De Anza College

TECHNOLOGY PLAN
2021–2024

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DE ANZA COLLEGE MISSION STATEMENT

De Anza College provides an academically rich, multicultural learning environment that challenges students of every background to develop their intellect, character and abilities; to realize their goals; and to be socially responsible leaders in their communities, the nation and the world. The college engages students in creative work that demonstrates the knowledge, skills and attitudes contained within the college's Institutional Core Competencies:

- Communication and expression
- Information literacy
- Physical/mental wellness and personal responsibility
- Civic capacity for global, cultural, social and environmental justice
- Critical thinking

COMMITTEE MEMBERS

Stephanie Anderson
Instructor, Communication Studies
At Large

Ray Brennan
Instructor, English
Faculty Association

Sandy Cardoza
Senior Library Technician
Equity Action Committee

Juan Diaz
Web Support Technician
Web Team

Brandon Gainer
Instructor, Communications Studies
At Large

Nazy Galoyan
Dean, Enrollment Services
At Large

David Garrido
Instructional Designer
Online Education/Staff Technology Expert

Pam Grey
Vice President, Administrative Services
Administrative Planning and Budget Team/
Educational Technology Services Project
Scheduling Committee

Alex Harrell (co-chair)
Senior Web Coordinator
Staff Technology Expert

Shagundeep Kaur
Instructor, Communication Studies
At Large

Sridevi Lakshmanan
Instructor, Disability Support Services
Accessibility Expert

Sharon Luciw
Director, Networks and Client Services
Educational Technology Services

Joe Moreau
Vice Chancellor, Technology
Educational Technology Services

Cheryl Owiesny
Head Women's Soccer Coach
At Large

Mary Pape (co-chair)
Department Chair,
Computer Information Systems
Academic Senate

Lorrie Ranck
Associate Vice President, Instruction
Instructional Planning and Budget Team/
Online Education

Jerry Rosenberg
Dean, Physical Sciences, Mathematics and
Engineering
At Large

Dennis Shannakian
Office Coordinator, College Life
Classified Senate

Marisa Spatafore (co-chair)
Associate Vice President, Communications
and External Relations
Senior Staff

Kishore Srinivas
Senator
De Anza Student Government

[message to come]

Lloyd A. Holmes, President

INTRODUCTION AND OVERVIEW

An Equity Focus for College Planning

Equity was a guiding principle for the development of this Technology Plan, in keeping with the equity framework and goals that are outlined in De Anza's Educational Master Plan and inherent in all college planning efforts.

As an important element of this equity focus, the Technology Committee recognizes that the cost of technology can be a significant barrier to student access and success. This can be addressed in part by providing access to computer labs and open educational resources in place of costly textbooks, and through the thoughtful purchase and deployment of technology tools in classrooms and learning communities. Providing technology training to faculty and staff members, and engaging employees in the training process, is also an important factor in supporting instruction and services for student success.

The three-year span of the Technology Plan reflects an understanding that technology needs and capabilities are constantly changing and require regular review to offer the most effective services to students, faculty members and classified professionals. The period also allows the campus to regularly assess the implications of the goals and adjust future planning needs to meet changing technology needs and trends.

De Anza's Technology Plan, together with that of Foothill College, will inform the development of the Foothill-De Anza district Technology Plan, which will respond to the goals and needs of both colleges in providing instruction and services to our students.

De Anza has long supported equity planning, aimed at reducing achievement gaps, in academic divisions. The equity focus in the Educational Master Plan also encouraged the college community to infuse equity into all planning and activities, including the development of the Facilities Master Plan. State mandates for Student Equity and Achievement programs and funding, which include the development of college Equity Plans, have further underscored the importance of equity efforts. Ultimately, all college planning documents – including this one – share the common goal of student equity.

Summary of Accomplishments: Technology Plan 2017-2020

Goal 1: Support ubiquitous, agile technology across the campus community

Objective	Results
Promote the consolidation of technology functions to yield economies of scale and/or foster better communication	Implemented the following • Syllabus repository • eLumen Curriculum/SLO/Program Review • Banner services in mobile App • Updated MyPortal • New website • Office 365 • New governance pages • Chatbot
Assist with the transition of the course management system from Catalyst to Canvas	• Completed transition • Providing ongoing training in Canvas and Online Ed topics • Online U
Create a map for technology support	• Completed • Ongoing updates

Goal 2: Teaching, learning and student engagement

Objective	Results
Collaborate with Academic Senate, other partners on the development of Open Educational Resources (OER)	• AS committee created to foster OER • Low-cost/no-cost designation added in Banner and website schedules
Assist as affordable and feasible in the organized provision of tablets and similar devices in classrooms and programs	• Tablets distributed • In use by divisions • Used in "stretch" classes
Guide the continual growth of course management system functionality to foster meaningful student-instructor and student-to-student communication.	• OE holds many trainings/open-hours to facilitate this. • Online training materials created • Part of Online U cohort trainings
Collaborate with its accessibility expert and Disability Support Programs and Services (DSPS) to continually evaluate accessibility and Americans with Disabilities Act (ADA) compliance across the website, learning management system and student information systems	• Continual • Part of web editor training • Web pages can't be published unless they meet certain accessibility requirements • Automated WCAG scanning and reporting tools for website

Improve access to student and academic services via technology	• Mobile App • Zoom counseling sessions • Investigating other technologies (Starfish) • Parchment • New website • Chatbot

Goal 3: Deeper research into student success and subsequent responses

Objective	Results
Collect and analyze data to guide the enrichment of the student experience through technology	• Canvas tickets tracked, remote learning/COVID-19 surveys, tech survey • Website feedback gathered • Inquiry tool • Email open/click rates • Social media ad analytics • DSPS Survey
Research and work to implement device-independent technologies that improve student access and equity	• Mobile app • New website • Canvas • New MyPortal

Goal 4: Professional development

Objective	Results
Cultivate a culture in which technology training is understood to beneficial for all employees	• Made priority by SS and Deans • Ongoing
Evaluate technology training needs and priorities	• Ongoing

Technology Needs in a Remote Environment

The global COVID-19 pandemic brought technology needs to the forefront, providing an object lesson in the critical role that personal computers and online tools play in the delivery of instruction and services, while students and employees were required to shelter at home.

To meet health and safety requirements, De Anza College shifted all winter quarter classes to remote formats as of March 16, 2020 – one week before finals. Previously, about 20% of De Anza class sections were taught online. That figure rose to nearly 100% for spring and subsequent quarters.

By the time spring classes began on April 13, more than 600 faculty and staff members had taken part in online trainings provided by the Online Education Center and Office of Professional Development – including training for Canvas certification, workshops on specific Canvas tools, training in the use of Zoom and a variety of online labs and drop-in sessions.

The college also surveyed all students, faculty members and classified professionals about their access to technology and other needs. The survey included a direct channel for students to request assistance, and the college responded to more than 1,000 students who indicated specific needs. As a second channel, the Financial Aid Office developed a website form for students to request emergency aid, including cash grants for purchasing computers or other needed tools.

By mid-June, the Financial Aid Office had distributed almost $2 million in financial assistance to students who were affected by the pandemic and the shift to online instruction. This included Bookstore credits and cash grants to make it possible for students to afford computers, mobile Wi-Fi hotspots and other tools. The assistance was funded by the CARES Act and other sources, including Financial Aid contingency funds, Promise grants and Supplemental Educational Opportunity Grants.

