

ECAR Study of Faculty and Technology, 2015

Appalachian State University Benchmarking Report

Survey area of interest	Appalachian State University	MA public institutions	All US institutions
Teaching and learning	146	2215	11528
	98.0%	97.6%	95.5%
Research and scholarship	103	1301	6164
	69.1%	57.3%	51.1%
Total respondent count	149	2269	12070

Full or part time	Appalachian State University	MA public institutions	All US institutions
Full-time faculty member	131	1806	8656
	87.9%	79.6%	71.7%
Part-time faculty member	18	450	3345
	12.1%	19.8%	27.7%
Emeritus faculty member	0	13	69
	0.0%	0.6%	0.6%
Total respondent count (Percentages sum to 100%)	149	2269	12070
	100.0%	100.0%	100.0%

Survey version	Appalachian State University	MA public institutions	All US institutions
Take the shorter (10-minute) version	115	1621	8765
	77.2%	71.4%	72.6%
Take the longer (up to 30-minute) version	34	648	3305
	22.8%	28.6%	27.4%
Total respondent count (Percentages sum to 100%)	149	2269	12070
	100.0%	100.0%	100.0%

1.1. Years of experience		Appalachian State University	MA public institutions	All US institutions
Full-time faculty position	Mean	13.4	12.3	12.8
	SD	9.1	9.9	10.8
	N	135	1983	10046
Part-time faculty position	Mean	4.8	5.2	6.0
	SD	5.9	5.9	6.4
	N	67	1242	7196
Any faculty position	Mean	14.5	13.7	14.2
	SD	9.5	10.0	10.8
	N	148	2260	12035

1.2. Do you work with...	Appalachian State		

	University	MA public institutions	All US institutions
Undergraduate students	141	2054	10078
	94.6%	91.0%	83.9%
Graduate students	58	825	4881
	38.9%	36.5%	40.6%
Professional students	8	156	1541
	5.4%	6.9%	12.8%
I don't typically work directly with students.	1	18	177
	0.7%	0.8%	1.5%
Total respondent count	149	2258	12019

1.3. Tenure status	Appalachian State University	MA public institutions	All US institutions
Tenured	82	1012	4275
	63.1%	56.4%	49.7%
Not tenured, but on a tenure track	29	456	1622
	22.3%	25.4%	18.9%
Not on a tenure track (ongoing appointment)	12	167	1694
	9.2%	9.3%	19.7%
Not on a tenure track (fixed-term appointment)	7	160	1011
	5.4%	8.9%	11.8%
Total respondent count (Percentages sum to 100%)	130	1795	8602
	100.0%	100.0%	100.0%

1.4. Academic rank	Appalachian State University	MA public institutions	All US institutions
Emeritus faculty	0	1	3
	0.0%	0.1%	0.0%
Professor	40	499	2485
	31.0%	27.8%	28.8%
Associate professor	41	504	2158
	31.8%	28.1%	25.0%
Assistant professor	30	507	1994
	23.3%	28.2%	23.1%
Clinical professor	0	8	79
	0.0%	0.4%	0.9%
Instructor	3	108	906
	2.3%	6.0%	10.5%
Senior lecturer	0	0	0
	0.0%	0.0%	0.0%
Qualifying post	0	0	0
	0.0%	0.0%	0.0%
Lecturer	10	130	490
	7.8%	7.2%	5.7%
Research associate	0	0	0
	0.0%	0.0%	0.0%
Research professor	0	0	0
	0.0%	0.0%	0.0%
Other; please specify	5	38	436
	3.9%	2.1%	5.1%
No academic rank	0	1	64
	0.0%	0.1%	0.7%

Total respondent count (Percentages sum to 100%)	129	1796	8615
	100.0%	100.0%	100.0%

2.1. Own: Desktop	Appalachian State University	MA public institutions	All US institutions
No, and I don't plan to purchase one	32	590	3018
	23.7%	28.3%	27.1%
No, but I plan to purchase one	3	27	136
	2.2%	1.3%	1.2%
Yes, I currently own one (or more)	100	1468	8002
	74.1%	70.4%	71.7%
Total respondent count (Percentages sum to 100%)	135	2085	11156
	100.0%	100.0%	100.0%

2.1. Own: Laptop	Appalachian State University	MA public institutions	All US institutions
No, and I don't plan to purchase one	16	195	871
	11.2%	8.8%	7.4%
No, but I plan to purchase one	2	43	195
	1.4%	1.9%	1.7%
Yes, I currently own one (or more)	125	1969	10692
	87.4%	89.2%	90.9%
Total respondent count (Percentages sum to 100%)	143	2207	11758
	100.0%	100.0%	100.0%

2.1. Own: Tablet	Appalachian State University	MA public institutions	All US institutions
No, and I don't plan to purchase one	29	408	2189
	21.5%	20.1%	20.4%
No, but I plan to purchase one	6	111	577
	4.4%	5.5%	5.4%
Yes, I currently own one (or more)	100	1515	7990
	74.1%	74.5%	74.3%
Total respondent count (Percentages sum to 100%)	135	2034	10756
	100.0%	100.0%	100.0%

2.1. Own: Smartphone	Appalachian State University	MA public institutions	All US institutions
No, and I don't plan to purchase one	20	248	1219
	14.2%	11.5%	10.6%
No, but I plan to purchase one	11	80	315
	7.8%	3.7%	2.7%
Yes, I currently own one (or more)	110	1820	9950
	78.0%	84.7%	86.6%
Total respondent count (Percentages sum to 100%)	141	2148	11484
	100.0%	100.0%	100.0%

2.1. Own: Wearable technology	Appalachian State University	MA public institutions	All US institutions
No, and I don't plan to purchase one	21	349	1772
	72.4%	68.2%	67.6%
No, but I plan to purchase one	3	36	229
	10.3%	7.0%	8.7%

Yes, I currently own one (or more)	5	127	620
	17.2%	24.8%	23.7%
Total respondent count (Percentages sum to 100%)	29	512	2621
	100.0%	100.0%	100.0%

2.1. Own: Internet-connected gaming device	Appalachian State University	MA public institutions	All US institutions
No, and I don't plan to purchase one	24	342	1792
	88.9%	66.8%	67.9%
No, but I plan to purchase one	0	2	26
	0.0%	0.4%	1.0%
Yes, I currently own one (or more)	3	168	823
	11.1%	32.8%	31.2%
Total respondent count (Percentages sum to 100%)	27	512	2641
	100.0%	100.0%	100.0%

2.2. Required to own or provided with desktop	Appalachian State University	MA public institutions	All US institutions
Required to own by institution	1	17	169
	3.1%	2.9%	5.6%
Provided by institution	25	403	1720
	78.1%	68.4%	56.6%
Neither required to own nor provided	6	175	1183
	18.8%	29.7%	38.9%
Total respondent count	32	589	3040

2.2. Required to own or provided with laptop	Appalachian State University	MA public institutions	All US institutions
Required to own by institution	0	9	151
	0.0%	1.5%	4.9%
Provided by institution	21	348	1474
	65.6%	58.9%	47.7%
Neither required to own nor provided	11	236	1486
	34.4%	39.9%	48.1%
Total respondent count	32	591	3088

2.2. Required to own or provided with tablet	Appalachian State University	MA public institutions	All US institutions
Required to own by institution	0	2	17
	0.0%	0.4%	0.6%
Provided by institution	14	145	495
	45.2%	26.2%	17.3%
Neither required to own nor provided	17	409	2350
	54.8%	73.8%	82.2%
Total respondent count	31	554	2858

2.2. Required to own or provided with smartphone	Appalachian State University	MA public institutions	All US institutions
Required to own by institution	0	6	41
	0.0%	1.1%	1.5%
Provided by institution	0	2	51
	0.0%	0.4%	1.8%

Neither required to own nor provided	29	517	2698
	100.0%	98.5%	96.7%
Total respondent count	29	525	2789

2.3. Experiences: Classroom-based technology resources	Appalachian State University	MA public institutions	All US institutions
Poor	3	52	249
	8.8%	8.1%	7.5%
Fair	3	101	479
	8.8%	15.7%	14.5%
Neutral	2	70	376
	5.9%	10.9%	11.4%
Good	19	269	1294
	55.9%	41.9%	39.2%
Excellent	5	131	623
	14.7%	20.4%	18.9%
N/A	2	19	280
	5.9%	3.0%	8.5%
Total respondent count (Percentages sum to 100%)	34	642	3301
	100.0%	100.0%	100.0%

2.3. Experiences: Laboratory or research-based technology resources	Appalachian State University	MA public institutions	All US institutions
Poor	2	58	240
	5.7%	9.0%	7.3%
Fair	5	74	291
	14.3%	11.4%	8.8%
Neutral	7	90	414
	20.0%	13.9%	12.6%
Good	11	187	888
	31.4%	28.9%	27.0%
Excellent	5	77	423
	14.3%	11.9%	12.9%
N/A	5	161	1034
	14.3%	24.9%	31.4%
Total respondent count (Percentages sum to 100%)	35	647	3290
	100.0%	100.0%	100.0%

2.3. Experiences: Online collaborative spaces	Appalachian State University	MA public institutions	All US institutions
Poor	6	51	235
	17.1%	7.9%	7.1%
Fair	5	69	353
	14.3%	10.7%	10.7%
Neutral	4	109	523
	11.4%	16.9%	15.9%
Good	11	223	1106
	31.4%	34.5%	33.5%
Excellent	5	99	545
	14.3%	15.3%	16.5%
N/A	4	95	536
	11.4%	14.7%	16.3%

Total respondent count	35	646	3298
(Percentages sum to 100%)	100.0%	100.0%	100.0%

2.3. Experiences: Physical collaborative spaces	Appalachian State University	MA public institutions	All US institutions
Poor	3	59	279
	8.6%	9.1%	8.5%
Fair	4	100	467
	11.4%	15.5%	14.2%
Neutral	5	106	493
	14.3%	16.4%	14.9%
Good	11	208	997
	31.4%	32.2%	30.2%
Excellent	6	92	481
	17.1%	14.2%	14.6%
N/A	6	81	583
	17.1%	12.5%	17.7%
Total respondent count	35	646	3300
(Percentages sum to 100%)	100.0%	100.0%	100.0%

2.3. Experiences: Access to institutional resources while away	Appalachian State University	MA public institutions	All US institutions
Poor	4	46	172
	11.4%	7.1%	5.2%
Fair	3	68	350
	8.6%	10.5%	10.6%
Neutral	5	71	373
	14.3%	11.0%	11.3%
Good	18	285	1396
	51.4%	44.0%	42.3%
Excellent	5	154	904
	14.3%	23.8%	27.4%
N/A	0	23	104
	0.0%	3.6%	3.2%
Total respondent count	35	647	3299
(Percentages sum to 100%)	100.0%	100.0%	100.0%

2.3. Experiences: Ability to get my work done while away	Appalachian State University	MA public institutions	All US institutions
Poor	1	33	133
	2.9%	5.1%	4.0%
Fair	3	74	307
	8.6%	11.4%	9.3%
Neutral	4	68	304
	11.4%	10.5%	9.2%
Good	21	258	1366
	60.0%	39.8%	41.4%
Excellent	6	196	1121
	17.1%	30.2%	34.0%
N/A	0	19	68
	0.0%	2.9%	2.1%
Total respondent count	35	648	3299

(Percentages sum to 100%)	100.0%	100.0%	100.0%
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2.3. Experiences: Reliable access to Wi-Fi networks throughout facilities	Appalachian State University	MA public institutions	All US institutions
Poor	0	52	281
	0.0%	8.1%	8.5%
Fair	11	102	490
	31.4%	15.9%	14.9%
Neutral	4	58	314
	11.4%	9.0%	9.5%
Good	12	246	1136
	34.3%	38.3%	34.5%
Excellent	7	166	873
	20.0%	25.8%	26.5%
N/A	1	19	198
	2.9%	3.0%	6.0%
Total respondent count (Percentages sum to 100%)	35	643	3292
	100.0%	100.0%	100.0%

