

Survey of Hardware and Software Needs during March 2020-May 2021.

John Jay College Faculty Senate Technology Committee*. October 2021.

Introduction

Throughout the COVID 19 – dictated period of substantially online teaching and learning at John Jay College, the Faculty Technology Committee has connected remotely to think together about the problems and successes of remote university education. Issues about software and hardware availability, technology glitches and reliability were often raised, either from the direct experience of the committee members, or from the experience of faculty colleagues. In anticipation of the continuing importance of remote teaching and learning at John Jay College, we decided to survey faculty with a few short questions about their technology needs and experience during this period. The Committee is grateful to Associate to the Provost for Faculty Angela Crossman for facilitating the survey.

Survey objectives

The survey was limited to a few basic questions:

1. Did the availability of software impact faculty teaching and research?
2. What specific software was needed?
3. If faculty members purchased any form of hardware or software, what were the approximate personal costs?
4. Is information about hardware and software available through CUNY or John Jay College known and understood by the faculty?

Survey Response

An invitation with a link to the survey in Qualtrics was emailed to full-time and adjunct faculty on May 12, and again on May 19, with a deadline for responses of May 31, 2021.

149 surveys were completed and returned.

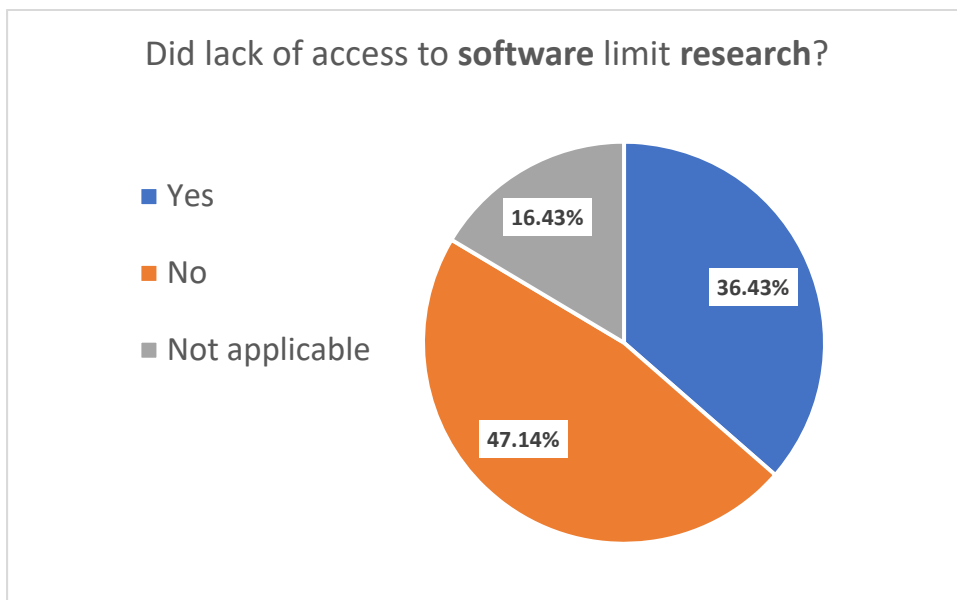
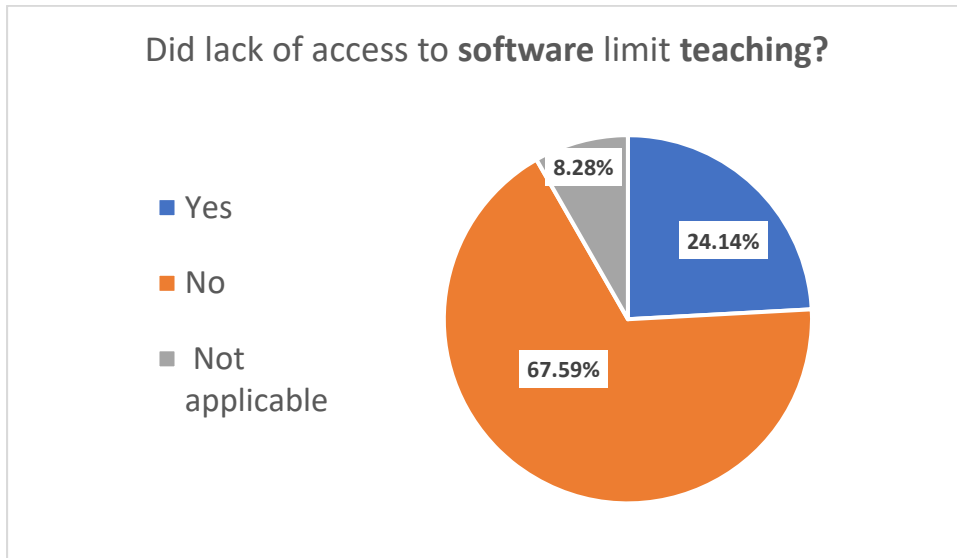
Survey analysis