De Anza also supported students with technology tips, training, resources and referrals, made available through webpages created by the Online Education Center and the Office of Communications. The Online Spring, Summer, Fall and Winter webpages shared information about discounts available for students purchasing computers and other technology products, including Office 365 software, through CollegeBuys.org and other vendors.

In a further use of online technology to support students, the Office of Communications added a "Quick Help" button on the college website. Staff members answered almost 5,000 questions from students before the button was replaced in July 2020 with "Chat Cat," an automated service that provides online answers from a continuously updated database.

The Library provided tech support via live chat and email, to assist students with using Canvas, Zoom and other online tools. The Student Success Center retrained its student employees to provide peer tutoring online. All Student Services offices shifted to online service, with many offering workshops, one-on-one meetings and "virtual office hours" on Zoom.

Technology Plan Survey Summary

To better understand the technology needs and challenges of students and college employees, the Technology Committee administered a survey in December 2020. The survey was sent to 6,000 students and to all faculty members, classified professionals and administrators. Results were received from almost 500 respondents, including 263 students.

The survey included questions about hardware and software usage and needs; access to reliable internet service, online materials and tech support; accessibility and ADA compliance; student feelings about appearing on web camera during online classes; the effectiveness of Canvas and other learning platforms; and communication between students and instructors as well as the college.

Key takeaways include

- **Student access:** Students need capable devices for online study, reliable internet, study space and easy access to online materials and Library or campus resources
- **Upgraded tech:** Faculty members, classified professionals and administrators would like a shorter refresh cycle for technology – providing newer devices and software, and allowing them to keep pace with industry standards
- **Training:** Faculty members, classified professionals and administrators need access to robust training on many topics and technologies, to enhance their use of technology both in remote learning and in the classroom
- **Campus upgrades:** The campus Wi-Fi network needs enhancement and coverage expansion. Classrooms need to be modernized and made capable of delivering an excellent experience, both remotely and in person.

Survey Excerpts
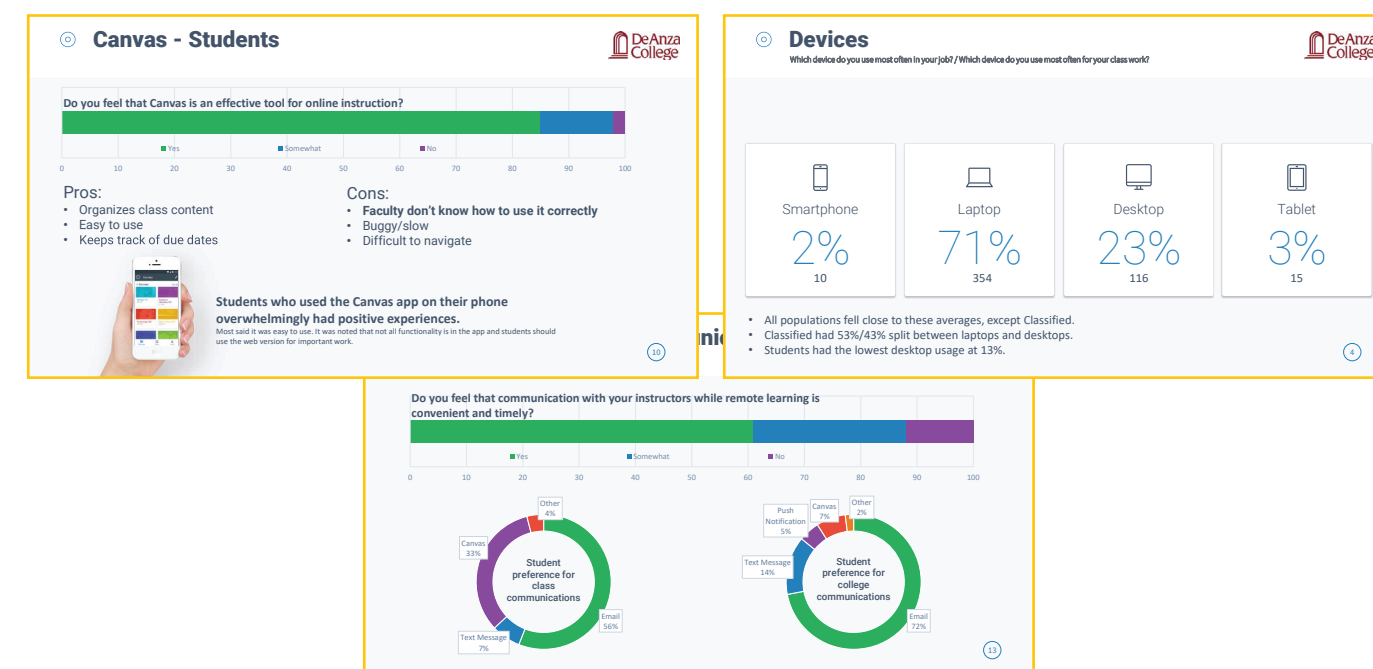
College and District Roles and Accreditation Standards

At the college level, De Anza's Technology Committee advises on technology proposals and training needs in support of equity and student success. The committee serves as the clearinghouse for technology-related projects and initiatives, disseminating information through representative, expert membership, and serving as both the technology planning and relevant accreditation committees.

The Technology Committee also serves as an advisory group to College Council. Committee responsibilities include

- Developing the college Technology Plan
- Serving as the Accreditation Standard III.C Subcommittee
- Advising and providing feedback on proposed technology projects, while centralizing awareness of planning and budget team actions
- Prioritizing implementation of bond measure technology projects for the college – through a subcommittee, the ETS Project Scheduling Group
- Providing a venue for the centralizing of all technology information, including regular report-outs regarding the district's Educational Technology Advisory Committee, the Banner Student and Core committees, other advisory groups and tech projects

At the district level, the Educational Technology Services (ETS) office of the Foothill-De Anza Community College District contributes to student success through its provision of critical technology infrastructure. Interrelated and discrete technology responsibilities of the district

and college are represented in the adapted excerpt of the district functional map for Accreditation Standard III: Technology Resources, as set by the Accrediting Commission for Community and Junior Colleges (ACCJC).

