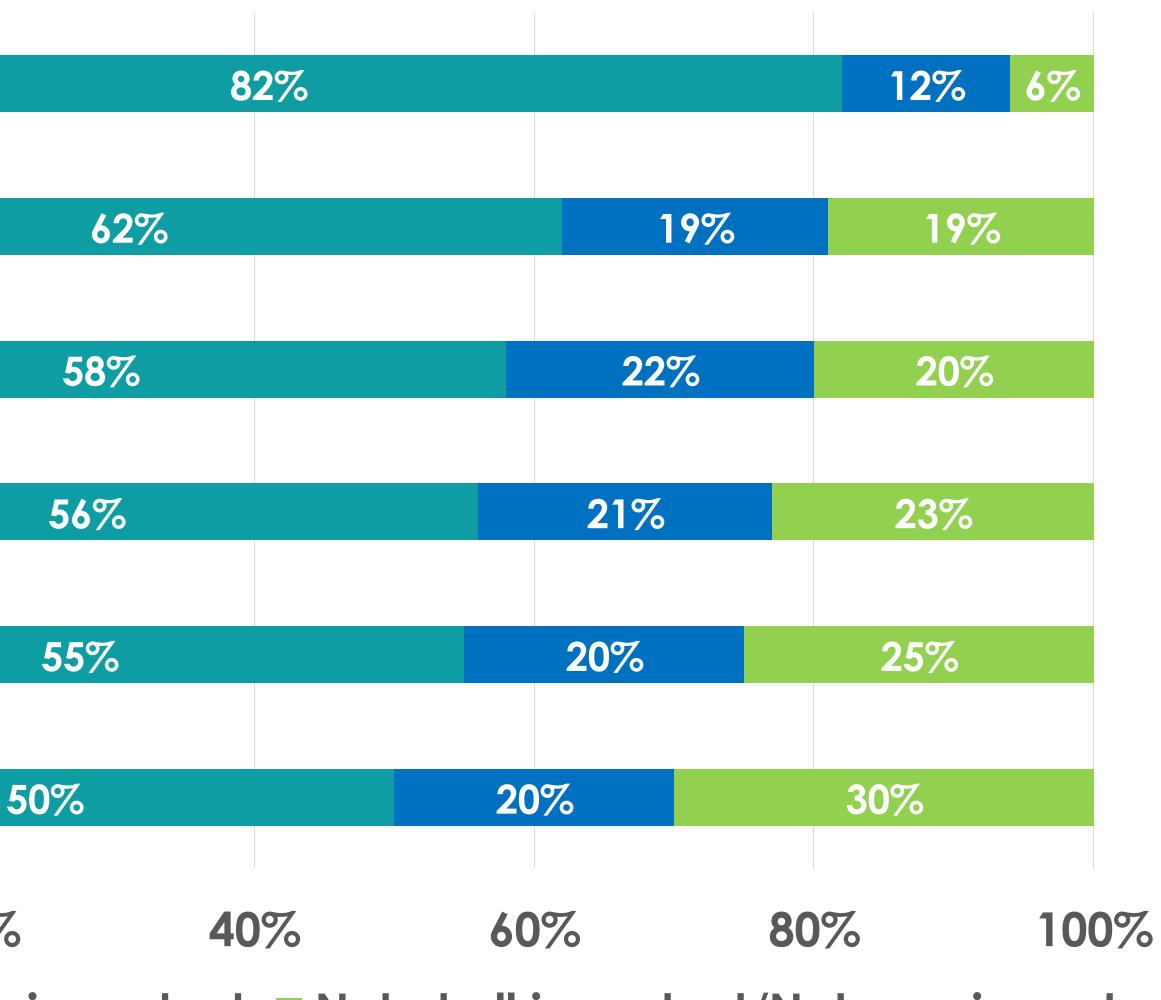
Resource Management & Organizational Tools

Design Tools

0%

20%

Important/Very important Moderately important Not at all important/Not very important



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.