After March, 2020 and the transition to remote teaching and learning, did faculty members experience limitations to their teaching and research practice based on lack of software?

<i>Did lack of access to software limit teaching?</i>				<i>Did lack of access to software limit research?</i>			
Yes	No	Not Applicable	Total	Yes	No	Not Applicable	Total
35	98	12	145	51	66	23	140
24.14%	67.59%	8.28%	100%	36.43%	47.14%	16.43%	100%

► 65 faculty members, or 43.62% of the total number of respondents, were affected either in their teaching or research capacities.

➤ 21 faculty members, or 14.09% of the total number of respondents reported that they had been limited BOTH in their teaching and in their research by lack of the requisite software applications.



Which software applications were needed?

The applications below were specifically listed in the survey, and respondents added additional forms of software. The count below shows the number of faculty members who reported a need for the specific application for their teaching or research activity.

Software Applications Needed for Teaching						
MS Office	SPSS	SAS	ArcGIS	Adobe Suite	Qualtrics	Other
38	12	0	6	43	9	12

Software Applications Needed for Research						
MS Office	SPSS	SAS	ArcGIS	Adobe Suite	Qualtrics	Other
30	27	0	8	35	21	19

➤ A majority of the 65 faculty members who reported needing software would have used more than one form of software, had it been available. Additional desired software included:

Atlas.ti, Camtasia, Caspio, Dedoose, Endnote, GoReact, GraphPad Prism, Mplus, NVivo, Padlet, PDF Expert, RedCapc (RedHat?), Screencast-o-matic, Stata, and Asana.

Faculty out-of-pocket costs for teaching and research

The survey question asked: “After March 2020, when you did not have access to software from the college, did you purchase software on your own in order to be able to do your teaching?”

And, the question was repeated with respect to hardware. The responses are shown below:

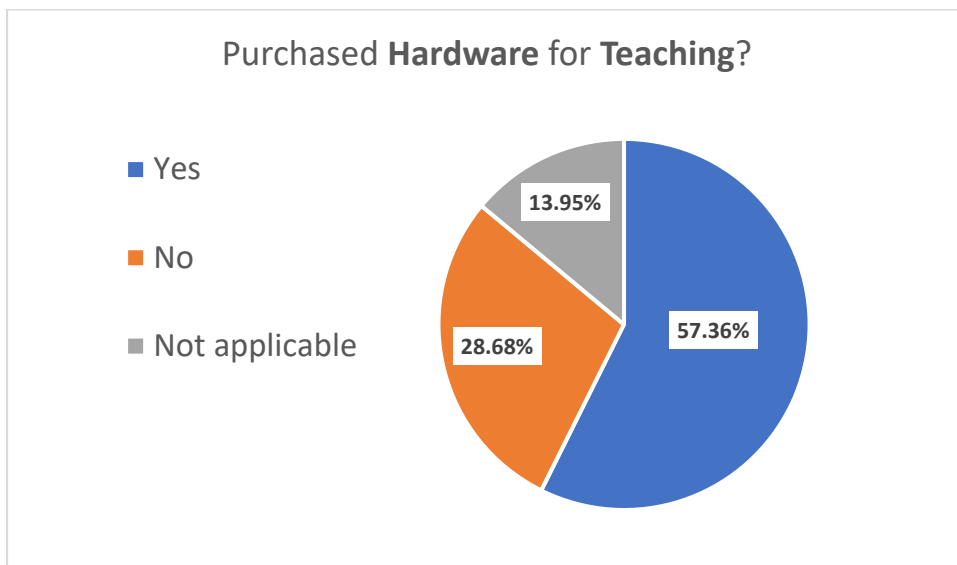
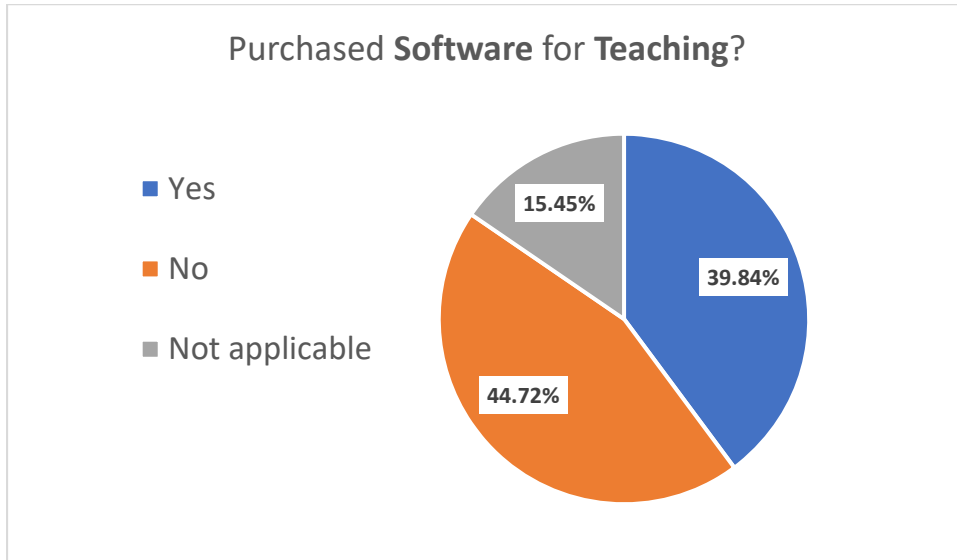
Purchased Software for Teaching?				Purchased Hardware for Teaching?			
Yes	No	Not applicable	Total	Yes	No	Not applicable	Total
49	55	19	123	74	37	18	129
39.84%	44.72%	15.45%	100%	57.36%	28.68%	13.95%	100%

➤ **Thirty-one faculty members purchased BOTH software and hardware for teaching.**

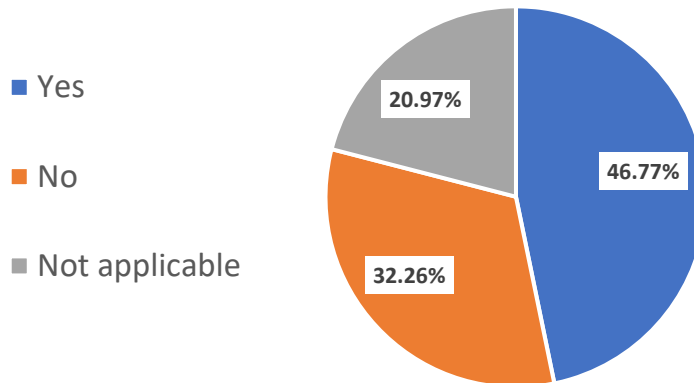
Purchased Software for Research?				Purchased Hardware for Research?			
Yes	No	Not applicable	Total	Yes	No	Not applicable	Total
58	40	26	124	65	33	26	124
46.77%	32.26%	20.97%	100%	52.42%	26.61%	20.97%	100%

► **Forty-five faculty members purchased BOTH software and hardware for research.**

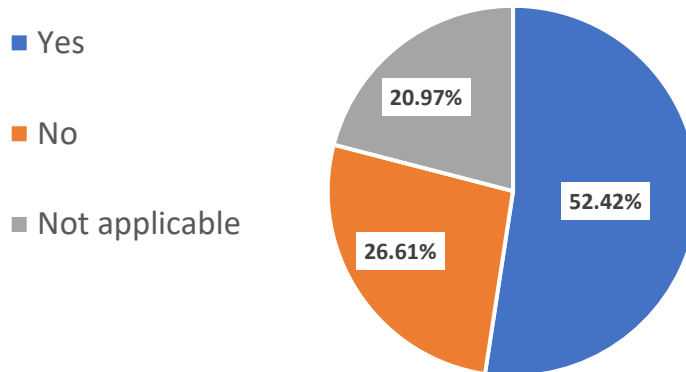
► **One hundred and three faculty members, or 69.13 % of the 149 faculty who responded reported that they had made a software or hardware purchase for teaching or research purposes.**



Purchased **Software** for Research?