Functional Map: Accreditation Standard III

ACCJC Standard III		College	District
III.C.1	Technology services, professional support, facilities, hardware and software are appropriate and adequate to support the institution's management and operational functions, academic programs, teaching and learning, and support services.	Shared	Shared
III.C.2	The institution continuously plans for, updates and replaces technology to ensure its technological infrastructure, quality and capacity are adequate to support its mission, operations, programs and services.	Shared	Shared
III.C.3	The institution assures that technology resources at all locations where it offers courses, programs and services are implemented and maintained to assure reliable access, safety and security.	Secondary	Primary
III.C.4	The institution provides appropriate instruction and support for faculty, staff, students and administrators, in the effective use of technology and technology systems related to its programs, services and institutional operations.	Primary	Primary
III.C.5	The institution has policies and procedures that guide the appropriate use of technology in the teaching and learning processes.	Shared	Shared

TECHNOLOGY PLAN 2021-2024: THREE-YEAR GOALS

Goal 1: Increase Overall Student Access to Technology for Learning and Services

Includes but not limited to the provision of laptops for students, and other devices as necessary; **software and software as a service (SAAS)** as appropriate, both required and that would enhance the student experience; continuous technical improvement of c**ommunications resources** including the website, app and portal; and **classroom equipment** to support student learning and engagement in **evolving modalities**, with classroom needs documented through updated classroom standards, program review and the Facilities Condition Assessment

Goal 2: Increase and Enhance Faculty and Staff Professional Development and Training

Includes but not limited to **robust training and related communication** about the trainings based on faculty and classified professional feedback, especially to holistically improve online pedagogy and pedagogy in the use of technology tools, including in evolving modalities such as HyFlex; and **accessibility training**

Goal 3: Work to Ensure Accessibility

Includes but not limited to **implementation of SAAS** to support an equitable teaching and learning environment; **researching strategies and emerging technologies** and implementing as appropriate; ongoing ensuring of accessibility in **instructional and communications tools**

Goal 4: Enhance Communication and Collaboration with ETS to Achieve Evolving Priority College Objectives

Strategy to include **monthly small-group meetings** of Tech Committee and ETS leadership, with **updates** as requested, on college-identified priorities including but not limited to

- **Ubiquitous**, **functioning Wi-Fi**, including on **Athletics fields** and in **parking lots**
- **Upgraded technology for employees**, including shorter personal technology refresh cycle of **three years**
- **Improving communication,** including of system and software availability and changes
- **Development and support of peripheral loan program** to address additional needs, such as doc cams, iPads for whiteboards, etc.
- **College-identified** projects that
  - Directly affect **student success** or the **student experience**, particularly timely requests via expert administrators
  - Address **regulatory issues**

APPENDIX
2020 TECHNOLOGY SURVEY RESULTS

Respondents

Surveys were sent to all faculty, staff and administrators and to 6,000 students.

Classified 70

1 year or less - **3**	5 to 10 years - **6**
1 to 2 years - **7**	10 to 20 years - **26**
2 to 5 years - **15**	20 or more years - **13**

PT Faculty 72

1 year or less - **7**	5 to 10 years - **11**
1 to 2 years - **3**	10 to 20 years - **16**
2 to 5 years - **10**	20 or more years - **24**

FT Faculty 81

1 year or less - **4**	5 to 10 years - **16**
1 to 2 years - **1**	10 to 20 years - **21**
2 to 5 years - **6**	20 or more years - **33**
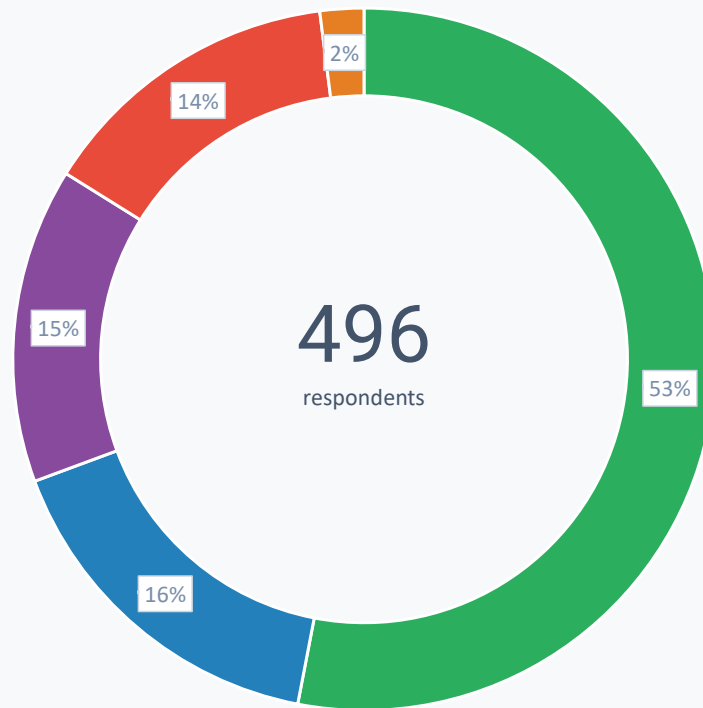
Administrators 10

1 year or less - **7**	5 to 10 years - **11**
1 to 2 years - **3**	10 to 20 years - **16**
2 to 5 years - **10**	20 or more years - **24**

Students 263

First quarter - **73**	4 quarters - **26**
2 quarters - **21**	5 quarters - **32**
3 quarters - **18**	6 or more Quarters - **92**

496 respondents

2% 14% 15% 16% 53%

Response Rates

Faculty, staff and administrators: **16.0%**

Students: **4.4%**

◎ **Devices**

Which device do you use most often in your job? / Which device do you use most often for your class work?

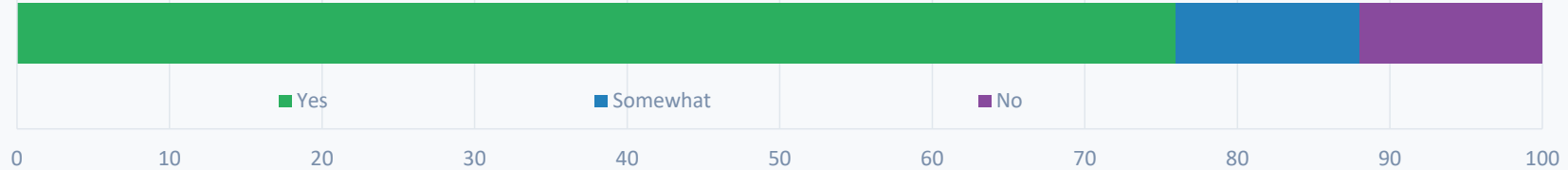| Smartphone	Laptop	Desktop	Tablet
2%	**71%**	**23%**	**3%**
10	354	116	15

- All populations fell close to these averages, except Classified.
- Classified had 53%/43% split between laptops and desktops.
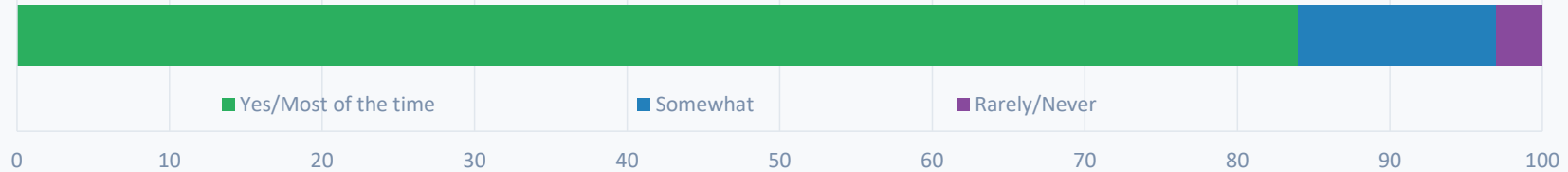- Students had the lowest desktop usage at 13%.

◎ Device, Internet and Workspace

All respondents were asked the following questions.