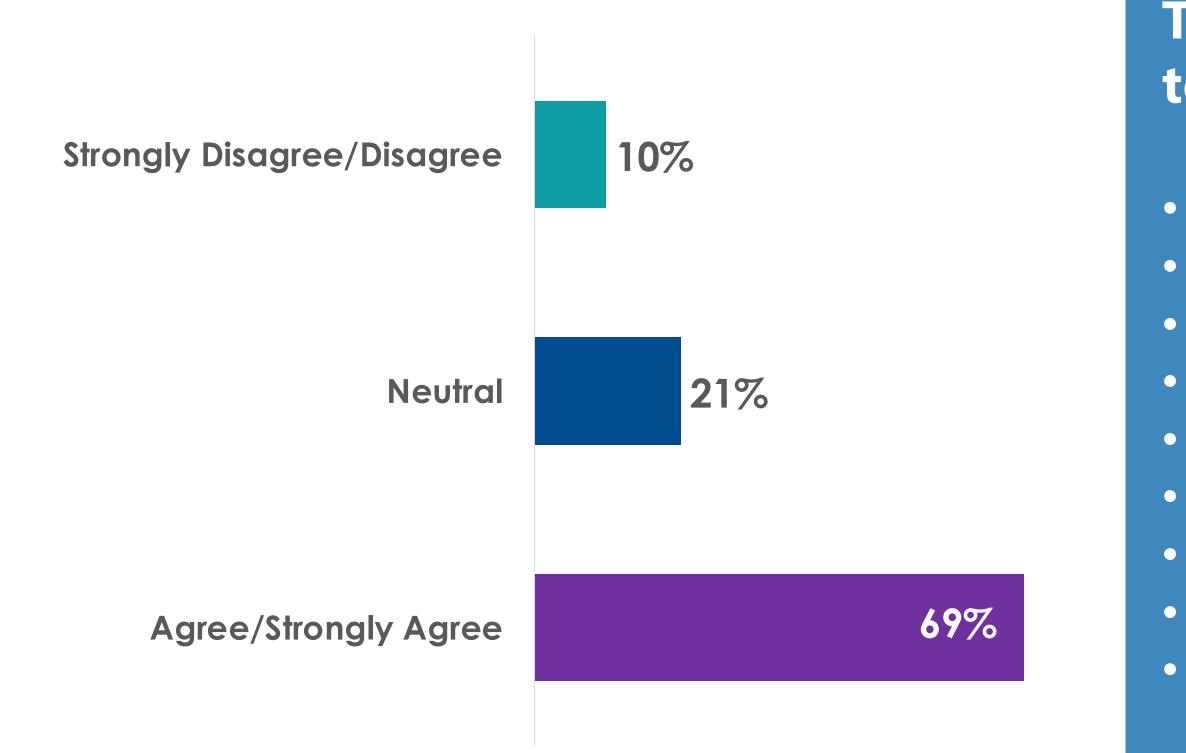
TECHNOLOGY USED FOR LEARNING HAS ENABLED ME TO...

Discussion, Collaboration & Interaction (DCI - 9 items) Experiential Learning (EL - 8 items)

Personalization (P - 8 items)

Organization, Planning, and Resource Management (OPRM - 10 items)

Average Level of Agreement (DCI)