2.3. Experiences: Communication technologies	Appalachian State University	MA public institutions	All US institutions
Poor	0	22	124
	0.0%	3.4%	3.8%
Fair	10	66	293
	28.6%	10.2%	8.9%
Neutral	2	75	374
	5.7%	11.6%	11.4%
Good	18	302	1462
	51.4%	46.9%	44.4%
Excellent	5	168	949
	14.3%	26.1%	28.8%
N/A	0	11	89
	0.0%	1.7%	2.7%
Total respondent count (Percentages sum to 100%)	35	644	3291
	100.0%	100.0%	100.0%

2.3. Experiences: Online or virtual technologies	Appalachian State University	MA public institutions	All US institutions
Poor	6	66	283
	17.1%	10.3%	8.6%
Fair	8	67	388
	22.9%	10.4%	11.8%
Neutral	7	139	594
	20.0%	21.6%	18.0%
Good	11	218	1109
	31.4%	33.9%	33.7%
Excellent	2	87	512
	5.7%	13.5%	15.6%
N/A	1	66	405
	2.9%	10.3%	12.3%
Total respondent count (Percentages sum to 100%)	35	643	3291
	100.0%	100.0%	100.0%

2.3. Experiences: Remote access to commercial software applications	Appalachian State University	MA public institutions	All US institutions
Poor	3	93	397
	8.6%	14.4%	12.1%
Fair	3	87	350
	8.6%	13.5%	10.6%
Neutral	5	88	420
	14.3%	13.7%	12.8%
Good	10	122	602
	28.6%	18.9%	18.3%
Excellent	1	39	267
	2.9%	6.1%	8.1%
N/A	13	215	1252
	37.1%	33.4%	38.1%
Total respondent count (Percentages sum to 100%)	35	644	3288
	100.0%	100.0%	100.0%

2.3. Experiences: Technology support	Appalachian State University	MA public institutions	All US institutions
Poor	1	45	227
	2.9%	7.0%	6.9%
Fair	1	88	433
	2.9%	13.7%	13.2%
Neutral	3	70	401
	8.8%	10.9%	12.2%
Good	13	225	1211
	38.2%	34.9%	36.8%
Excellent	16	208	934
	47.1%	32.3%	28.4%
N/A	0	8	85
	0.0%	1.2%	2.6%
Total respondent count (Percentages sum to 100%)	34	644	3291
	100.0%	100.0%	100.0%

2.3. Experiences: Professional development around the integrated use of technology in your teaching	Appalachian State University	MA public institutions	All US institutions
Poor	4	68	378
	11.8%	10.6%	11.5%
Fair	4	82	441
	11.8%	12.7%	13.4%
Neutral	6	118	589
	17.6%	18.3%	17.9%
Good	13	220	1075
	38.2%	34.2%	32.7%
Excellent	6	116	515
	17.6%	18.0%	15.7%
N/A	1	40	291
	2.9%	6.2%	8.8%
Total respondent count (Percentages sum to 100%)	34	644	3289
	100.0%	100.0%	100.0%

2.3. Experiences: Support for making courses accessible to students with disabilities	Appalachian State University	MA public institutions	All US institutions
Poor	4	50	255
	12.1%	7.8%	7.8%
Fair	4	64	277
	12.1%	10.0%	8.4%
Neutral	1	99	510
	3.0%	15.4%	15.5%
Good	5	152	830
	15.2%	23.7%	25.2%
Excellent	6	105	508
	18.2%	16.4%	15.4%
N/A	13	171	909
	39.4%	26.7%	27.6%
Total respondent count (Percentages sum to 100%)	33	641	3289
	100.0%	100.0%	100.0%

2.3. Experiences: Support for making teaching courses accessible to faculty with disabilities	Appalachian State University	MA public institutions	All US institutions
Poor	0	29	174
	0.0%	4.5%	5.3%
Fair	0	35	143
	0.0%	5.4%	4.3%
Neutral	5	100	419
	14.7%	15.5%	12.7%
Good	0	68	322
	0.0%	10.6%	9.8%
Excellent	2	42	221
	5.9%	6.5%	6.7%
N/A	27	370	2011
	79.4%	57.5%	61.1%
Total respondent count (Percentages sum to 100%)	34	644	3290
	100.0%	100.0%	100.0%

2.3. Experiences: Professional development around the integrated use of technology in your research	Appalachian State University	MA public institutions	All US institutions
Poor	4	90	426
	11.8%	14.0%	13.0%
Fair	6	91	405
	17.6%	14.1%	12.3%
Neutral	3	112	574
	8.8%	17.4%	17.5%
Good	8	140	777
	23.5%	21.7%	23.6%
Excellent	9	88	366
	26.5%	13.7%	11.1%
N/A	4	123	741
	11.8%	19.1%	22.5%
Total respondent count (Percentages sum to 100%)	34	644	3289
	100.0%	100.0%	100.0%

2.3. Experiences: Consultations for using technology in	Appalachian State		

teaching and research	University	MA public institutions	All US institutions
Poor	3	60	329
	8.8%	9.3%	10.0%
Fair	4	70	390
	11.8%	10.9%	11.9%
Neutral	2	90	511
	5.9%	14.0%	15.5%
Good	13	210	1001
	38.2%	32.6%	30.4%
Excellent	8	160	626
	23.5%	24.8%	19.0%
N/A	4	55	431
	11.8%	8.5%	13.1%
Total respondent count (Percentages sum to 100%)	34	645	3288
	100.0%	100.0%	100.0%

2.3. Experiences: Specialized teaching software	Appalachian State University	MA public institutions	All US institutions
Poor	2	76	375
	6.1%	12.0%	11.5%
Fair	3	78	421
	9.1%	12.3%	12.9%
Neutral	5	131	631
	15.2%	20.6%	19.3%
Good	13	146	719
	39.4%	23.0%	22.0%
Excellent	2	56	262
	6.1%	8.8%	8.0%
N/A	8	148	859
	24.2%	23.3%	26.3%
Total respondent count (Percentages sum to 100%)	33	635	3267
	100.0%	100.0%	100.0%

2.3. Experiences: Locally housed high-performance computing/research computing services	Appalachian State University	MA public institutions	All US institutions
Poor	4	97	338
	11.8%	15.0%	10.3%
Fair	0	31	127
	0.0%	4.8%	3.9%
Neutral	2	72	342
	5.9%	11.2%	10.4%
Good	1	27	213
	2.9%	4.2%	6.5%
Excellent	1	15	131
	2.9%	2.3%	4.0%
N/A	26	403	2129
	76.5%	62.5%	64.9%
Total respondent count (Percentages sum to 100%)	34	645	3280
	100.0%	100.0%	100.0%

2.3. Experiences: Outsourced high-performance computing (or research computing) systems	Appalachian State University	MA public institutions	All US institutions
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Poor	3	74	285
	8.8%	11.5%	8.7%
Fair	0	24	102
	0.0%	3.7%	3.1%
Neutral	4	75	361
	11.8%	11.7%	11.0%
Good	0	31	123
	0.0%	4.8%	3.8%
Excellent	1	7	60
	2.9%	1.1%	1.8%
N/A	26	432	2349
	76.5%	67.2%	71.6%
Total respondent count (Percentages sum to 100%)	34	643	3280
	100.0%	100.0%	100.0%

2.3. Experiences: Self-publishing	Appalachian State University	MA public institutions	All US institutions
Poor	4	77	366
	11.8%	12.0%	11.2%
Fair	0	45	183
	0.0%	7.0%	5.6%
Neutral	1	101	443
	2.9%	15.7%	13.5%
Good	3	41	230
	8.8%	6.4%	7.0%
Excellent	1	10	82
	2.9%	1.6%	2.5%
N/A	25	369	1975
	73.5%	57.4%	60.2%
Total respondent count (Percentages sum to 100%)	34	643	3279
	100.0%	100.0%	100.0%

2.3. Experiences: New models for global research collaborations	Appalachian State University	MA public institutions	All US institutions
Poor	5	96	395
	14.7%	14.9%	12.1%
Fair	0	41	165
	0.0%	6.4%	5.0%
Neutral	4	95	440
	11.8%	14.7%	13.4%
Good	2	30	167
	5.9%	4.7%	5.1%
Excellent	2	10	57
	5.9%	1.6%	1.7%
N/A	21	373	2053
	61.8%	57.8%	62.6%
Total respondent count (Percentages sum to 100%)	34	645	3277
	100.0%	100.0%	100.0%

2.3. Experiences: Open content	Appalachian State University	MA public institutions	All US institutions
	2	59	278

Poor	5.9%	9.2%	8.5%
	2	58	221
Fair	5.9%	9.0%	6.7%
	4	104	541
Neutral	11.8%	16.2%	16.5%
	6	86	434
Good	17.6%	13.4%	13.2%
	3	14	136
Excellent	8.8%	2.2%	4.2%
	17	321	1666
N/A	50.0%	50.0%	50.9%
	Total respondent count	34	642
(Percentages sum to 100%)	100.0%	100.0%	100.0%

2.5. Privacy and security: I take sufficient measures to keep my research and scholarly data secure.	Appalachian State University	MA public institutions	All US institutions
Don't know	7	84	525
	4.7%	3.7%	4.4%
Strongly disagree	1	17	78
	0.7%	0.8%	0.7%
Disagree	6	75	359
	4.0%	3.3%	3.0%
Neutral	23	361	1968
	15.4%	16.0%	16.4%
Agree	82	1090	5701
	55.0%	48.4%	47.6%
Strongly agree	30	625	3347
	20.1%	27.8%	27.9%
Total respondent count	149	2252	11978
(Percentages sum to 100%)	100.0%	100.0%	100.0%

2.5. Privacy and security: I take sufficient measures to keep data about my students secure.	Appalachian State University	MA public institutions	All US institutions
Don't know	7	41	274
	4.7%	1.8%	2.3%
Strongly disagree	0	11	48
	0.0%	0.5%	0.4%
Disagree	4	32	179
	2.7%	1.4%	1.5%
Neutral	15	159	899
	10.1%	7.0%	7.5%
Agree	77	1131	5753
	51.7%	50.0%	47.9%
Strongly agree	46	890	4868
	30.9%	39.3%	40.5%
Total respondent count	149	2264	12021
(Percentages sum to 100%)	100.0%	100.0%	100.0%

2.5. Privacy and security: I have confidence in my institution's ability to safeguard my personal information.	Appalachian State University	MA public institutions	All US institutions
	10	99	551

Don't know	6.8%	4.4%	4.6%
Strongly disagree	9	151	705
	6.1%	6.7%	5.9%
Disagree	17	282	1336
	11.6%	12.5%	11.1%
Neutral	34	478	2682
	23.1%	21.2%	22.3%
Agree	60	908	4993
	40.8%	40.2%	41.5%
Strongly agree	17	341	1764
	11.6%	15.1%	14.7%
Total respondent count (Percentages sum to 100%)	147	2259	12031
	100.0%	100.0%	100.0%

2.5. Privacy and security: In general, I have confidence in my institution's data privacy practices.	Appalachian State University	MA public institutions	All US institutions
Don't know	9	114	615
	6.0%	5.0%	5.1%
Strongly disagree	5	117	530
	3.4%	5.2%	4.4%
Disagree	13	203	970
	8.7%	9.0%	8.1%
Neutral	35	453	2440
	23.5%	20.0%	20.3%
Agree	71	1006	5431
	47.7%	44.5%	45.1%
Strongly agree	16	368	2045
	10.7%	16.3%	17.0%
Total respondent count (Percentages sum to 100%)	149	2261	12031
	100.0%	100.0%	100.0%

2.5. Privacy and security: In general, I have confidence in my institution's information security practices.	Appalachian State University	MA public institutions	All US institutions
Don't know	11	104	569
	7.4%	4.6%	4.7%
Strongly disagree	5	106	501
	3.4%	4.7%	4.2%
Disagree	9	212	1010
	6.0%	9.4%	8.4%
Neutral	36	427	2293
	24.2%	18.9%	19.1%
Agree	68	1023	5623
	45.6%	45.3%	46.8%
Strongly agree	20	388	2027
	13.4%	17.2%	16.9%
Total respondent count (Percentages sum to 100%)	149	2260	12023
	100.0%	100.0%	100.0%