Does this device generally meet your needs?

| ■ Yes | ■ Somewhat | ■ No |

0   10   20   30   40   50   60   70   80   90   100

Do you have reliable and fast internet at your primary residence?

| ■ Yes/Most of the time | ■ Somewhat | ■ Rarely/Never |

0   10   20   30   40   50   60   70   80   90   100

Do you have a space where you can work/study that allows you to concentrate when needed?

| ■ Yes/Most of the time | ■ Somewhat | ■ Rarely/Never |

0   10   20   30   40   50   60   70   80   90   100
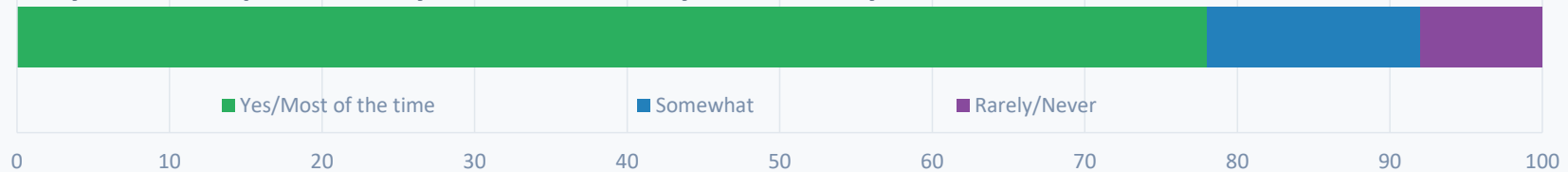
Student Comfort on Camera

Are you generally comfortable appearing on web camera in your classes?

Never 11%
Yes 24%
Rarely 17%
Most of the time 17%
Sometimes 31%
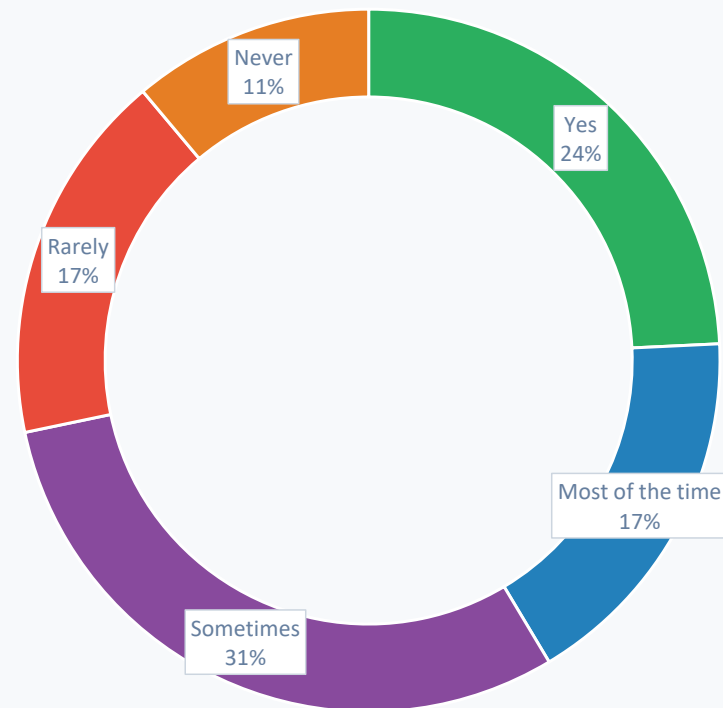
◎ **Most Requested Needs**

All respondents were asked about their technology needs; most common answers are below.

- New/updated device
- Fast and reliable internet
- Remote learning equipment (webcam, headphones, microphone, monitor)
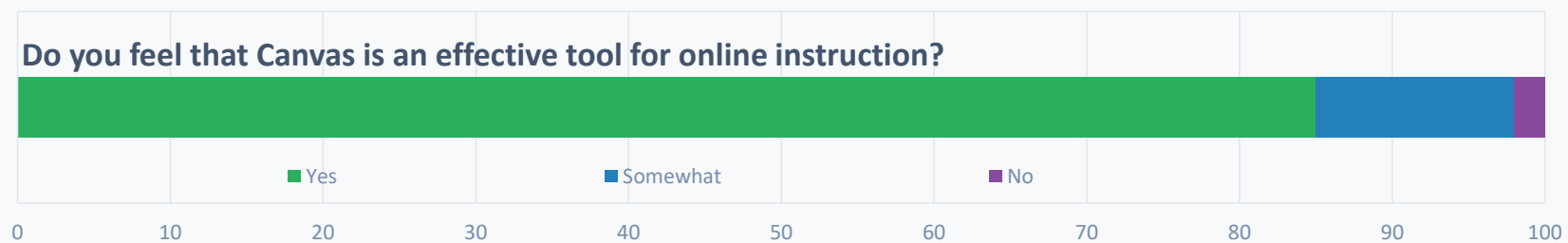- Office equipment (desk, chair)
- Printer

◎ Canvas – Faculty Overview

How well is Canvas meeting your needs?

FT Faculty

3.9

| 1 | 2 | 3 | 4 | 5 |

PT Faculty

3.9
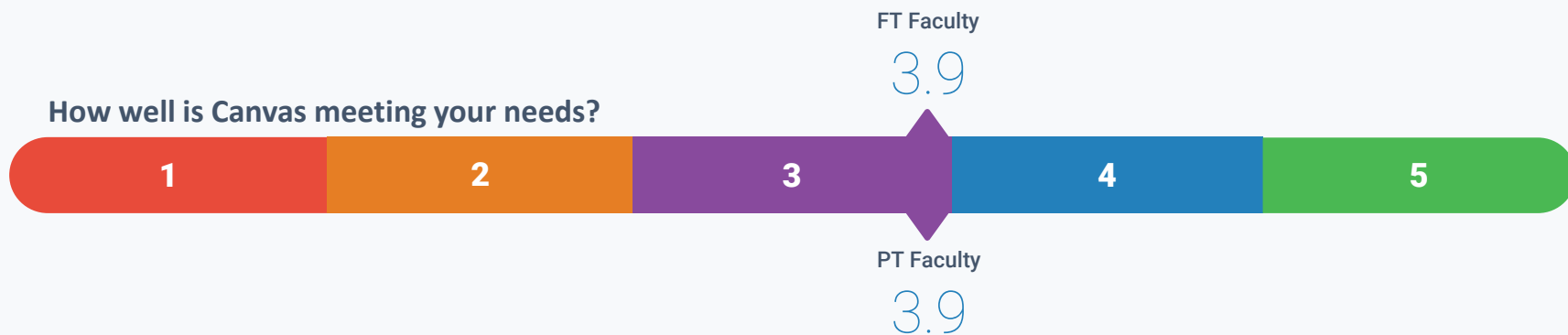
Canvas features that faculty members would like to make better use of:

- Studio/video creation, editing and posting
- Collaborations
- Zoom integration

Canvas features that faculty members would like implemented:

- TurnItIn
- Slack/Discord/chat functionality
- Configurable gradebook

◎ Canvas - Students

Do you feel that Canvas is an effective tool for online instruction?

■ Yes   ■ Somewhat   ■ No

0   10   20   30   40   50   60   70   80   90   100

Pros:
- Organizes class content
- Easy to use
- Keeps track of due dates

Cons:
- **Faculty don't know how to use it correctly**
- Buggy/slow
- Difficult to navigate
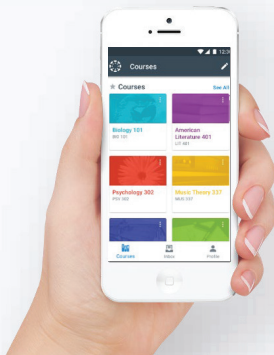
Students who used the Canvas app on their phone overwhelmingly had positive experiences.