Purchased **Hardware** for Research?



The survey question was then asked: *“After March 2020, when you did not have access to software from the college, did you purchase software on your own in order to be able to do your research?”*

And, the question was repeated with respect to hardware. The responses are shown on the next page.

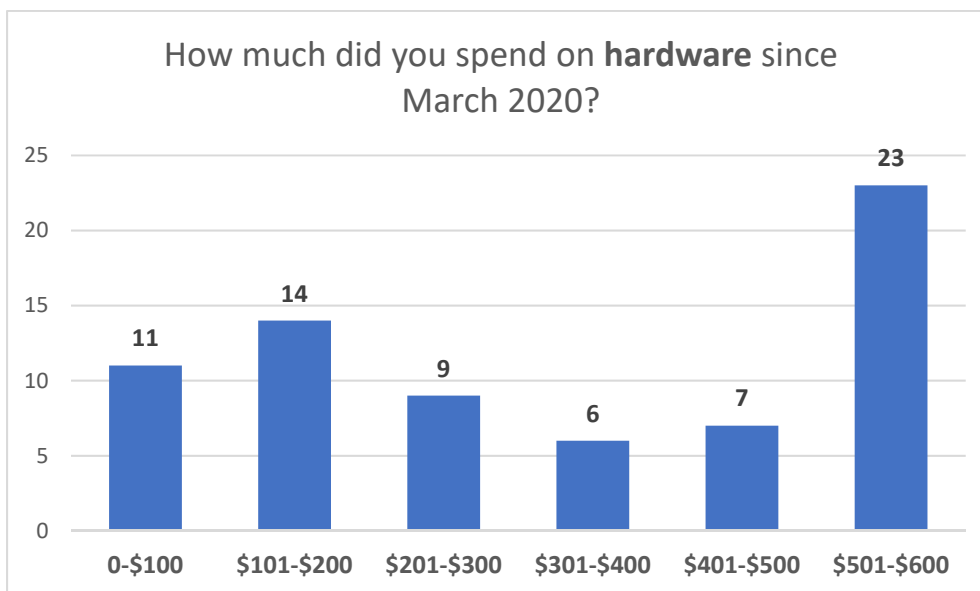
Costs to faculty

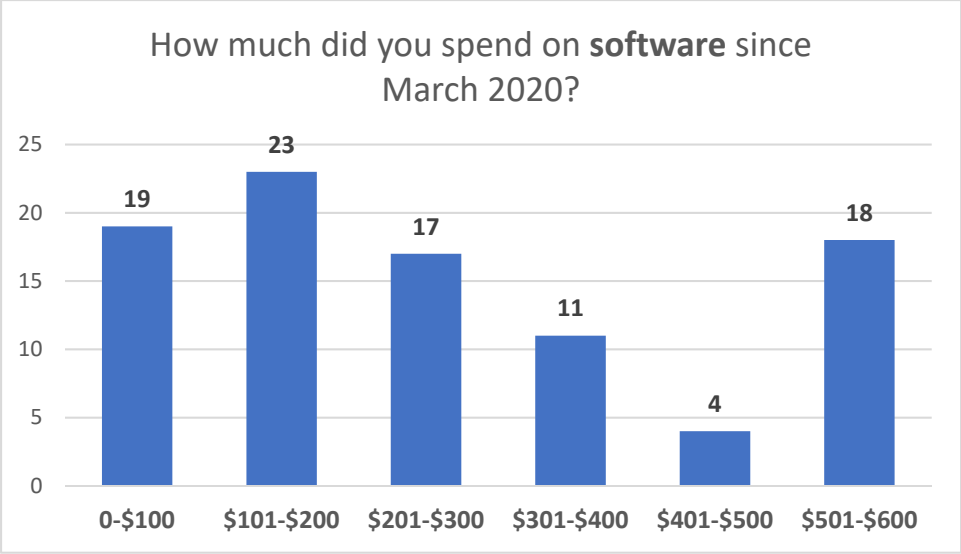
Survey respondents were asked to estimate the amount in dollars that they had spent on software and hardware for the purposes of teaching and research.