2.5. Privacy and security: I understand relevant university policies about free online data storage.	Appalachian State University	MA public institutions	All US institutions
Don't know	4	77	457

	11.8%	11.9%	13.9%
Strongly disagree	5	69	334
	14.7%	10.7%	10.2%
Disagree	7	120	716
	20.6%	18.6%	21.8%
Neutral	4	110	546
	11.8%	17.1%	16.6%
Agree	11	195	919
	32.4%	30.2%	28.0%
Strongly agree	3	74	314
	8.8%	11.5%	9.6%
Total respondent count (Percentages sum to 100%)	34	645	3286
	100.0%	100.0%	100.0%

2.5. Privacy and security: I understand relevant university policies and state and federal laws about data protection.	Appalachian State University	MA public institutions	All US institutions
Don't know	2	24	130
	6.1%	3.7%	4.0%
Strongly disagree	0	19	92
	0.0%	3.0%	2.8%
Disagree	3	43	237
	9.1%	6.7%	7.2%
Neutral	8	81	412
	24.2%	12.6%	12.5%
Agree	13	310	1520
	39.4%	48.1%	46.2%
Strongly agree	7	167	900
	21.2%	25.9%	27.3%
Total respondent count (Percentages sum to 100%)	33	644	3291
	100.0%	100.0%	100.0%

2.5. Privacy and security: I have access to all the resources I need to keep my research and scholarly data secure.	Appalachian State University	MA public institutions	All US institutions
Don't know	4	76	504
	11.8%	11.8%	15.4%
Strongly disagree	1	30	164
	2.9%	4.7%	5.0%
Disagree	2	72	307
	5.9%	11.2%	9.4%
Neutral	12	146	750
	35.3%	22.7%	22.9%
Agree	12	239	1148
	35.3%	37.2%	35.0%
Strongly agree	3	79	407
	8.8%	12.3%	12.4%
Total respondent count (Percentages sum to 100%)	34	642	3280
	100.0%	100.0%	100.0%

2.5. Privacy and security: I have access to all the resources I need to keep my personal data and information secure.	Appalachian State University	MA public institutions	All US institutions
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Don't know	1	65	387
	2.9%	10.1%	11.8%
Strongly disagree	2	34	190
	5.9%	5.3%	5.8%
Disagree	4	69	354
	11.8%	10.7%	10.8%
Neutral	11	132	734
	32.4%	20.5%	22.3%
Agree	14	265	1242
	41.2%	41.2%	37.8%
Strongly agree	2	78	379
	5.9%	12.1%	11.5%
Total respondent count (Percentages sum to 100%)	34	643	3286
	100.0%	100.0%	100.0%

2.5. Privacy and security: My institution has mandatory information security training regarding institutional data.	Appalachian State University	MA public institutions	All US institutions
Don't know	15	123	806
	44.1%	19.1%	24.5%
Strongly disagree	4	64	355
	11.8%	9.9%	10.8%
Disagree	4	72	501
	11.8%	11.2%	15.3%
Neutral	5	77	388
	14.7%	12.0%	11.8%
Agree	3	175	794
	8.8%	27.2%	24.2%
Strongly agree	3	133	441
	8.8%	20.7%	13.4%
Total respondent count (Percentages sum to 100%)	34	644	3285
	100.0%	100.0%	100.0%

2.5. Privacy and security: My institution offers optional information security training regarding institutional data.	Appalachian State University	MA public institutions	All US institutions
Don't know	17	206	1200
	50.0%	32.0%	36.6%
Strongly disagree	0	40	226
	0.0%	6.2%	6.9%
Disagree	2	55	349
	5.9%	8.6%	10.6%
Neutral	6	91	512
	17.6%	14.2%	15.6%
Agree	7	184	739
	20.6%	28.6%	22.5%
Strongly agree	2	67	254
	5.9%	10.4%	7.7%
Total respondent count (Percentages sum to 100%)	34	643	3280
	100.0%	100.0%	100.0%

2.5. Privacy and security: My institution's privacy and	Appalachian State		
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security policies impede my productivity.	University	MA public institutions	All US institutions
Don't know	4	34	275
	12.1%	5.3%	8.4%
Strongly disagree	5	126	659
	15.2%	19.6%	20.1%
Disagree	10	234	1218
	30.3%	36.4%	37.1%
Neutral	6	125	622
	18.2%	19.4%	19.0%
Agree	7	82	348
	21.2%	12.8%	10.6%
Strongly agree	1	42	159
	3.0%	6.5%	4.8%
Total respondent count (Percentages sum to 100%)	33	643	3281
	100.0%	100.0%	100.0%

2.5. Privacy and security: My institution's intellectual property policies impede my productivity.	Appalachian State University	MA public institutions	All US institutions
Don't know	9	97	487
	26.5%	15.1%	14.8%
Strongly disagree	2	99	571
	5.9%	15.4%	17.4%
Disagree	10	207	1113
	29.4%	32.3%	33.9%
Neutral	7	157	718
	20.6%	24.5%	21.9%
Agree	3	53	270
	8.8%	8.3%	8.2%
Strongly agree	3	28	125
	8.8%	4.4%	3.8%
Total respondent count (Percentages sum to 100%)	34	641	3284
	100.0%	100.0%	100.0%

2.6. Using student data to create individualized messages about academic progress, training, and guidance opportunities	Appalachian State University	MA public institutions	All US institutions
Very bad idea	21	269	1398
	14.2%	11.9%	11.6%
Bad idea	31	483	2413
	20.9%	21.4%	20.1%
Neither good nor bad	44	698	3644
	29.7%	30.9%	30.3%
Good idea	43	651	3725
	29.1%	28.8%	31.0%
Very good idea	9	157	843
	6.1%	7.0%	7.0%
Total respondent count (Percentages sum to 100%)	148	2258	12023
	100.0%	100.0%	100.0%

2.7. Collecting data from/about students' performance in past courses	Appalachian State University	MA public institutions	All US institutions
Very bad idea	3	52	265

	8.8%	8.0%	8.1%
Bad idea	2	71	323
	5.9%	11.0%	9.9%
Neither good nor bad	4	118	629
	11.8%	18.3%	19.2%
Good idea	20	312	1503
	58.8%	48.3%	45.9%
Very good idea	5	93	555
	14.7%	14.4%	16.9%
Total respondent count (Percentages sum to 100%)	34	646	3275
	100.0%	100.0%	100.0%

2.7. Collecting data from/about students' performance in current courses	Appalachian State University	MA public institutions	All US institutions
Very bad idea	3	46	212
	8.8%	7.1%	6.5%
Bad idea	1	55	267
	2.9%	8.5%	8.1%
Neither good nor bad	4	110	495
	11.8%	17.1%	15.1%
Good idea	22	314	1587
	64.7%	48.7%	48.4%
Very good idea	4	120	717
	11.8%	18.6%	21.9%
Total respondent count (Percentages sum to 100%)	34	645	3278
	100.0%	100.0%	100.0%

2.7. Collecting data from/about students' progress toward degree or certificate goal	Appalachian State University	MA public institutions	All US institutions
Very bad idea	3	26	131
	8.8%	4.0%	4.0%
Bad idea	0	27	129
	0.0%	4.2%	3.9%
Neither good nor bad	3	76	420
	8.8%	11.8%	12.8%
Good idea	20	331	1651
	58.8%	51.6%	50.4%
Very good idea	8	182	942
	23.5%	28.3%	28.8%
Total respondent count (Percentages sum to 100%)	34	642	3273
	100.0%	100.0%	100.0%

2.7. Collecting data from/about students' performance in individual courses compared to the performance of others	Appalachian State University	MA public institutions	All US institutions
Very bad idea	4	90	404
	11.8%	14.0%	12.3%
Bad idea	5	108	517
	14.7%	16.8%	15.8%
Neither good nor bad	8	148	697
	23.5%	23.0%	21.3%
Good idea	13	221	1215

	38.2%	34.4%	37.1%
Very good idea	4	76	442
	11.8%	11.8%	13.5%
Total respondent count (Percentages sum to 100%)	34	643	3275
	100.0%	100.0%	100.0%

2.7. Collecting data from/about students' activity on a college or university website	Appalachian State University	MA public institutions	All US institutions
Very bad idea	9	119	615
	27.3%	18.5%	18.8%
Bad idea	5	123	622
	15.2%	19.2%	19.1%
Neither good nor bad	7	171	834
	21.2%	26.6%	25.5%
Good idea	10	180	945
	30.3%	28.0%	28.9%
Very good idea	2	49	249
	6.1%	7.6%	7.6%
Total respondent count (Percentages sum to 100%)	33	642	3265
	100.0%	100.0%	100.0%

2.7. Collecting data from/about students' activity in a specific application or service provided by the institution	Appalachian State University	MA public institutions	All US institutions
Very bad idea	7	83	411
	20.6%	12.9%	12.6%
Bad idea	4	90	440
	11.8%	14.0%	13.5%
Neither good nor bad	10	183	927
	29.4%	28.4%	28.4%
Good idea	11	237	1165
	32.4%	36.7%	35.7%
Very good idea	2	52	319
	5.9%	8.1%	9.8%
Total respondent count (Percentages sum to 100%)	34	645	3262
	100.0%	100.0%	100.0%

2.7. Collecting data from/about students' campus-based activities logged through student ID/smart cards	Appalachian State University	MA public institutions	All US institutions
Very bad idea	9	136	674
	26.5%	21.1%	20.6%
Bad idea	7	135	704
	20.6%	20.9%	21.5%
Neither good nor bad	7	173	841
	20.6%	26.8%	25.7%
Good idea	9	158	828
	26.5%	24.5%	25.3%
Very good idea	2	44	230
	5.9%	6.8%	7.0%
Total respondent count (Percentages sum to 100%)	34	646	3277
	100.0%	100.0%	100.0%

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2.7. Collecting data from/about students' campus-based activities logged through smartphones	Appalachian State University	MA public institutions	All US institutions
Very bad idea	11	182	915
	33.3%	28.4%	27.9%
Bad idea	6	172	820
	18.2%	26.8%	25.0%
Neither good nor bad	7	147	793
	21.2%	22.9%	24.2%
Good idea	8	102	595
	24.2%	15.9%	18.2%
Very good idea	1	38	151
	3.0%	5.9%	4.6%
Total respondent count (Percentages sum to 100%)	33	641	3274
	100.0%	100.0%	100.0%

2.7. Collecting data from/about students' location on campus	Appalachian State University	MA public institutions	All US institutions
Very bad idea	13	247	1163
	39.4%	38.4%	35.6%
Bad idea	9	164	898
	27.3%	25.5%	27.5%
Neither good nor bad	5	149	708
	15.2%	23.1%	21.6%
Good idea	4	58	388
	12.1%	9.0%	11.9%
Very good idea	2	26	114
	6.1%	4.0%	3.5%
Total respondent count (Percentages sum to 100%)	33	644	3271
	100.0%	100.0%	100.0%

2.7. Collecting data from/about students' proximity to a college building, office, or resource	Appalachian State University	MA public institutions	All US institutions
Very bad idea	13	221	1053
	38.2%	34.3%	32.2%
Bad idea	9	170	852
	26.5%	26.4%	26.0%
Neither good nor bad	7	158	826
	20.6%	24.5%	25.2%
Good idea	4	67	423
	11.8%	10.4%	12.9%
Very good idea	1	29	119
	2.9%	4.5%	3.6%
Total respondent count (Percentages sum to 100%)	34	645	3273
	100.0%	100.0%	100.0%

2.7. Collecting data from/about students' social-media activities	Appalachian State University	MA public institutions	All US institutions
Very bad idea	13	257	1285
	38.2%	40.0%	39.3%
Bad idea	10	192	999
	29.4%	29.9%	30.5%
Neither good nor bad	7	112	580

	20.6%	17.4%	17.7%
Good idea	3	60	311
	8.8%	9.3%	9.5%
Very good idea	1	22	98
	2.9%	3.4%	3.0%
Total respondent count (Percentages sum to 100%)	34	643	3273
	100.0%	100.0%	100.0%