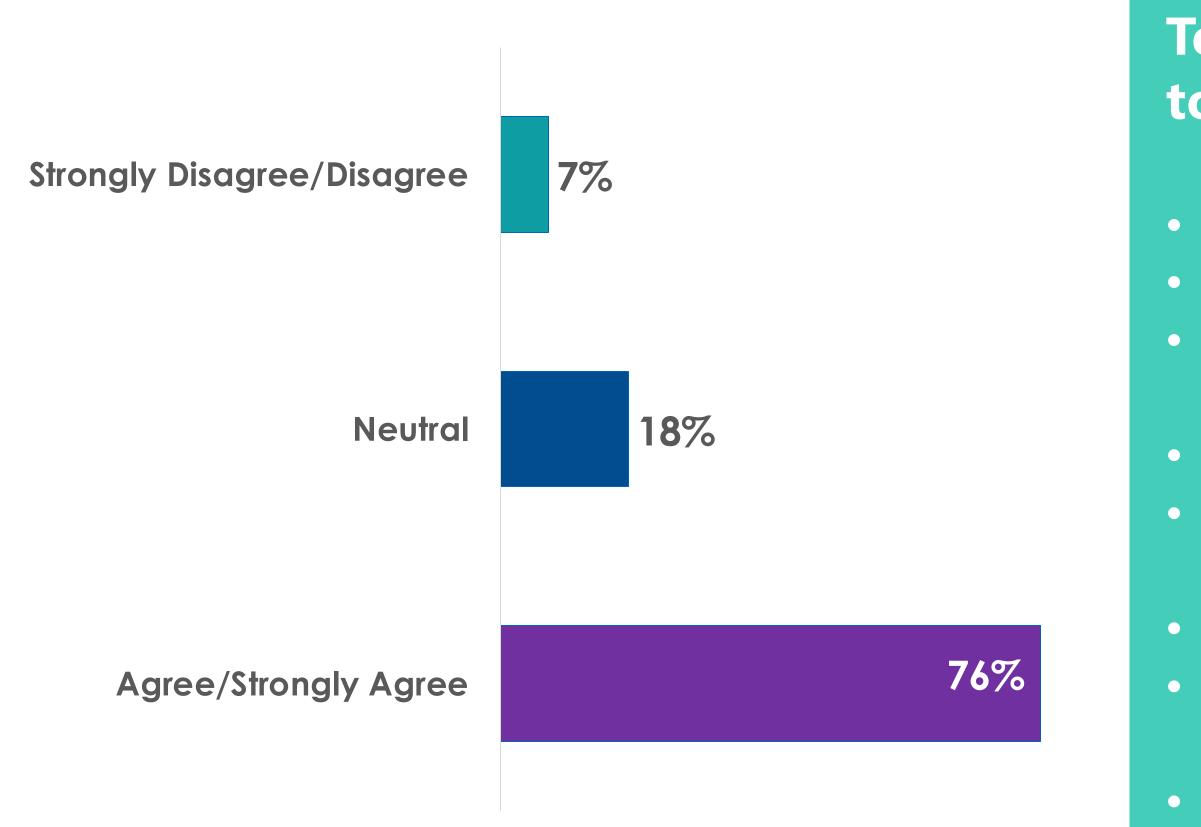
DISCUSSION/COLLABORATION/ INTERACTION

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%)



Average Level of Agreement (EL)



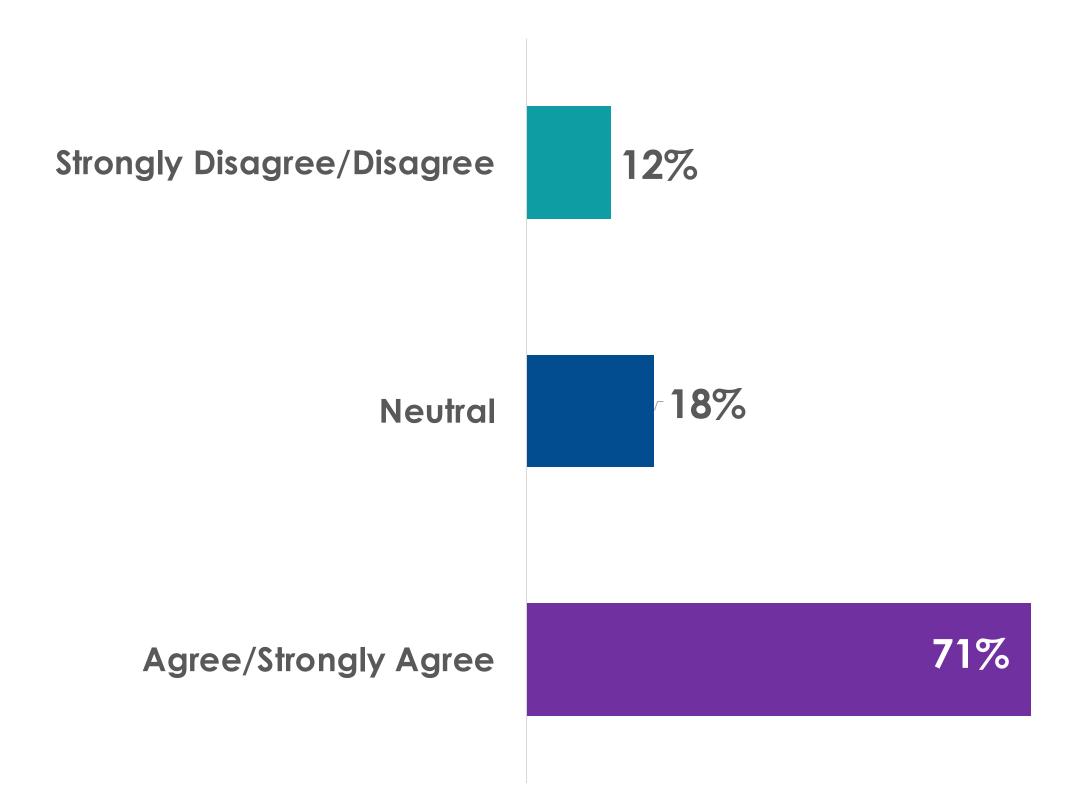
EXPERIENTIAL LEARNING

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%)



Average Level of Agreement (P)