Most said it was easy to use. It was noted that not all functionality is in the app and students should use the web version for important work.

◎ Remote Learning - Students

Likes

Time
- No commute
- Flexibility of schedule
- Self-paced classes
- No parking hassles
- More free time
- Time management/can plan ahead

Money
- Saves money
- Can work/have job

Learning
- Can re-watch/re-listen to lectures
- Organized courses

Lifestyle
- Convenience
- Avoid people/Covid-19
- Being at home
- Not having to get ready for school

Dislikes

Communication and Interaction
- Instructor access/responsiveness
- Interaction and engagement with instructor
- Connecting and communicating with peers
- Communication/notifications (Canvas)
- Working in teams/group work

Technology and Workspace
- Instructor tech issues/abilities
- Internet access/technical issues
- Study space/quiet environment

Learning
- Attention/concentration/motivation
- Finding help outside of class
- More demanding assignments
- Time management

Campus
- No hands-on learning (labs, auto shop, tools)
- Access to materials

◎ Instructor/Student Communication

Do you feel that communication with your instructors while remote learning is convenient and timely?
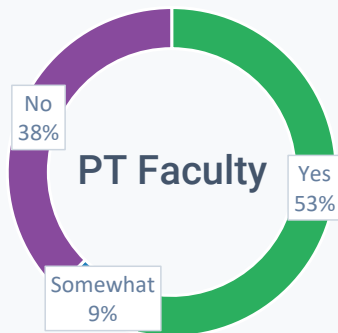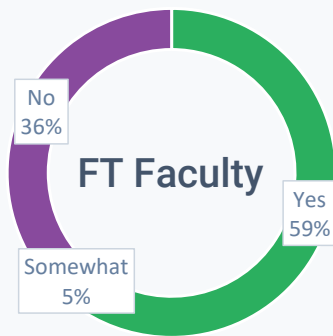
■ Yes   ■ Somewhat   ■ No

0   10   20   30   40   50   60   70   80   90   100

Student preference for class communications

Other 4%
Canvas 33%
Text Message 7%
Email 56%

Student preference for college communications

Push Notification 5%
Canvas 7%
Other 2%
Text Message 14%
Email 72%
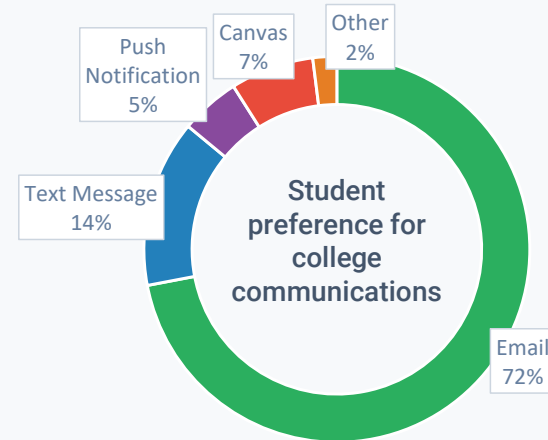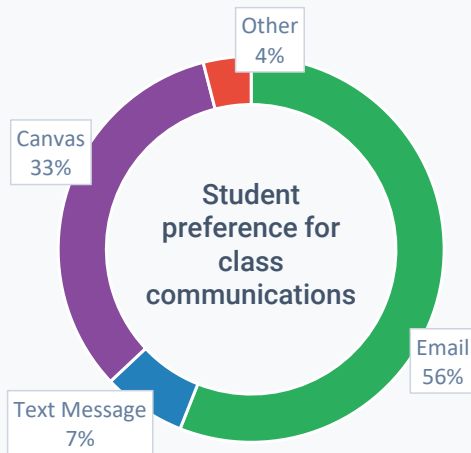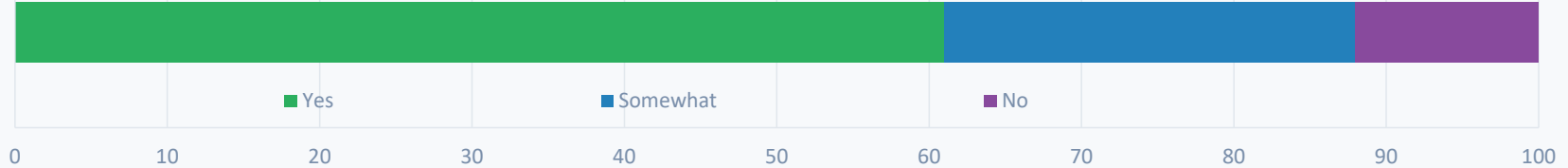
◎ Online Material Access

Do you have easy access to online materials for your courses, such as textbooks, course packets, videos or other supporting materials?
Does your instructor make free or low-cost textbooks and materials available as an alternative to traditional purchased textbooks?

Easy Access to Online Materials

Was offered free/low-cost materials
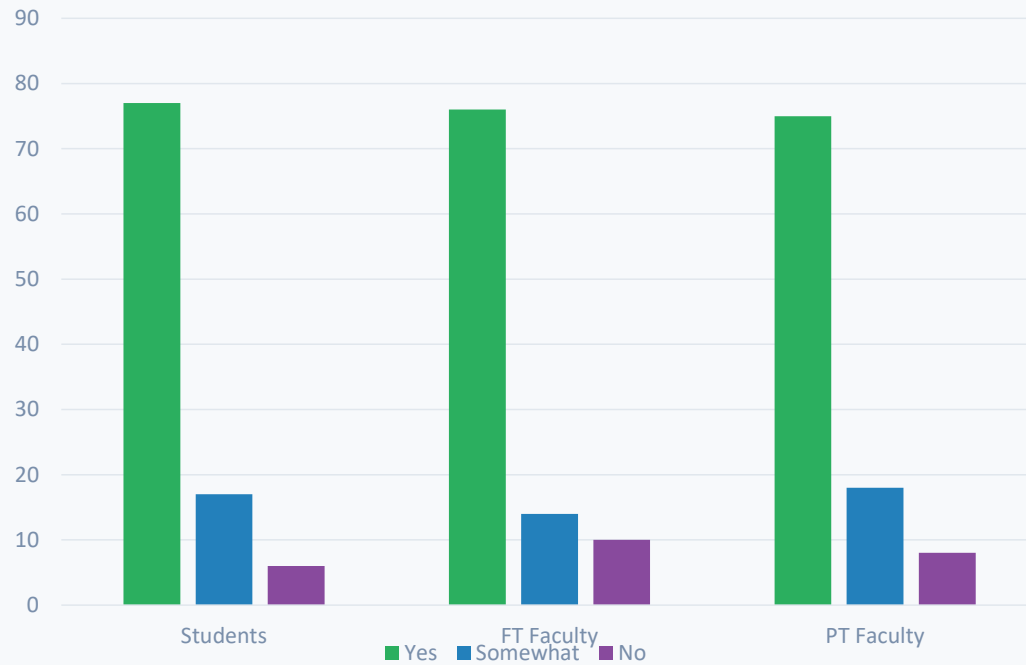
Students