2.8. Combining data about students' school-related activities with their social-media and mobile-device data	Appalachian State University	MA public institutions	All US institutions
Very bad idea	34	498	2553
	22.8%	22.1%	21.3%
Bad idea	43	667	3674
	28.9%	29.6%	30.7%
Neither good nor bad	36	555	2891
	24.2%	24.6%	24.1%
Good idea	31	438	2366
	20.8%	19.4%	19.7%
Very good idea	5	97	499
	3.4%	4.3%	4.2%
Total respondent count (Percentages sum to 100%)	149	2255	11983
	100.0%	100.0%	100.0%

2.9. Online learning helps students learn more effectively	Appalachian State University	MA public institutions	All US institutions
Don't know	0	12	79
	0.0%	1.9%	2.4%
Strongly disagree	4	117	540
	11.8%	18.1%	16.4%
Disagree	14	148	779
	41.2%	22.9%	23.6%
Neutral	8	213	1047
	23.5%	32.9%	31.8%
Agree	4	111	583
	11.8%	17.2%	17.7%
Strongly agree	4	46	266
	11.8%	7.1%	8.1%
Total respondent count (Percentages sum to 100%)	34	647	3294
	100.0%	100.0%	100.0%

2.9. Online learning will lead to pedagogical breakthroughs	Appalachian State University	MA public institutions	All US institutions
Don't know	0	14	110
	0.0%	2.2%	3.3%
Strongly disagree	6	98	430
	17.6%	15.1%	13.1%
Disagree	5	115	609
	14.7%	17.8%	18.5%
Neutral	13	197	979
	38.2%	30.4%	29.7%
Agree	7	149	798
	20.6%	23.0%	24.2%

Strongly agree	3	74	367
	8.8%	11.4%	11.1%
Total respondent count (Percentages sum to 100%)	34	647	3293
	100.0%	100.0%	100.0%

2.9. Online learning will make higher education available to more students	Appalachian State University	MA public institutions	All US institutions
Don't know	0	4	29
	0.0%	0.6%	0.9%
Strongly disagree	4	40	143
	11.8%	6.2%	4.3%
Disagree	1	41	233
	2.9%	6.3%	7.1%
Neutral	8	99	437
	23.5%	15.3%	13.3%
Agree	15	307	1579
	44.1%	47.4%	48.0%
Strongly agree	6	156	872
	17.6%	24.1%	26.5%
Total respondent count (Percentages sum to 100%)	34	647	3293
	100.0%	100.0%	100.0%

For question 2.11, respondents ranked up to ten items 1–10, with 1 representing the action done first. The values reported here are the average rank of each item and the number of respondents ranking each item.

2.11. Tech support or assistance		Appalachian State University	MA public institutions	All US institutions
Ask your friends	Mean	5.1	5.2	5.2
	N	48	749	4053
Ask your family	Mean	5.5	5.4	5.3
	N	46	754	4112
Ask your peers or colleagues	Mean	2.7	2.8	2.8
	N	116	1749	9116
Ask teaching or research assistants	Mean	6.1	5.7	5.2
	N	40	599	3605
Ask your students	Mean	5.8	5.5	5.5
	N	49	805	4275
Search Google, YouTube, or another online source	Mean	2.6	2.8	2.8
	N	112	1656	8732
Contact the company or vendor	Mean	5.4	5.5	5.4
	N	38	798	4458
Use the college/university help desk services	Mean	2.6	2.8	2.9
	N	135	1998	10362
Figure it out on your own	Mean	2.5	2.3	2.4
	N	123	1918	10115
Other	Mean	7.9	8.0	8.0
	N	22	450	2459

2.12. Help desk services: Walk-in		Appalachian State University	MA public institutions	All US institutions
Service not offered		1	20	237
		2.9%	3.1%	7.3%

N/A	9	190	1133
	26.5%	29.7%	34.9%
Poor	1	33	139
	2.9%	5.2%	4.3%
Fair	1	31	161
	2.9%	4.9%	5.0%
Neutral	2	58	307
	5.9%	9.1%	9.5%
Good	13	171	720
	38.2%	26.8%	22.2%
Excellent	7	136	549
	20.6%	21.3%	16.9%
Total respondent count (Percentages sum to 100%)	34	639	3246
	100.0%	100.0%	100.0%

2.12. Help desk services: Phone	Appalachian State University	MA public institutions	All US institutions
Service not offered	0	6	47
	0.0%	0.9%	1.4%
N/A	1	42	320
	2.9%	6.5%	9.8%
Poor	0	37	190
	0.0%	5.7%	5.8%
Fair	1	50	300
	2.9%	7.8%	9.2%
Neutral	5	78	325
	14.7%	12.1%	9.9%
Good	17	243	1190
	50.0%	37.7%	36.3%
Excellent	10	188	906
	29.4%	29.2%	27.6%
Total respondent count (Percentages sum to 100%)	34	644	3278
	100.0%	100.0%	100.0%

2.12. Help desk services: E-mail	Appalachian State University	MA public institutions	All US institutions
Service not offered	1	11	64
	2.9%	1.7%	2.0%
N/A	2	40	275
	5.9%	6.3%	8.4%
Poor	3	46	219
	8.8%	7.2%	6.7%
Fair	4	66	338
	11.8%	10.3%	10.3%
Neutral	2	70	363
	5.9%	11.0%	11.1%
Good	14	261	1294
	41.2%	40.9%	39.6%
Excellent	8	144	714
	23.5%	22.6%	21.9%
Total respondent count (Percentages sum to 100%)	34	638	3267
	100.0%	100.0%	100.0%

2.12. Help desk services: Web form	Appalachian State University	MA public institutions	All US institutions
Service not offered	1	42	268
	3.0%	6.7%	8.3%
N/A	7	181	978
	21.2%	28.8%	30.3%
Poor	1	62	271
	3.0%	9.9%	8.4%
Fair	6	59	270
	18.2%	9.4%	8.4%
Neutral	6	95	495
	18.2%	15.1%	15.3%
Good	6	136	662
	18.2%	21.6%	20.5%
Excellent	6	54	287
	18.2%	8.6%	8.9%
Total respondent count (Percentages sum to 100%)	33	629	3231
	100.0%	100.0%	100.0%

2.12. Help desk services: Chat/IM	Appalachian State University	MA public institutions	All US institutions
Service not offered	7	130	704
	21.2%	20.7%	21.8%
N/A	15	307	1555
	45.5%	48.8%	48.2%
Poor	0	22	105
	0.0%	3.5%	3.3%
Fair	3	20	84
	9.1%	3.2%	2.6%
Neutral	5	66	319
	15.2%	10.5%	9.9%
Good	2	58	298
	6.1%	9.2%	9.2%
Excellent	1	26	158
	3.0%	4.1%	4.9%
Total respondent count (Percentages sum to 100%)	33	629	3223
	100.0%	100.0%	100.0%

2.12. Help desk services: Remote assistance/desktop	Appalachian State University	MA public institutions	All US institutions
Service not offered	2	54	316
	6.1%	8.5%	9.8%
N/A	9	189	1101
	27.3%	29.7%	34.0%
Poor	1	27	131
	3.0%	4.2%	4.1%
Fair	4	30	164
	12.1%	4.7%	5.1%
Neutral	3	69	317
	9.1%	10.8%	9.8%
	9	151	713

Good	27.3%	23.7%	22.0%
	5	116	492
Excellent	15.2%	18.2%	15.2%
	33	636	3234
Total respondent count (Percentages sum to 100%)	100.0%	100.0%	100.0%

2.12. Help desk services: Self-service FAQ	Appalachian State University	MA public institutions	All US institutions
Service not offered	3	38	254
	9.1%	6.0%	7.9%
N/A	1	152	786
	3.0%	24.1%	24.4%
Poor	8	84	410
	24.2%	13.3%	12.7%
Fair	5	91	419
	15.2%	14.4%	13.0%
Neutral	6	124	607
	18.2%	19.6%	18.8%
Good	7	109	589
	21.2%	17.2%	18.3%
Excellent	3	34	161
	9.1%	5.4%	5.0%
Total respondent count (Percentages sum to 100%)	33	632	3226
	100.0%	100.0%	100.0%

2.12. Help desk services: Overall	Appalachian State University	MA public institutions	All US institutions
Service not offered	0	4	42
	0.0%	0.2%	0.3%
N/A	4	38	312
	2.7%	1.7%	2.6%
Poor	2	98	598
	1.4%	4.3%	5.0%
Fair	16	222	1199
	10.8%	9.8%	10.0%
Neutral	8	213	1248
	5.4%	9.4%	10.4%
Good	69	1007	5324
	46.6%	44.5%	44.4%
Excellent	49	680	3280
	33.1%	30.1%	27.3%
Total respondent count (Percentages sum to 100%)	148	2262	12003
	100.0%	100.0%	100.0%

2.13. My institution maintains a highly qualified IT staff.	Appalachian State University	MA public institutions	All US institutions
Don't know	1	29	245
	2.9%	4.5%	7.5%
Strongly disagree	1	45	207
	2.9%	7.0%	6.3%
Disagree	2	53	303

	5.9%	8.2%	9.2%
Neutral	1	112	596
	2.9%	17.4%	18.2%
Agree	20	285	1335
	58.8%	44.2%	40.7%
Strongly agree	9	121	593
	26.5%	18.8%	18.1%
Total respondent count (Percentages sum to 100%)	34	645	3279
	100.0%	100.0%	100.0%

2.13. My institution facilitates the use of technology in collaboration with academic leadership.	Appalachian State University	MA public institutions	All US institutions
Don't know	0	44	299
	0.0%	6.9%	9.1%
Strongly disagree	2	57	295
	5.9%	8.9%	9.0%
Disagree	12	107	523
	35.3%	16.7%	16.0%
Neutral	6	141	713
	17.6%	22.0%	21.8%
Agree	12	237	1169
	35.3%	37.0%	35.7%
Strongly agree	2	55	271
	5.9%	8.6%	8.3%
Total respondent count (Percentages sum to 100%)	34	641	3270
	100.0%	100.0%	100.0%

2.13. My institution funds IT strategically.	Appalachian State University	MA public institutions	All US institutions
Don't know	16	232	1260
	47.1%	36.1%	38.5%
Strongly disagree	4	76	376
	11.8%	11.8%	11.5%
Disagree	4	99	464
	11.8%	15.4%	14.2%
Neutral	5	107	582
	14.7%	16.6%	17.8%
Agree	4	106	462
	11.8%	16.5%	14.1%
Strongly agree	1	23	129
	2.9%	3.6%	3.9%
Total respondent count (Percentages sum to 100%)	34	643	3273
	100.0%	100.0%	100.0%

2.13. My institution improves student outcomes through an approach that uses technology.	Appalachian State University	MA public institutions	All US institutions
Don't know	5	85	525
	14.7%	13.3%	16.1%
Strongly disagree	1	44	226
	2.9%	6.9%	6.9%
Disagree	2	105	472
	5.9%	16.4%	14.5%

Neutral	10	168	812
	29.4%	26.2%	24.9%
Agree	14	196	1013
	41.2%	30.6%	31.0%
Strongly agree	2	43	217
	5.9%	6.7%	6.6%
Total respondent count (Percentages sum to 100%)	34	641	3265
	100.0%	100.0%	100.0%

2.13. My institution demonstrates the business value of information technology.	Appalachian State University	MA public institutions	All US institutions
Don't know	13	182	987
	38.2%	28.4%	30.2%
Strongly disagree	1	47	259
	2.9%	7.3%	7.9%
Disagree	6	116	487
	17.6%	18.1%	14.9%
Neutral	7	152	719
	20.6%	23.7%	22.0%
Agree	6	115	635
	17.6%	17.9%	19.4%
Strongly agree	1	29	179
	2.9%	4.5%	5.5%
Total respondent count (Percentages sum to 100%)	34	641	3266
	100.0%	100.0%	100.0%