PERSONALIZATION

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

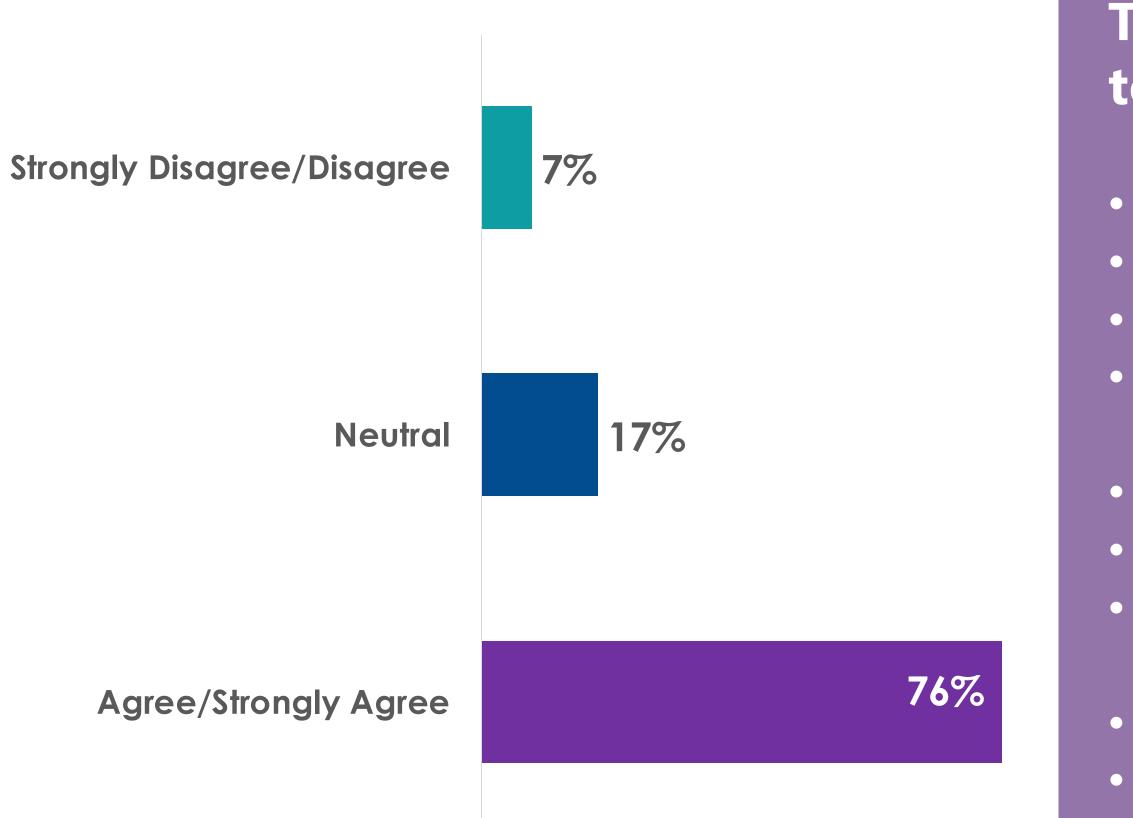
- Learn anytime, anywhere (91%)
- Access learning materials that interest me
- Learn at my own pace
- Select how learning materials are presented to me (e.g., video or text)
- Customize the user interface or visual display to suit my learning needs* (UG)
- Access learning materials based on my previous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

Minimize distractions (31%)* (G)





Average Level of Agreement (OPRM)



ORGANIZATIONAL/PLANNING/ RESOURCE MANAGEMENT

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%)

acer

X X X X X

V A



participants felt

important/very

important to their

smartphones

learning

64% Of

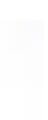
Classes

- Una

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

setting and the

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
- Should we rethink the LMS? Learning Experience Platforms? Program **Experience Platforms?**

99% Search Engines **90%** File Sharing Tools 88% Digital Libraries 85% Videos

Learners may need support analyzing the quality of the sources they find

New learning tech segments have arrived

Learning Experience Platforms

Degreed, EdCast, PathGather Jam, Fuse, Percipio, Cornerstone, Valamis, Tribridge,



Intrepid (Vitalsource), NovoEd EdX, Everwise, OpenEdX, Blackboard, Instructure,

Assessment, VR, Development Tools

Video Authoring, Intelligent assessment, spaced learning, gaming, virtual reality, collaboration, simulations,

(6)

(4)

LMS and Content Platforms

Traditional: Cornerstone, Saba, SuccessFactors, SumTotal Modernized: Workday, Oracle, SAP, Bridge, D2L, Litmos, Intellum, Docebo, others

Source: Bersin by Deloitte, Deloitte Consulting LLP

Program Delivery Platforms

(3)

Micro-Learning Platforms (adaptive)

Axonify, Area9, Grovo, Qstream, Practice, Rehearsal, Jubi, Wisetail, Mindtickle, Trivie Echo, EduMe, etc.

5)

Content Libraries

Udacity, Coursera, EdX, Udemy, Pluralsight, SkillSoft, General Assembly, O-Reilly, CrossKnowledge, hundreds of others

Learning Record Store

GrassBlade, Learning Locker, Saltbox, Yet, Watershed





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 ullet
- •
- Distributed Learning Platforms ullet

Deliver a more personalized and data-driven learning experience using seamless technologies similar to consumer-like technologies (natural)

WHAT NEXT?



TECHNOLOGY US EFOR LEARNING

STUDENT SURVEY 2017 - 2018.