◎ **OER Materials Use**

Do you offer your students the opportunity to use open educational resources?
Please describe the open educational resources and other low-cost or zero-cost materials that you make available to students.
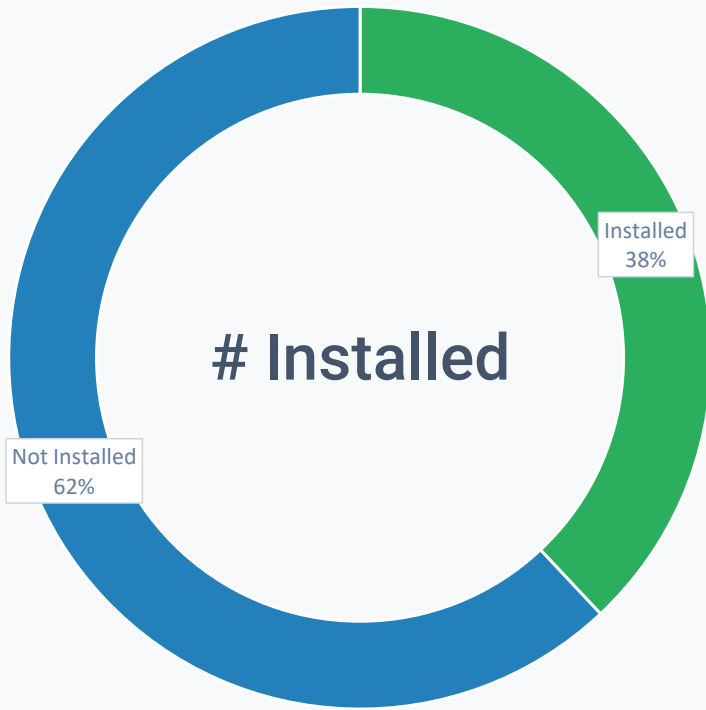
FT Faculty

No 36%
Yes 59%
Somewhat 5%

PT Faculty

No 38%
Yes 53%
Somewhat 9%

Types of OER Provided

| FT Faculty	PT Faculty
• Textbooks • Videos/YouTube • Websites/Links • Self-created materials • Books/Novels/Articles • eBooks • OpenStax	• Videos/YouTube • Textbooks • Websites/Links • Self-created materials • Books/Novels/Articles • Library Databases

De Anza App

Have you installed the De Anza College app (not the Canvas app) on your mobile device?
How have you used the De Anza mobile app?

Installed

Installed
38%

Not Installed
62%

	Value
Searching for Classes	50
Registering for Classes	33
Paying Fees	28
News/Events	28
Map	24
Contact Info	21

■ Searching for Classes ■ Registering for Classes ■ Paying Fees ■ News/Events ■ Map ■ Contact Info
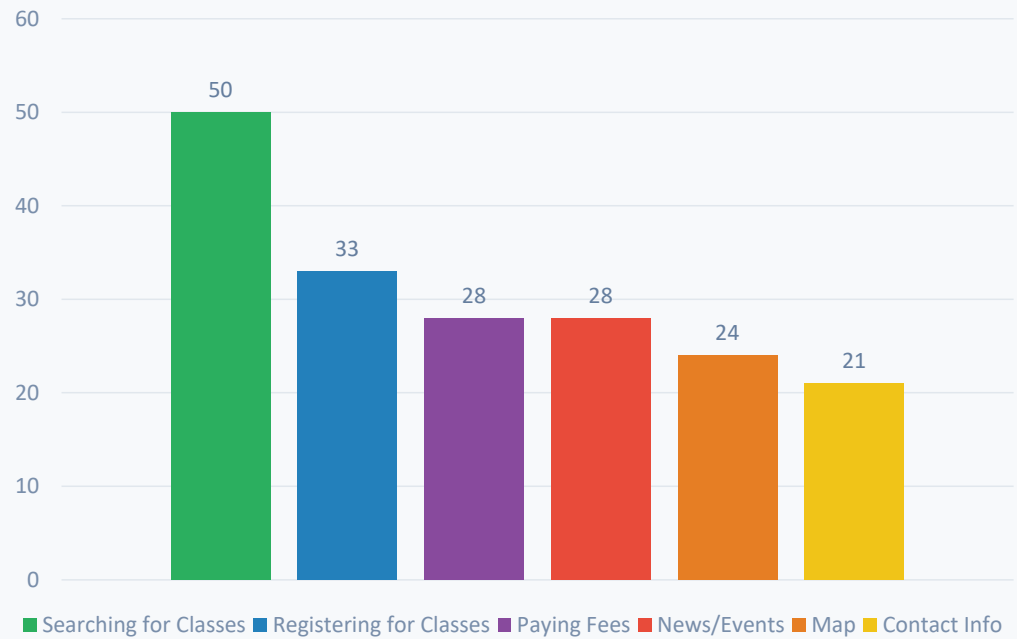
Software Tools - Students