2.13. My institution demonstrates how technology and the IT organization can help the institution achieve its goals.	Appalachian State University	MA public institutions	All US institutions
Don't know	3	92	518
	8.8%	14.3%	15.9%
Strongly disagree	3	60	328
	8.8%	9.3%	10.0%
Disagree	8	131	619
	23.5%	20.4%	18.9%
Neutral	8	149	780
	23.5%	23.2%	23.9%
Agree	11	171	840
	32.4%	26.6%	25.7%
Strongly agree	1	39	182
	2.9%	6.1%	5.6%
Total respondent count (Percentages sum to 100%)	34	642	3267
	100.0%	100.0%	100.0%

2.13. My institution increases the IT organization's capacity for managing change.	Appalachian State University	MA public institutions	All US institutions
Don't know	8	160	951
	23.5%	25.0%	29.1%
Strongly disagree	4	64	328
	11.8%	10.0%	10.0%
Disagree	4	108	513
	11.8%	16.9%	15.7%

Neutral	7	139	687
	20.6%	21.7%	21.0%
Agree	9	138	634
	26.5%	21.6%	19.4%
Strongly agree	2	31	158
	5.9%	4.8%	4.8%
Total respondent count (Percentages sum to 100%)	34	640	3271
	100.0%	100.0%	100.0%

2.13. My institution provides user support for mobile, online education, cloud, and BYOD environments.	Appalachian State University	MA public institutions	All US institutions
Don't know	2	107	648
	5.9%	16.6%	19.8%
Strongly disagree	5	55	274
	14.7%	8.6%	8.4%
Disagree	4	82	495
	11.8%	12.8%	15.1%
Neutral	11	160	713
	32.4%	24.9%	21.8%
Agree	11	199	940
	32.4%	30.9%	28.8%
Strongly agree	1	40	198
	2.9%	6.2%	6.1%
Total respondent count (Percentages sum to 100%)	34	643	3268
	100.0%	100.0%	100.0%

2.13. My institution is developing mobile, cloud, and digital security policies that work for most	Appalachian State University	MA public institutions	All US institutions
Don't know	12	228	1315
	35.3%	35.5%	40.1%
Strongly disagree	0	31	206
	0.0%	4.8%	6.3%
Disagree	7	87	357
	20.6%	13.5%	10.9%
Neutral	10	135	647
	29.4%	21.0%	19.7%
Agree	4	129	602
	11.8%	20.1%	18.4%
Strongly agree	1	33	150
	2.9%	5.1%	4.6%
Total respondent count (Percentages sum to 100%)	34	643	3277
	100.0%	100.0%	100.0%

2.13. My institution has an agile approach to IT infrastructure that can respond	Appalachian State University	MA public institutions	All US institutions
Don't know	4	131	716
	11.8%	20.3%	21.9%
Strongly disagree	8	99	501
	23.5%	15.3%	15.3%
Disagree	6	139	621
	17.6%	21.6%	19.0%
	5	120	638

	Neutral		
		14.7%	18.6%
		9	121
	Agree	26.5%	18.8%
		2	35
	Strongly agree	5.9%	5.4%
		34	645
	Total respondent count (Percentages sum to 100%)	100.0%	100.0%
			19.5%
			627
			19.2%
			169
			5.2%
			3272
			100.0%

2.13. My institution facilitates a better understanding of information privacy and security.	Appalachian State University	MA public institutions	All US institutions
		5	77
	Don't know	14.7%	12.0%
		3	46
	Strongly disagree	8.8%	7.2%
		9	103
	Disagree	26.5%	16.0%
		6	178
	Neutral	17.6%	27.7%
		10	187
	Agree	29.4%	29.1%
		1	51
	Strongly agree	2.9%	7.9%
		34	642
	Total respondent count (Percentages sum to 100%)	100.0%	100.0%
			492
			15.1%
			258
			7.9%
			578
			17.7%
			876
			26.8%
			887
			27.1%
			178
			5.4%
			3269
			100.0%

2.13. My institution is committed to supporting accessible or adaptive technologies for students with disabilities.	Appalachian State University	MA public institutions	All US institutions
		13	186
	Don't know	38.2%	28.9%
		2	38
	Strongly disagree	5.9%	5.9%
		1	36
	Disagree	2.9%	5.6%
		4	112
	Neutral	11.8%	17.4%
		12	189
	Agree	35.3%	29.4%
		2	82
	Strongly agree	5.9%	12.8%
		34	643
	Total respondent count (Percentages sum to 100%)	100.0%	100.0%
			1068
			32.6%
			142
			4.3%
			182
			5.6%
			543
			16.6%
			977
			29.8%
			364
			11.1%
			3276
			100.0%

2.13. My institution supports faculty technology needs.	Appalachian State University	MA public institutions	All US institutions
		0	8
	Don't know	0.0%	1.2%
		3	76
	Strongly disagree	8.8%	11.8%
		6	107
	Disagree	17.6%	16.6%
		3	117
			686

Neutral	8.8%	18.2%	20.9%
	19	264	1343
Agree	55.9%	41.0%	40.9%
	3	72	365
Strongly agree	8.8%	11.2%	11.1%
	34	644	3280
Total respondent count (Percentages sum to 100%)	100.0%	100.0%	100.0%

3.1. Agree/disagree: I wish my students were better prepared to use institutionally specific technology.	Appalachian State University	MA public institutions	All US institutions
N/A	7	57	407
	4.8%	2.6%	3.6%
Strongly disagree	6	78	390
	4.1%	3.5%	3.4%
Disagree	20	333	1734
	13.8%	15.1%	15.1%
Neutral	46	542	2829
	31.7%	24.6%	24.7%
Agree	54	842	4222
	37.2%	38.2%	36.9%
Strongly agree	12	354	1868
	8.3%	16.0%	16.3%
Total respondent count (Percentages sum to 100%)	145	2206	11450
	100.0%	100.0%	100.0%

3.1. Agree/disagree: I wish my students were better prepared to use basic software programs and applications.	Appalachian State University	MA public institutions	All US institutions
N/A	2	43	274
	1.4%	1.9%	2.4%
Strongly disagree	5	111	663
	3.4%	5.0%	5.8%
Disagree	34	485	2465
	23.3%	22.0%	21.5%
Neutral	43	541	2877
	29.5%	24.5%	25.1%
Agree	34	671	3422
	23.3%	30.4%	29.9%
Strongly agree	28	355	1761
	19.2%	16.1%	15.4%
Total respondent count (Percentages sum to 100%)	146	2206	11462
	100.0%	100.0%	100.0%

3.1. Agree/disagree: Most of my students have adequate technology skills for carrying out course activities.	Appalachian State University	MA public institutions	All US institutions
N/A	0	0	19
	0.0%	0.0%	0.6%
Strongly disagree	0	26	142
	0.0%	4.1%	4.5%
Disagree	4	125	581
	12.1%	19.7%	18.3%
	5	98	526

Neutral	15.2%	15.4%	16.6%
	22	328	1605
Agree	66.7%	51.6%	50.6%
	2	59	302
Strongly agree	6.1%	9.3%	9.5%
	33	636	3175
Total respondent count (Percentages sum to 100%)	100.0%	100.0%	100.0%

3.1. Agree/disagree: Too many of my students look to me or my TAs for technology support to fulfill course requirements.	Appalachian State University	MA public institutions	All US institutions
N/A	2	20	120
	6.1%	3.2%	3.8%
Strongly disagree	2	67	298
	6.1%	10.6%	9.4%
Disagree	12	189	1005
	36.4%	29.9%	31.7%
Neutral	5	133	614
	15.2%	21.0%	19.3%
Agree	10	165	796
	30.3%	26.1%	25.1%
Strongly agree	2	59	342
	6.1%	9.3%	10.8%
Total respondent count (Percentages sum to 100%)	33	633	3175
	100.0%	100.0%	100.0%

3.3. Alerts and notifications: Guidance about courses students might consider taking in the future	Appalachian State University	MA public institutions	All US institutions
Don't know	5	63	341
	3.5%	2.9%	3.0%
Not at all interested	26	301	1357
	18.1%	13.7%	11.9%
Not very interested	22	418	2095
	15.3%	19.1%	18.4%
Moderately interested	62	763	3957
	43.1%	34.8%	34.7%
Very interested	23	474	2624
	16.0%	21.6%	23.0%
Extremely interested	6	174	1023
	4.2%	7.9%	9.0%
Total respondent count (Percentages sum to 100%)	144	2193	11397
	100.0%	100.0%	100.0%

3.3. Alerts and notifications: Alerts if it appears a student's progress in a course is declining	Appalachian State University	MA public institutions	All US institutions
Don't know	1	39	222
	0.7%	1.8%	1.9%
Not at all interested	20	185	914
	13.9%	8.4%	8.0%
Not very interested	24	299	1327
	16.7%	13.6%	11.6%
	58	696	3533

Moderately interested	40.3%	31.8%	31.0%
Very interested	35	702	3793
	24.3%	32.0%	33.3%
Extremely interested	6	270	1614
	4.2%	12.3%	14.2%
Total respondent count (Percentages sum to 100%)	144	2191	11403
	100.0%	100.0%	100.0%

3.3. Alerts and notifications: Suggestions for how to improve performance in a course ...	Appalachian State University	MA public institutions	All US institutions
Don't know	2	48	236
	1.4%	2.2%	2.1%
Not at all interested	22	191	924
	15.3%	8.7%	8.1%
Not very interested	19	281	1298
	13.2%	12.8%	11.4%
Moderately interested	60	762	3795
	41.7%	34.8%	33.3%
Very interested	36	673	3724
	25.0%	30.7%	32.7%
Extremely interested	5	237	1417
	3.5%	10.8%	12.4%
Total respondent count (Percentages sum to 100%)	144	2192	11394
	100.0%	100.0%	100.0%

3.3. Alerts and notifications: Suggestions about new or different academic resources for your students	Appalachian State University	MA public institutions	All US institutions
Don't know	0	8	69
	0.0%	1.3%	2.2%
Not at all interested	4	39	181
	12.5%	6.2%	5.7%
Not very interested	4	41	227
	12.5%	6.5%	7.2%
Moderately interested	7	230	1031
	21.9%	36.5%	32.7%
Very interested	13	214	1127
	40.6%	33.9%	35.7%
Extremely interested	4	99	519
	12.5%	15.7%	16.5%
Total respondent count (Percentages sum to 100%)	32	631	3154
	100.0%	100.0%	100.0%

3.3. Alerts and notifications: Automated tracking of course attendance ...	Appalachian State University	MA public institutions	All US institutions
Don't know	1	17	112
	3.1%	2.7%	3.6%
Not at all interested	4	157	719
	12.5%	25.0%	22.8%
Not very interested	7	125	580
	21.9%	19.9%	18.4%
Moderately interested	8	136	672

	25.0%	21.6%	21.3%
Very interested	8	109	602
	25.0%	17.3%	19.1%
Extremely interested	4	85	467
	12.5%	13.5%	14.8%
Total respondent count (Percentages sum to 100%)	32	629	3152
	100.0%	100.0%	100.0%

3.3. Alerts and notifications: Personalized support and information on your students' progress toward their degree goals	Appalachian State University	MA public institutions	All US institutions
Don't know	1	13	97
	3.2%	2.1%	3.1%
Not at all interested	2	62	292
	6.5%	9.9%	9.3%
Not very interested	0	63	368
	0.0%	10.0%	11.7%
Moderately interested	11	201	1009
	35.5%	32.0%	32.0%
Very interested	15	219	981
	48.4%	34.8%	31.1%
Extremely interested	2	71	405
	6.5%	11.3%	12.8%
Total respondent count (Percentages sum to 100%)	31	629	3152
	100.0%	100.0%	100.0%

3.3. Alerts and notifications: Personalized quizzes or practice questions oriented to your students ...	Appalachian State University	MA public institutions	All US institutions
Don't know	1	19	114
	3.1%	3.0%	3.6%
Not at all interested	4	115	488
	12.5%	18.3%	15.5%
Not very interested	9	119	548
	28.1%	18.9%	17.4%
Moderately interested	10	168	852
	31.3%	26.7%	27.0%
Very interested	6	155	785
	18.8%	24.6%	24.9%
Extremely interested	2	54	365
	6.3%	8.6%	11.6%
Total respondent count (Percentages sum to 100%)	32	630	3152
	100.0%	100.0%	100.0%