How much did you spend on software since March 2020?						
0-\$100	\$101-\$200	\$201-\$300	\$301-\$400	\$401-\$500	\$501-\$600	Total
19	23	17	11	4	18	92
20.65%	25.00%	18.48%	11.96%	4.35%	19.57%	100%

How much did you spend on hardware since March 2020?						
0-\$100	\$101-\$200	\$201-\$300	\$301-\$400	\$401-\$500	\$501-\$600	Total
11	14	9	6	7	23	70
15.71%	20.00%	12.86%	8.57%	10.00%	32.86%	100%

The cost range provided on the survey was clearly inadequate, and many faculty members spent between \$1,000 and \$5,000 on new hardware. Specifically, 21 faculty members who responded to this survey bought new laptops, typically spending more than \$2,000.

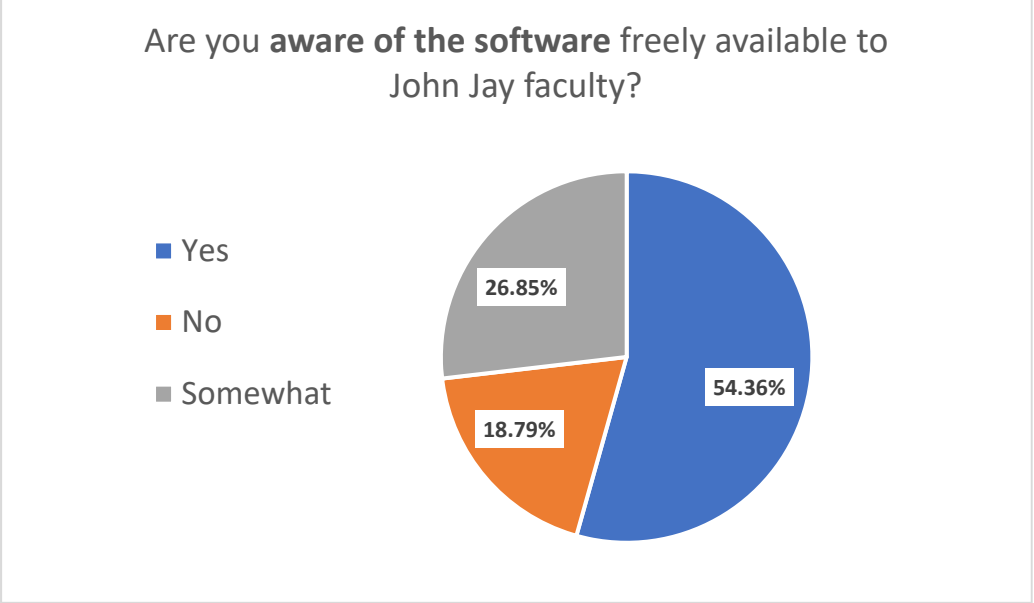




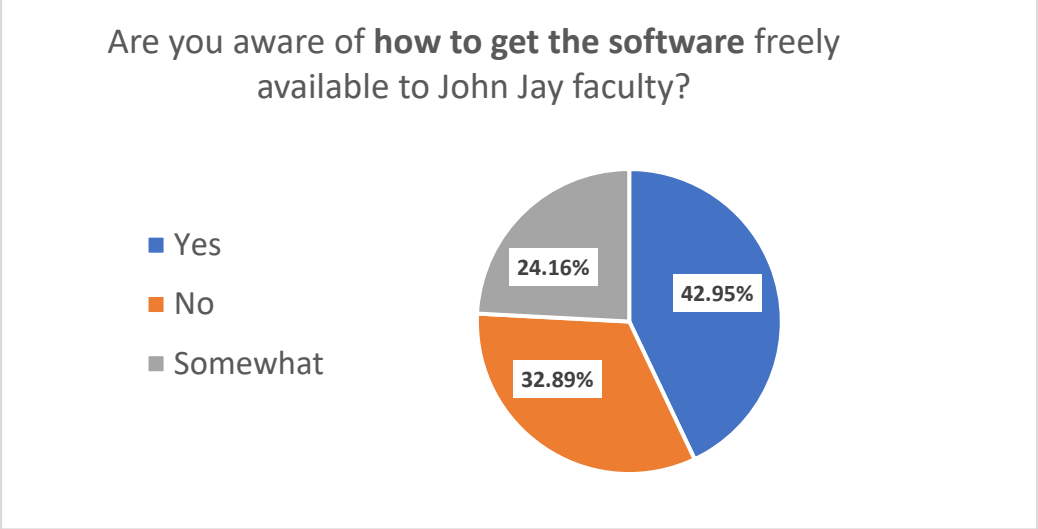
Access to Information about CUNY- or JJC-licensed software and/or additional hardware

The responses to the three questions about faculty access to hardware and software are shown in the tables below.

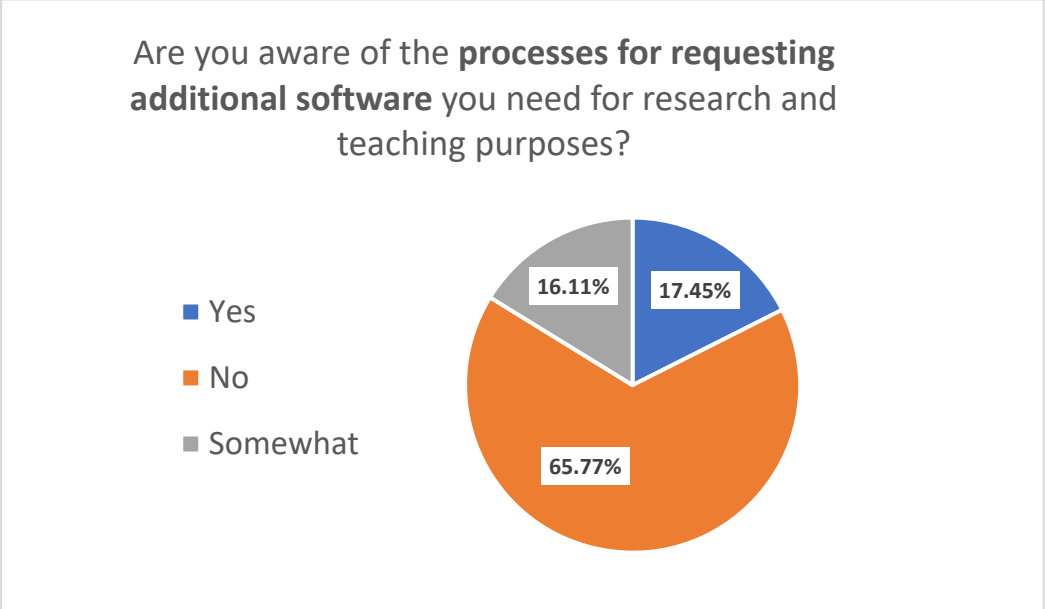
Are you aware of the software freely available to John Jay faculty?			
Yes	No	Somewhat	Total
81	28	40	149
54.36%	18.79%	26.85%	100%



Are you aware of how to get the software freely available to John Jay faculty?			
Yes	No	Somewhat	Total
64	49	36	149
42.95%	32.89%	24.16%	100%



Are you aware of the processes for requesting additional software you need for research and teaching purposes?			
Yes	No	Somewhat	Total
26	98	24	149
17.45%	65.77%	16.11%	100%



Summary of Survey Results

- JJC has a substantial number of faculty members who have pressing software needs.
- Research needs for software were more significant than teaching needs
- Hardware was a bigger issue than software, but most faculty purchased what they needed out-of-pocket.
- Many faculty members lack a clear understanding of what is available at JJC or through CUNY.

*Special thanks to Maggie Smith for analyzing the data and writing the report, and to Angela Crossman for Qualtrics formatting and distribution. Committee Co-Chaired by Paul Narkunas and Ellen Sexton.