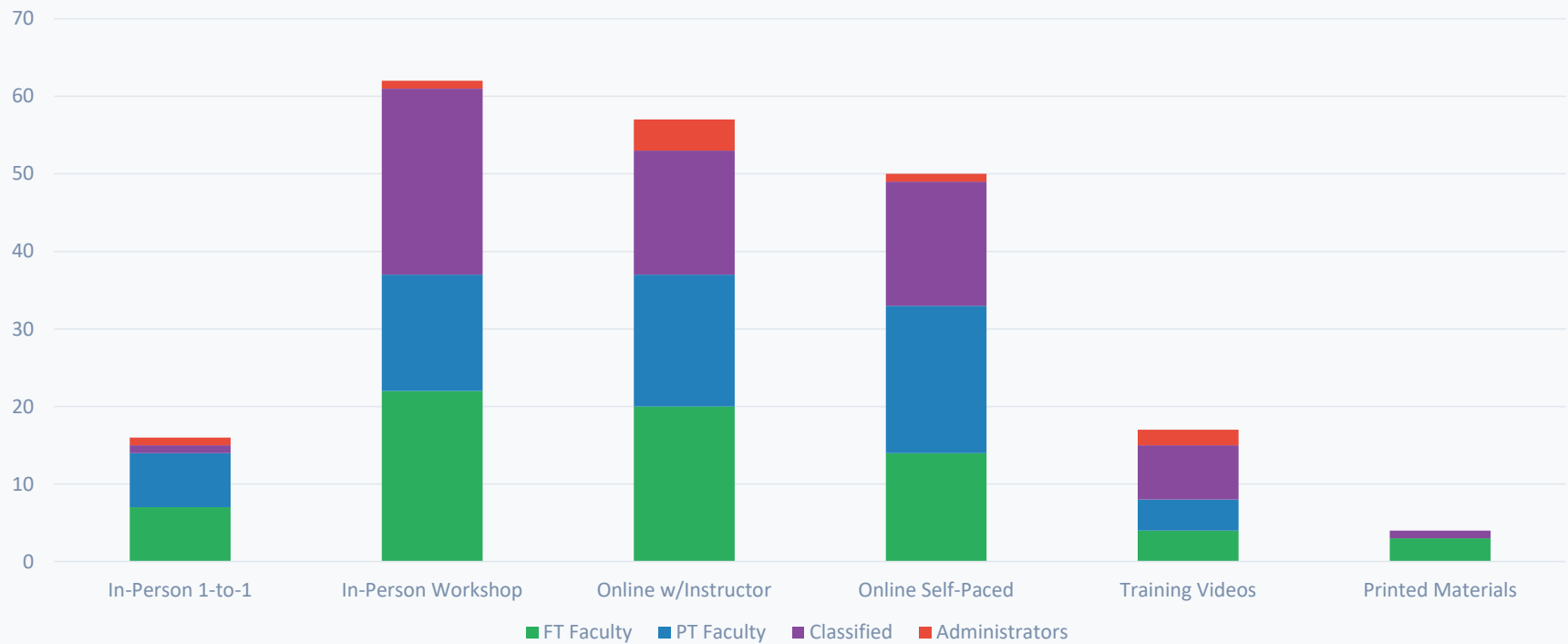Which of the following software tools do you use most often for school? Please select up to five.
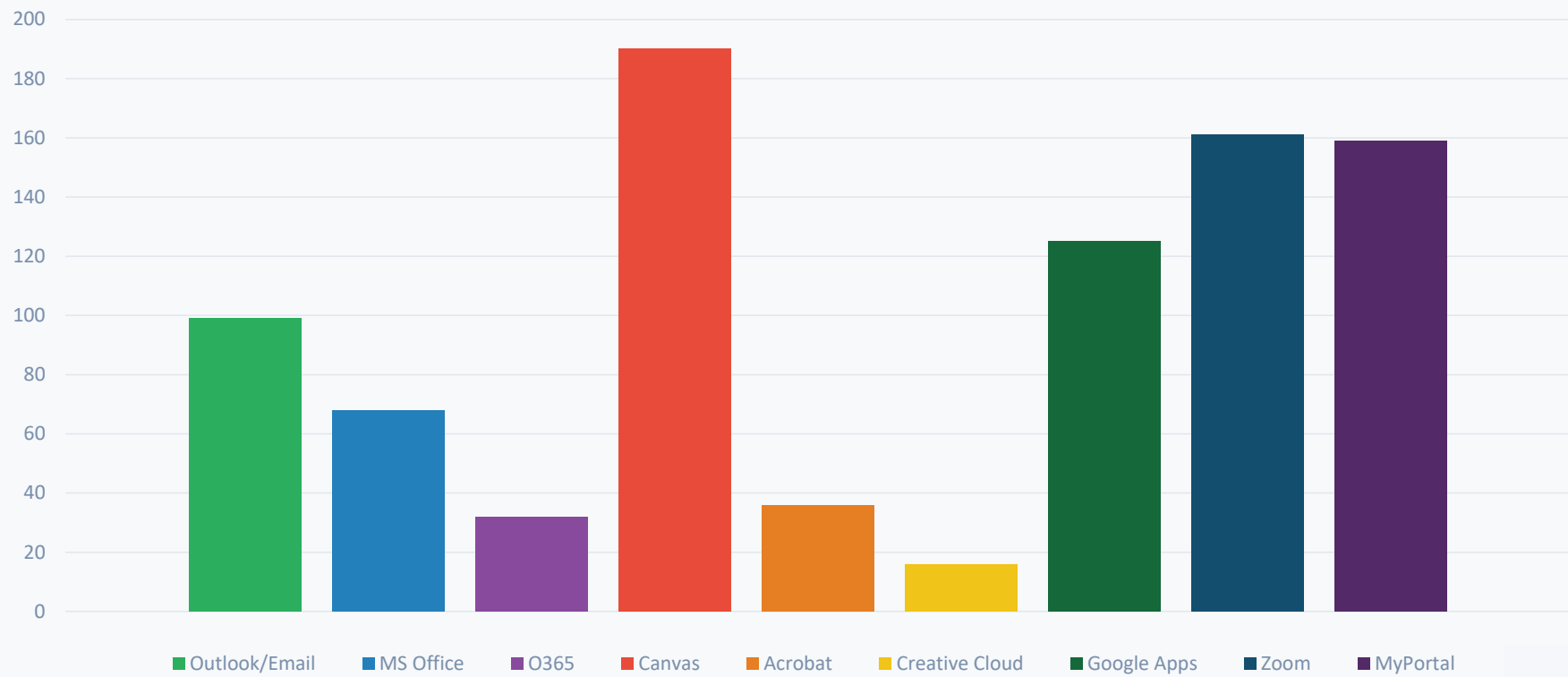
◎ Software Tools – Faculty, Staff & Administrators

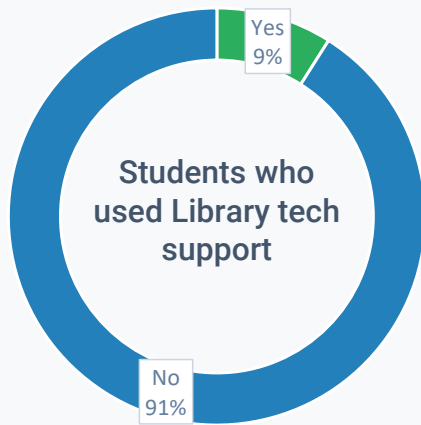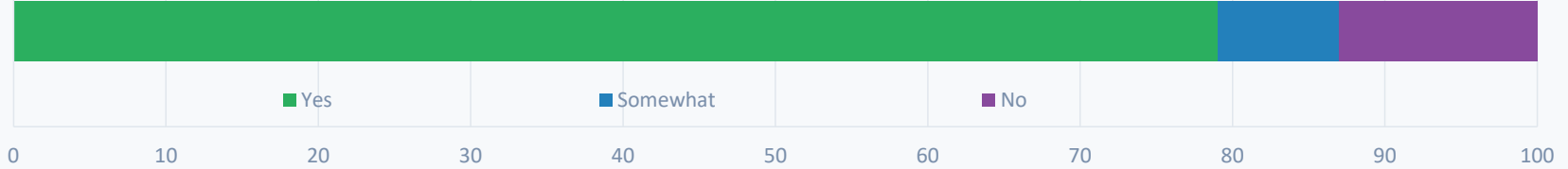Which of the following software tools do you use most often for work? Please select up to five.
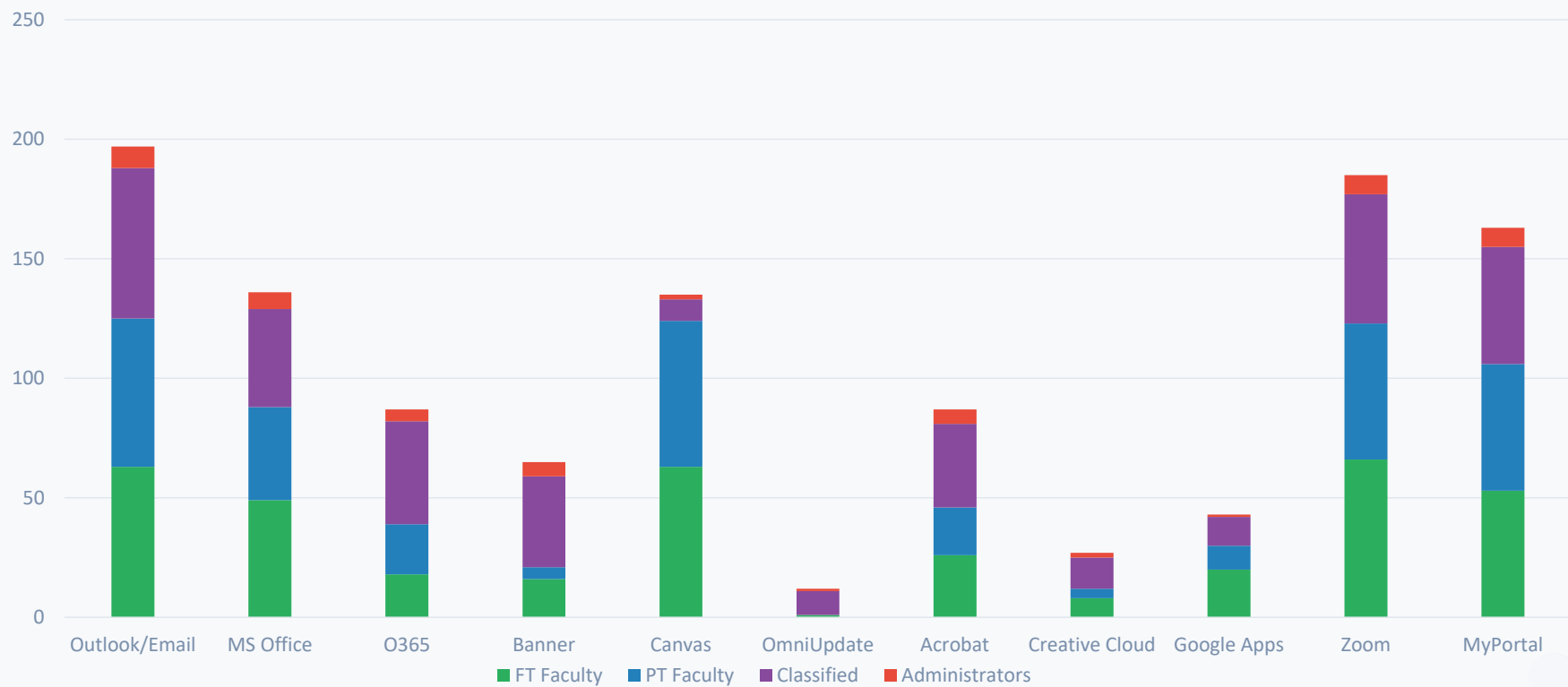
Post-pandemic Training Preferences