3.3. Alerts and notifications: Personalized dashboards that give students real-time feedback about their progress	Appalachian State University	MA public institutions	All US institutions
Don't know	1	18	102
	3.1%	2.9%	3.2%
Not at all interested	3	76	347
	9.4%	12.1%	11.0%
Not very interested	5	79	368
	15.6%	12.6%	11.7%
	10	192	961

Moderately interested	31.3%	30.5%	30.5%
Very interested	9	169	903
	28.1%	26.9%	28.6%
Extremely interested	4	95	473
	12.5%	15.1%	15.0%
Total respondent count (Percentages sum to 100%)	32	629	3154
	100.0%	100.0%	100.0%

3.3. Alerts and notifications: Personalized dashboards that give you real-time feedback about students' progress	Appalachian State University	MA public institutions	All US institutions
Don't know	0	18	112
	0.0%	2.9%	3.6%
Not at all interested	5	84	392
	15.6%	13.3%	12.4%
Not very interested	5	101	431
	15.6%	16.0%	13.7%
Moderately interested	13	192	931
	40.6%	30.5%	29.5%
Very interested	5	161	874
	15.6%	25.6%	27.7%
Extremely interested	4	74	412
	12.5%	11.7%	13.1%
Total respondent count (Percentages sum to 100%)	32	630	3152
	100.0%	100.0%	100.0%

3.4. Online services: Guidance about courses students might consider taking in the future	Appalachian State University	MA public institutions	All US institutions
Service not provided	13	294	1286
	40.6%	46.8%	41.0%
Don't know	8	158	919
	25.0%	25.2%	29.3%
Not at all useful	2	29	132
	6.3%	4.6%	4.2%
Not very useful	1	23	154
	3.1%	3.7%	4.9%
Moderately useful	5	56	306
	15.6%	8.9%	9.7%
Very useful	1	47	240
	3.1%	7.5%	7.6%
Extremely useful	2	21	103
	6.3%	3.3%	3.3%
Total respondent count (Percentages sum to 100%)	32	628	3140
	100.0%	100.0%	100.0%

3.4. Online services: Alerts if it appears a student's progress in a course is declining	Appalachian State University	MA public institutions	All US institutions
Service not provided	12	212	1073
	37.5%	34.2%	34.3%
Don't know	8	142	716
	25.0%	22.9%	22.9%
	3	30	124

Not at all useful	9.4%	4.8%	4.0%
Not very useful	4	50	226
	12.5%	8.1%	7.2%
Moderately useful	2	92	482
	6.3%	14.8%	15.4%
Very useful	2	69	334
	6.3%	11.1%	10.7%
Extremely useful	1	25	175
	3.1%	4.0%	5.6%
Total respondent count (Percentages sum to 100%)	32	620	3130
	100.0%	100.0%	100.0%

3.4. Online services: Suggestions for how to improve performance in a course ...	Appalachian State University	MA public institutions	All US institutions
Service not provided	15	275	1260
	48.4%	44.2%	40.2%
Don't know	6	145	801
	19.4%	23.3%	25.6%
Not at all useful	2	25	119
	6.5%	4.0%	3.8%
Not very useful	4	39	195
	12.9%	6.3%	6.2%
Moderately useful	2	69	373
	6.5%	11.1%	11.9%
Very useful	1	48	263
	3.2%	7.7%	8.4%
Extremely useful	1	21	122
	3.2%	3.4%	3.9%
Total respondent count (Percentages sum to 100%)	31	622	3133
	100.0%	100.0%	100.0%

3.4. Online services: Suggestions about new or different academic resources for your students	Appalachian State University	MA public institutions	All US institutions
Service not provided	10	167	823
	31.3%	26.8%	26.3%
Don't know	8	152	852
	25.0%	24.4%	27.2%
Not at all useful	2	17	80
	6.3%	2.7%	2.6%
Not very useful	1	46	187
	3.1%	7.4%	6.0%
Moderately useful	8	130	576
	25.0%	20.8%	18.4%
Very useful	2	78	444
	6.3%	12.5%	14.2%
Extremely useful	1	34	168
	3.1%	5.4%	5.4%
Total respondent count (Percentages sum to 100%)	32	624	3130
	100.0%	100.0%	100.0%

3.4. Online services: Automated tracking of your	Appalachian State		
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students' course attendance ...	University	MA public institutions	All US institutions
Service not provided	19	358	1598
	59.4%	57.3%	50.9%
Don't know	5	112	625
	15.6%	17.9%	19.9%
Not at all useful	3	36	185
	9.4%	5.8%	5.9%
Not very useful	1	27	155
	3.1%	4.3%	4.9%
Moderately useful	1	37	246
	3.1%	5.9%	7.8%
Very useful	2	35	207
	6.3%	5.6%	6.6%
Extremely useful	1	20	123
	3.1%	3.2%	3.9%
Total respondent count (Percentages sum to 100%)	32	625	3139
	100.0%	100.0%	100.0%

3.4. Online services: Personalized support and information on your students' progress toward their degree goals	Appalachian State University	MA public institutions	All US institutions
Service not provided	7	172	900
	21.9%	27.5%	28.7%
Don't know	7	161	905
	21.9%	25.7%	28.9%
Not at all useful	1	24	113
	3.1%	3.8%	3.6%
Not very useful	3	35	177
	9.4%	5.6%	5.7%
Moderately useful	5	109	510
	15.6%	17.4%	16.3%
Very useful	6	90	367
	18.8%	14.4%	11.7%
Extremely useful	3	35	160
	9.4%	5.6%	5.1%
Total respondent count (Percentages sum to 100%)	32	626	3132
	100.0%	100.0%	100.0%

3.4. Online services: Personalized quizzes or practice questions oriented to your students ...	Appalachian State University	MA public institutions	All US institutions
Service not provided	18	296	1421
	56.3%	47.4%	45.4%
Don't know	4	149	778
	12.5%	23.8%	24.8%
Not at all useful	5	32	157
	15.6%	5.1%	5.0%
Not very useful	2	33	147
	6.3%	5.3%	4.7%
Moderately useful	1	57	291
	3.1%	9.1%	9.3%
Very useful	1	42	226
	3.1%	6.7%	7.2%

Extremely useful	1	16	112
	3.1%	2.6%	3.6%
Total respondent count (Percentages sum to 100%)	32	625	3132
	100.0%	100.0%	100.0%

3.4. Online services: Personalized dashboards that give students real-time feedback about their progress	Appalachian State University	MA public institutions	All US institutions
Service not provided	12	246	1105
	37.5%	39.5%	35.3%
Don't know	9	157	826
	28.1%	25.2%	26.4%
Not at all useful	3	23	127
	9.4%	3.7%	4.1%
Not very useful	0	32	151
	0.0%	5.1%	4.8%
Moderately useful	4	76	416
	12.5%	12.2%	13.3%
Very useful	4	66	339
	12.5%	10.6%	10.8%
Extremely useful	0	23	165
	0.0%	3.7%	5.3%
Total respondent count (Percentages sum to 100%)	32	623	3129
	100.0%	100.0%	100.0%

3.4. Online services: Personalized dashboards that give you real-time feedback about students' progress	Appalachian State University	MA public institutions	All US institutions
Service not provided	17	261	1205
	53.1%	41.9%	38.4%
Don't know	5	143	747
	15.6%	23.0%	23.8%
Not at all useful	4	29	136
	12.5%	4.7%	4.3%
Not very useful	1	41	179
	3.1%	6.6%	5.7%
Moderately useful	1	72	398
	3.1%	11.6%	12.7%
Very useful	3	54	316
	9.4%	8.7%	10.1%
Extremely useful	1	23	156
	3.1%	3.7%	5.0%
Total respondent count (Percentages sum to 100%)	32	623	3137
	100.0%	100.0%	100.0%

3.5. More effective if better skilled: Learning management system	Appalachian State University	MA public institutions	All US institutions
N/A	6	70	511
	4.2%	3.2%	4.5%
Strongly disagree	7	123	688
	4.9%	5.6%	6.1%
Disagree	15	190	945
	10.4%	8.7%	8.3%
	33	512	2682

Neutral	22.9%	23.5%	23.7%
	60	909	4606
Agree	41.7%	41.7%	40.6%
	23	376	1900
Strongly agree	16.0%	17.2%	16.8%
	144	2180	11332
Total respondent count (Percentages sum to 100%)	100.0%	100.0%	100.0%

3.5. More effective if better skilled: Online collaboration tools	Appalachian State University	MA public institutions	All US institutions
N/A	4	79	530
	2.8%	3.6%	4.7%
Strongly disagree	6	123	692
	4.2%	5.6%	6.1%
Disagree	11	191	947
	7.6%	8.8%	8.3%
Neutral	30	497	2631
	20.8%	22.8%	23.2%
Agree	67	933	4795
	46.5%	42.8%	42.3%
Strongly agree	26	359	1754
	18.1%	16.5%	15.5%
Total respondent count (Percentages sum to 100%)	144	2182	11349
	100.0%	100.0%	100.0%

3.5. More effective if better skilled: E-portfolios	Appalachian State University	MA public institutions	All US institutions
N/A	14	242	1703
	9.8%	11.1%	15.1%
Strongly disagree	17	244	1185
	11.9%	11.2%	10.5%
Disagree	25	335	1662
	17.5%	15.4%	14.7%
Neutral	42	641	3416
	29.4%	29.5%	30.2%
Agree	33	553	2588
	23.1%	25.4%	22.9%
Strongly agree	12	159	746
	8.4%	7.3%	6.6%
Total respondent count (Percentages sum to 100%)	143	2174	11300
	100.0%	100.0%	100.0%

3.5. More effective if better skilled: E-books or e-textbooks	Appalachian State University	MA public institutions	All US institutions
N/A	5	90	598
	3.5%	4.1%	5.3%
Strongly disagree	11	187	950
	7.6%	8.6%	8.4%
Disagree	22	284	1370
	15.3%	13.0%	12.1%
Neutral	44	619	3132

	30.6%	28.4%	27.6%
Agree	48	762	4009
	33.3%	35.0%	35.4%
Strongly agree	14	238	1274
	9.7%	10.9%	11.2%
Total respondent count (Percentages sum to 100%)	144	2180	11333
	100.0%	100.0%	100.0%

3.5. More effective if better skilled: Free, web-based content to supplement course-related materials	Appalachian State University	MA public institutions	All US institutions
N/A	4	75	437
	2.8%	3.4%	3.8%
Strongly disagree	9	171	816
	6.3%	7.8%	7.2%
Disagree	14	202	972
	9.7%	9.2%	8.5%
Neutral	37	492	2465
	25.7%	22.5%	21.7%
Agree	67	934	4946
	46.5%	42.7%	43.5%
Strongly agree	13	312	1735
	9.0%	14.3%	15.3%
Total respondent count (Percentages sum to 100%)	144	2186	11371
	100.0%	100.0%	100.0%

3.5. More effective if better skilled: Simulations or educational games	Appalachian State University	MA public institutions	All US institutions
N/A	9	100	669
	6.3%	4.6%	5.9%
Strongly disagree	17	198	1035
	11.8%	9.1%	9.2%
Disagree	12	208	1173
	8.3%	9.6%	10.4%
Neutral	40	492	2446
	27.8%	22.6%	21.6%
Agree	51	874	4414
	35.4%	40.2%	39.0%
Strongly agree	15	301	1568
	10.4%	13.9%	13.9%
Total respondent count (Percentages sum to 100%)	144	2173	11305
	100.0%	100.0%	100.0%

3.5. More effective if better skilled: Lecture capture/classroom-based recordings	Appalachian State University	MA public institutions	All US institutions
N/A	7	85	574
	4.9%	3.9%	5.1%
Strongly disagree	9	175	928
	6.3%	8.0%	8.2%
Disagree	25	285	1266
	17.6%	13.1%	11.2%
Neutral	31	519	2650
	21.8%	23.9%	23.3%

Agree	54	802	4292
	38.0%	36.9%	37.8%
Strongly agree	16	309	1642
	11.3%	14.2%	14.5%
Total respondent count (Percentages sum to 100%)	142	2175	11352
	100.0%	100.0%	100.0%