Ideally, how would you like to receive technology training when we are not sheltering at home because of the pandemic?
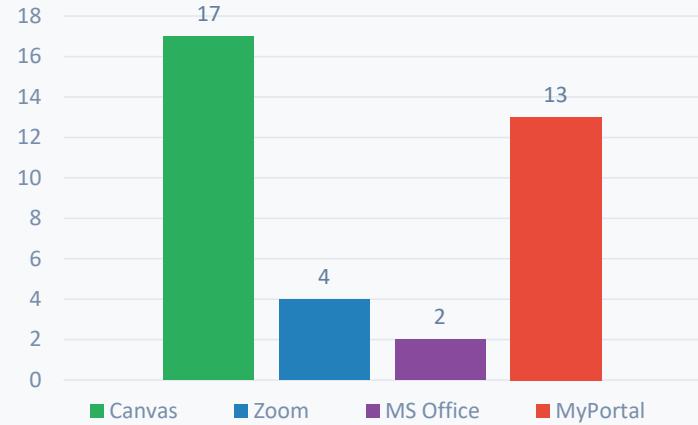
◎ Tech Support

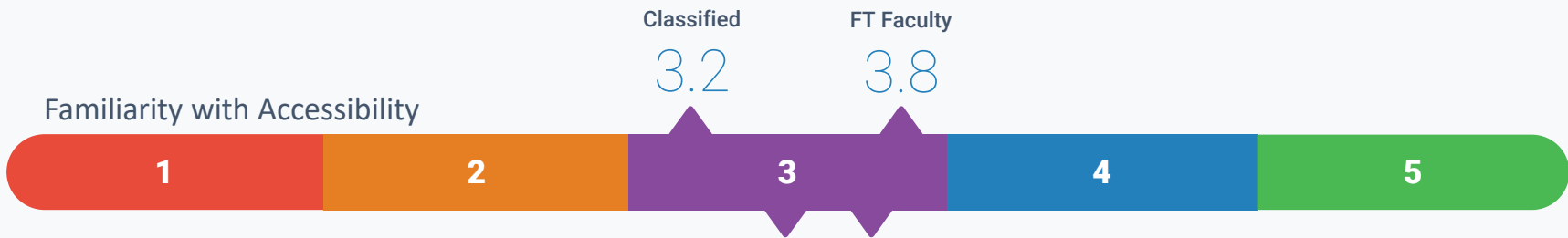**Is it easy to find the tech support that you need?**

■ Yes   ■ Somewhat   ■ No
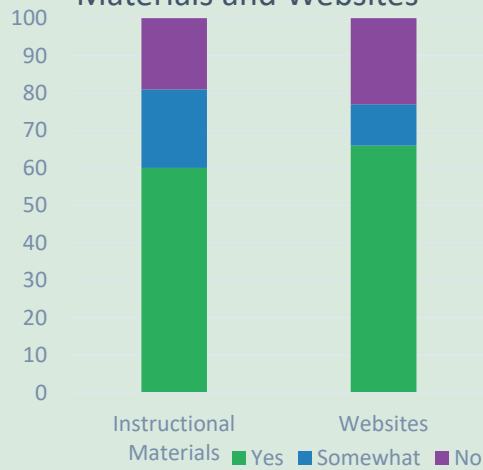
0   10   20   30   40   50   60   70   80   90   100

Students who used Library tech support

Yes 9%

No 91%

Library tech support requested

17

4

2

13

■ Canvas   ■ Zoom   ■ MS Office   ■ MyPortal

◎ Accessibility

Familiarity with Accessibility

Classified 3.2

FT Faculty 3.8

1	2	3	4	5

Administrators 3.5

PT Faculty 3.7

Creating Accessible Materials and Websites

Instructional Materials | Websites

■ Yes ■ Somewhat ■ No

Support for Making Accessible Materials/Websites
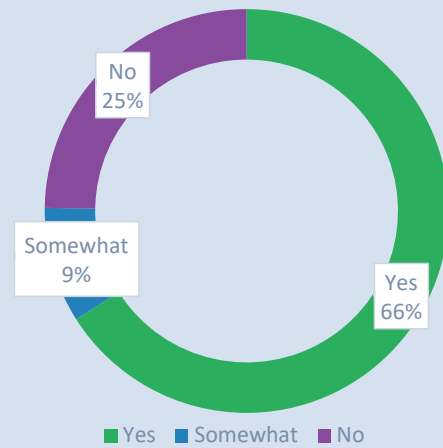
No 25%

Somewhat 9%

Yes 66%

■ Yes ■ Somewhat ■ No

◉ **Takeaways**

1

Student Access

Students need capable devices for online study, reliable internet, study space and easy access to online materials and Library or campus resources.

2

Upgraded Tech

Faculty, staff and administrators would like shorter refresh cycles for technology – providing newer devices and software, and allowing them to keep pace with current industry standards.

3

Training

Faculty, staff and administrators need access to robust training on many topics and technologies, to enhance their use of technology in either remote learning or in the classroom.

4

Campus Upgrades

Campus WIFI needs enhancement and coverage expansion. Classrooms need to be modernized and made capable of delivering an excellent experience either in-person or remotely.