3.5. More effective if better skilled: Students' tablets during class	Appalachian State University	MA public institutions	All US institutions
N/A	13	139	984
	9.0%	6.4%	8.7%
Strongly disagree	27	302	1458
	18.8%	13.9%	12.9%
Disagree	25	370	1848
	17.4%	17.0%	16.3%
Neutral	39	526	2834
	27.1%	24.1%	25.0%
Agree	30	673	3359
	20.8%	30.9%	29.6%
Strongly agree	10	169	850
	6.9%	7.8%	7.5%
Total respondent count (Percentages sum to 100%)	144	2179	11333
	100.0%	100.0%	100.0%

3.5. More effective if better skilled: Students' smartphones during class	Appalachian State University	MA public institutions	All US institutions
N/A	11	111	859
	7.7%	5.1%	7.6%
Strongly disagree	35	436	2307
	24.5%	20.0%	20.4%
Disagree	31	438	2161
	21.7%	20.1%	19.1%
Neutral	36	485	2427
	25.2%	22.3%	21.4%
Agree	24	539	2803
	16.8%	24.8%	24.7%
Strongly agree	6	167	773
	4.2%	7.7%	6.8%
Total respondent count (Percentages sum to 100%)	143	2176	11330
	100.0%	100.0%	100.0%

3.5. More effective if better skilled: Students' laptops during class	Appalachian State University	MA public institutions	All US institutions
N/A	11	121	827
	7.7%	5.6%	7.3%
Strongly disagree	24	269	1353
	16.8%	12.4%	11.9%
Disagree	22	350	1594
	15.4%	16.1%	14.1%
Neutral	38	565	2857
	26.6%	26.0%	25.2%
	34	674	3682

Agree	23.8%	31.0%	32.5%
	14	193	1011
Strongly agree	9.8%	8.9%	8.9%
	143	2172	11324
Total respondent count (Percentages sum to 100%)	100.0%	100.0%	100.0%

3.5. More effective if better skilled: Social media as a teaching and learning tool	Appalachian State University	MA public institutions	All US institutions
N/A	6	84	560
	4.2%	3.9%	4.9%
Strongly disagree	25	343	1833
	17.5%	15.7%	16.2%
Disagree	28	380	1994
	19.6%	17.4%	17.6%
Neutral	39	583	3017
	27.3%	26.8%	26.6%
Agree	36	618	3095
	25.2%	28.4%	27.3%
Strongly agree	9	171	848
	6.3%	7.8%	7.5%
Total respondent count (Percentages sum to 100%)	143	2179	11347
	100.0%	100.0%	100.0%

3.5. More effective if better skilled: 3D printers	Appalachian State University	MA public institutions	All US institutions
N/A	10	119	715
	30.3%	18.9%	22.8%
Strongly disagree	5	116	604
	15.2%	18.4%	19.2%
Disagree	5	106	492
	15.2%	16.8%	15.7%
Neutral	6	164	723
	18.2%	26.0%	23.0%
Agree	2	82	415
	6.1%	13.0%	13.2%
Strongly agree	5	43	193
	15.2%	6.8%	6.1%
Total respondent count (Percentages sum to 100%)	33	630	3142
	100.0%	100.0%	100.0%

3.5. More effective if better skilled: Nonkeyboard or nonmouse computer interfaces	Appalachian State University	MA public institutions	All US institutions
N/A	6	51	364
	18.8%	8.1%	11.6%
Strongly disagree	5	73	368
	15.6%	11.6%	11.7%
Disagree	4	108	484
	12.5%	17.1%	15.4%
Neutral	10	191	940
	31.3%	30.3%	29.9%
Agree	5	150	744

	15.6%	23.8%	23.6%
Strongly agree	2	57	247
	6.3%	9.0%	7.8%
Total respondent count (Percentages sum to 100%)	32	630	3147
	100.0%	100.0%	100.0%

3.5. More effective if better skilled: Software to create videos or multimedia resources	Appalachian State University	MA public institutions	All US institutions
N/A	1	17	169
	3.0%	2.7%	5.4%
Strongly disagree	2	37	207
	6.1%	5.9%	6.6%
Disagree	1	64	271
	3.0%	10.2%	8.6%
Neutral	6	124	576
	18.2%	19.8%	18.4%
Agree	13	248	1258
	39.4%	39.6%	40.1%
Strongly agree	10	137	657
	30.3%	21.9%	20.9%
Total respondent count (Percentages sum to 100%)	33	627	3138
	100.0%	100.0%	100.0%

3.5. More effective if better skilled: Early-alert systems designed to catch potential academic trouble ...	Appalachian State University	MA public institutions	All US institutions
N/A	0	28	171
	0.0%	4.5%	5.4%
Strongly disagree	5	56	280
	15.2%	8.9%	8.9%
Disagree	5	76	379
	15.2%	12.1%	12.1%
Neutral	6	156	714
	18.2%	24.8%	22.7%
Agree	13	237	1167
	39.4%	37.7%	37.2%
Strongly agree	4	75	429
	12.1%	11.9%	13.7%
Total respondent count (Percentages sum to 100%)	33	628	3140
	100.0%	100.0%	100.0%

3.5. More effective if better skilled: Search tools to find references or other information online for class work	Appalachian State University	MA public institutions	All US institutions
N/A	2	30	167
	6.1%	4.8%	5.3%
Strongly disagree	1	52	268
	3.0%	8.3%	8.5%
Disagree	4	68	346
	12.1%	10.8%	11.0%
Neutral	6	163	707
	18.2%	25.9%	22.5%
Agree	10	222	1182
	30.3%	35.3%	37.6%

Strongly agree	10	94	474
	30.3%	14.9%	15.1%
Total respondent count (Percentages sum to 100%)	33	629	3144
	100.0%	100.0%	100.0%

3.5. More effective if better skilled: Blogs or online discussion/collaboration tools related to class work	Appalachian State University	MA public institutions	All US institutions
N/A	1	22	161
	3.0%	3.5%	5.1%
Strongly disagree	1	53	290
	3.0%	8.4%	9.3%
Disagree	4	89	426
	12.1%	14.2%	13.6%
Neutral	9	177	852
	27.3%	28.2%	27.2%
Agree	12	223	1090
	36.4%	35.5%	34.8%
Strongly agree	6	64	310
	18.2%	10.2%	9.9%
Total respondent count (Percentages sum to 100%)	33	628	3129
	100.0%	100.0%	100.0%

For question 3.7a, respondents ranked up to three items.
The values reported here are the number and percentage of respondents ranking each item.

3.7a. Motivation for integration	Appalachian State University	MA public institutions	All US institutions
More/better technology-oriented professional development opportunities	24	411	2139
	16.1%	18.1%	17.7%
A monetary or other value-oriented incentive	31	398	2057
	20.8%	17.5%	17.0%
Tenure decisions and other professional advancement considerations	15	200	953
	10.1%	8.8%	7.9%
Release time to design/redesign my courses	55	834	3628
	36.9%	36.8%	30.1%
Direct assistance from an instructional design expert to design/redesign my courses	32	541	2811
	21.5%	23.8%	23.3%
Direct assistance from IT staff to support the technology I choose to implement	31	541	2906
	20.8%	23.8%	24.1%
A teaching assistant to assist with technology implementation	11	297	1590
	7.4%	13.1%	13.2%
Support/encouragement from peers	7	69	370
	4.7%	3.0%	3.1%
Working in a faculty cohort or community that is adopting the same types of practices	34	379	1951
	22.8%	16.7%	16.2%
A better understanding of the types of technologies relevant to teaching and learning	37	613	3370
	24.8%	27.0%	27.9%
Confidence that the technology would work the way I planned	40	643	3609
	26.8%	28.3%	29.9%
Increased student expectations of technology integration	13	165	980
	8.7%	7.3%	8.1%
	62	961	5026

Clear indication/evidence that students would benefit	41.6%	42.4%	41.6%
Other; please specify	3	86	425
	2.0%	3.8%	3.5%
Total respondent count	149	2269	12070

4.1. Course sections in a typical year	Appalachian State University	MA public institutions	All US institutions
1-2	18	247	1878
	12.9%	11.5%	16.8%
3-5	38	655	4058
	27.3%	30.4%	36.2%
6-9	76	1033	3375
	54.7%	47.9%	30.1%
10+	7	220	1889
	5.0%	10.2%	16.9%
Total respondent count	139	2155	11200
(Percentages sum to 100%)	100.0%	100.0%	100.0%

4.2. In how many of your courses did you use a blended approach to teaching?	Appalachian State University	MA public institutions	All US institutions
Don't know	2	10	76
	1.4%	0.5%	0.7%
None	50	850	4972
	34.7%	38.8%	43.8%
A few	47	545	2512
	32.6%	24.9%	22.1%
About half	12	262	1198
	8.3%	11.9%	10.6%
Nearly all	15	276	1323
	10.4%	12.6%	11.7%
All	18	250	1269
	12.5%	11.4%	11.2%
Total respondent count	144	2193	11350
(Percentages sum to 100%)	100.0%	100.0%	100.0%

4.2. In how many of your courses did you use a completely online learning environment?	Appalachian State University	MA public institutions	All US institutions
Don't know	1	6	45
	0.7%	0.3%	0.4%
None	109	1502	7411
	75.7%	68.9%	65.4%
A few	19	364	1574
	13.2%	16.7%	13.9%
About half	7	136	747
	4.9%	6.2%	6.6%
Nearly all	2	78	438
	1.4%	3.6%	3.9%
All	6	95	1121
	4.2%	4.4%	9.9%
Total respondent count	144	2181	11336
(Percentages sum to 100%)	100.0%	100.0%	100.0%

4.2. In how many of your courses did you use a "flipped" pedagogical model?	Appalachian State University	MA public institutions	All US institutions
Don't know	7	103	558
	5.0%	4.8%	5.0%
None	83	1293	7102
	58.9%	59.9%	63.3%
A few	24	420	1888
	17.0%	19.5%	16.8%
About half	14	151	751
	9.9%	7.0%	6.7%
Nearly all	8	111	539
	5.7%	5.1%	4.8%
All	5	81	389
	3.5%	3.8%	3.5%
Total respondent count (Percentages sum to 100%)	141	2159	11227
	100.0%	100.0%	100.0%

4.4a. Have you taught a MOOC in the past year?	Appalachian State University	MA public institutions	All US institutions
No, and I don't know what a MOOC is	2	74	404
	8.3%	16.8%	19.0%
No, but I do know what a MOOC is	22	359	1680
	91.7%	81.4%	78.9%
Yes	0	8	46
	0.0%	1.8%	2.2%
Total respondent count (Percentages sum to 100%)	24	441	2130
	100.0%	100.0%	100.0%

4.4b. Through whom did you teach a MOOC?	Appalachian State University	MA public institutions	All US institutions
Through the institution that asked me to take this survey	0	3	25
	0	42.9%	56.8%
Through another institution	0	3	16
	0	42.9%	36.4%
Through a MOOC provider like Coursera or Udacity	0	1	10
	0	14.3%	22.7%
Total respondent count	0	7	44

4.5a. Have you taken a MOOC in the past year?	Appalachian State University	MA public institutions	All US institutions
No, and I don't know what a MOOC is	2	111	619
	6.1%	17.5%	19.5%
No, but I do know what a MOOC is	26	421	2092
	78.8%	66.5%	65.9%
Yes	5	101	462
	15.2%	16.0%	14.6%
Total respondent count (Percentages sum to 100%)	33	633	3173
	100.0%	100.0%	100.0%

4.5b. Through whom did you take a MOOC?	Appalachian State University	MA public institutions	All US institutions
Through the institution that asked me to take this survey	0	8	27

	0.0%	7.9%	5.9%
Through another institution	2	45	192
	40.0%	44.6%	41.6%
Through a MOOC provider like Coursera or Udacity	4	55	290
	80.0%	54.5%	62.9%
Total respondent count	5	101	461

4.6. Have you earned a digital badge or other type of digital credential?	Appalachian State University	MA public institutions	All US institutions
Don't know	0	43	241
	0.0%	6.9%	7.6%
No	25	487	2435
	75.8%	77.7%	77.0%
Yes	8	97	487
	24.2%	15.5%	15.4%
Total respondent count (Percentages sum to 100%)	33	627	3163
	100.0%	100.0%	100.0%

4.7. Opinion of: MOOCs	Appalachian State University	MA public institutions	All US institutions
Don't know	41	612	3389
	28.9%	28.0%	29.8%
Completely opposed	12	237	948
	8.5%	10.8%	8.3%
Generally opposed, but willing to consider	29	384	1756
	20.4%	17.6%	15.4%
Neutral	38	438	2287
	26.8%	20.0%	20.1%
Generally supportive, but somewhat skeptical	16	375	2138
	11.3%	17.2%	18.8%
Completely supportive	6	139	855
	4.2%	6.4%	7.5%
Total respondent count (Percentages sum to 100%)	142	2185	11373
	100.0%	100.0%	100.0%

4.7. Opinion of: Competency-based education	Appalachian State University	MA public institutions	All US institutions
Don't know	47	555	2903
	32.9%	25.4%	25.5%
Completely opposed	3	94	379
	2.1%	4.3%	3.3%
Generally opposed, but willing to consider	13	191	761
	9.1%	8.7%	6.7%
Neutral	25	403	2019
	17.5%	18.4%	17.7%
Generally supportive, but somewhat skeptical	38	535	2778
	26.6%	24.5%	24.4%
Completely supportive	17	410	2541
	11.9%	18.7%	22.3%
Total respondent count (Percentages sum to 100%)	143	2188	11381
	100.0%	100.0%	100.0%

4.7. Opinion of: Badges or digital credentials	Appalachian State University	MA public institutions	All US institutions
Don't know	59	893	4626
	41.3%	40.8%	40.7%
Completely opposed	13	115	601
	9.1%	5.3%	5.3%
Generally opposed, but willing to consider	16	200	962
	11.2%	9.1%	8.5%
Neutral	28	507	2667
	19.6%	23.2%	23.4%
Generally supportive, but somewhat skeptical	19	319	1644
	13.3%	14.6%	14.5%
Completely supportive	8	153	877
	5.6%	7.0%	7.7%
Total respondent count (Percentages sum to 100%)	143	2187	11377
	100.0%	100.0%	100.0%

4.7. Opinion of: Gamification	Appalachian State University	MA public institutions	All US institutions
Don't know	53	840	4527
	37.3%	38.5%	39.8%
Completely opposed	11	168	749
	7.7%	7.7%	6.6%
Generally opposed, but willing to consider	20	266	1241
	14.1%	12.2%	10.9%
Neutral	29	394	2171
	20.4%	18.0%	19.1%
Generally supportive, but somewhat skeptical	20	337	1723
	14.1%	15.4%	15.2%
Completely supportive	9	178	956
	6.3%	8.2%	8.4%
Total respondent count (Percentages sum to 100%)	142	2183	11367
	100.0%	100.0%	100.0%

4.7. Opinion of: Open educational resources	Appalachian State University	MA public institutions	All US institutions
Don't know	47	636	3516
	32.6%	29.1%	30.9%
Completely opposed	4	40	184
	2.8%	1.8%	1.6%
Generally opposed, but willing to consider	9	116	496
	6.3%	5.3%	4.4%
Neutral	36	413	2080
	25.0%	18.9%	18.3%
Generally supportive, but somewhat skeptical	28	507	2572
	19.4%	23.2%	22.6%
Completely supportive	20	472	2524
	13.9%	21.6%	22.2%
Total respondent count (Percentages sum to 100%)	144	2184	11372
	100.0%	100.0%	100.0%

4.8. Classroom technologies: Availability of classrooms	Appalachian State		

with multimedia equipment	University	MA public institutions	All US institutions
N/A	5	71	917
	3.4%	3.2%	8.0%
Very dissatisfied	7	147	692
	4.8%	6.7%	6.0%
Dissatisfied	16	276	1470
	11.0%	12.6%	12.8%
Neutral	16	279	1473
	11.0%	12.7%	12.9%
Satisfied	75	1003	4873
	51.7%	45.7%	42.6%
Very satisfied	26	421	2015
	17.9%	19.2%	17.6%
Total respondent count (Percentages sum to 100%)	145	2197	11440
	100.0%	100.0%	100.0%

4.8. Classroom technologies: Reliability of equipment available	Appalachian State University	MA public institutions	All US institutions
N/A	3	45	697
	2.1%	2.1%	6.1%
Very dissatisfied	3	172	777
	2.1%	7.8%	6.8%
Dissatisfied	25	361	1834
	17.4%	16.4%	16.0%
Neutral	28	374	1941
	19.4%	17.0%	17.0%
Satisfied	68	1001	4898
	47.2%	45.6%	42.8%
Very satisfied	17	242	1285
	11.8%	11.0%	11.2%
Total respondent count (Percentages sum to 100%)	144	2195	11432
	100.0%	100.0%	100.0%

4.8. Classroom technologies: Refresh/update frequency of equipment	Appalachian State University	MA public institutions	All US institutions
N/A	0	22	294
	0.0%	3.5%	9.3%
Very dissatisfied	4	85	389
	12.1%	13.5%	12.3%
Dissatisfied	8	124	600
	24.2%	19.7%	19.0%
Neutral	10	166	754
	30.3%	26.3%	23.9%
Satisfied	9	191	901
	27.3%	30.3%	28.6%
Very satisfied	2	42	215
	6.1%	6.7%	6.8%
Total respondent count (Percentages sum to 100%)	33	630	3153
	100.0%	100.0%	100.0%

4.8. Classroom technologies: Refresh/update frequency of software	Appalachian State University	MA public institutions	All US institutions
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N/A	1	31	346
	3.0%	4.9%	11.0%
Very dissatisfied	0	63	280
	0.0%	10.0%	8.9%
Dissatisfied	4	108	509
	12.1%	17.1%	16.1%
Neutral	10	157	767
	30.3%	24.8%	24.3%
Satisfied	12	215	996
	36.4%	34.0%	31.5%
Very satisfied	6	59	261
	18.2%	9.3%	8.3%
Total respondent count (Percentages sum to 100%)	33	633	3159
	100.0%	100.0%	100.0%

4.8. Classroom technologies: Technology that supports open learning classrooms	Appalachian State University	MA public institutions	All US institutions
N/A	16	217	1279
	48.5%	34.4%	40.7%
Very dissatisfied	1	69	279
	3.0%	10.9%	8.9%
Dissatisfied	3	93	471
	9.1%	14.7%	15.0%
Neutral	6	144	601
	18.2%	22.8%	19.1%
Satisfied	5	86	389
	15.2%	13.6%	12.4%
Very satisfied	2	22	125
	6.1%	3.5%	4.0%
Total respondent count (Percentages sum to 100%)	33	631	3144
	100.0%	100.0%	100.0%

4.8. Classroom technologies: Variety of equipment available	Appalachian State University	MA public institutions	All US institutions
N/A	2	20	278
	6.1%	3.2%	8.8%
Very dissatisfied	1	62	249
	3.0%	9.8%	7.9%
Dissatisfied	4	110	494
	12.1%	17.5%	15.7%
Neutral	7	150	771
	21.2%	23.8%	24.5%
Satisfied	16	229	1097
	48.5%	36.3%	34.8%
Very satisfied	3	59	264
	9.1%	9.4%	8.4%
Total respondent count (Percentages sum to 100%)	33	630	3153
	100.0%	100.0%	100.0%

4.8. Classroom technologies: Variety of software	Appalachian State University	MA public institutions	All US institutions
	0	25	313

N/A	0.0%	4.0%	9.9%
Very dissatisfied	0	56	234
	0.0%	8.9%	7.4%
Dissatisfied	6	103	434
	18.2%	16.3%	13.8%
Neutral	5	170	825
	15.2%	26.9%	26.1%
Satisfied	18	222	1098
	54.5%	35.1%	34.8%
Very satisfied	4	56	251
	12.1%	8.9%	8.0%
Total respondent count (Percentages sum to 100%)	33	632	3155
	100.0%	100.0%	100.0%

4.8. Classroom technologies: General ease-of-use of podium systems	Appalachian State University	MA public institutions	All US institutions
N/A	4	152	1372
	2.8%	6.9%	12.0%
Very dissatisfied	4	111	588
	2.8%	5.1%	5.1%
Dissatisfied	20	277	1361
	13.8%	12.6%	11.9%
Neutral	20	348	1887
	13.8%	15.9%	16.5%
Satisfied	75	990	4684
	51.7%	45.1%	41.0%
Very satisfied	22	317	1535
	15.2%	14.4%	13.4%
Total respondent count (Percentages sum to 100%)	145	2195	11427
	100.0%	100.0%	100.0%

4.8. Classroom technologies: Computers in the podiums	Appalachian State University	MA public institutions	All US institutions
N/A	2	68	543
	6.1%	10.8%	17.2%
Very dissatisfied	1	50	242
	3.0%	7.9%	7.7%
Dissatisfied	3	80	395
	9.1%	12.7%	12.5%
Neutral	7	88	512
	21.2%	14.0%	16.2%
Satisfied	16	258	1088
	48.5%	41.0%	34.5%
Very satisfied	4	86	375
	12.1%	13.7%	11.9%
Total respondent count (Percentages sum to 100%)	33	630	3155
	100.0%	100.0%	100.0%

4.8. Classroom technologies: Software on the podium computers	Appalachian State University	MA public institutions	All US institutions
N/A	2	63	555

	6.1%	10.0%	17.6%
Very dissatisfied	0	49	233
	0.0%	7.8%	7.4%
Dissatisfied	4	84	387
	12.1%	13.3%	12.3%
Neutral	4	136	628
	12.1%	21.6%	19.9%
Satisfied	18	230	1059
	54.5%	36.5%	33.6%
Very satisfied	5	68	290
	15.2%	10.8%	9.2%
Total respondent count (Percentages sum to 100%)	33	630	3152
	100.0%	100.0%	100.0%

4.8. Classroom technologies: Computer projection	Appalachian State University	MA public institutions	All US institutions
N/A	2	12	230
	6.1%	1.9%	7.3%
Very dissatisfied	2	40	208
	6.1%	6.3%	6.6%
Dissatisfied	3	74	377
	9.1%	11.7%	11.9%
Neutral	3	87	453
	9.1%	13.8%	14.4%
Satisfied	18	306	1394
	54.5%	48.6%	44.2%
Very satisfied	5	111	494
	15.2%	17.6%	15.7%
Total respondent count (Percentages sum to 100%)	33	630	3156
	100.0%	100.0%	100.0%

4.8. Classroom technologies: Audience response systems	Appalachian State University	MA public institutions	All US institutions
N/A	17	265	1500
	51.5%	42.0%	47.5%
Very dissatisfied	1	47	217
	3.0%	7.4%	6.9%
Dissatisfied	1	72	341
	3.0%	11.4%	10.8%
Neutral	7	140	608
	21.2%	22.2%	19.3%
Satisfied	4	80	359
	12.1%	12.7%	11.4%
Very satisfied	3	27	130
	9.1%	4.3%	4.1%
Total respondent count (Percentages sum to 100%)	33	631	3155
	100.0%	100.0%	100.0%

4.8. Classroom technologies: Wireless access	Appalachian State University	MA public institutions	All US institutions
N/A	0	10	216
	0.0%	1.6%	6.8%

Very dissatisfied	3	45	261
	9.1%	7.1%	8.3%
Dissatisfied	4	103	466
	12.1%	16.3%	14.8%
Neutral	8	96	450
	24.2%	15.2%	14.3%
Satisfied	11	252	1209
	33.3%	39.9%	38.3%
Very satisfied	7	125	555
	21.2%	19.8%	17.6%
Total respondent count (Percentages sum to 100%)	33	631	3157
	100.0%	100.0%	100.0%

4.8. Classroom technologies: Overall satisfaction	Appalachian State University	MA public institutions	All US institutions
N/A	1	34	549
	0.7%	1.6%	4.8%
Very dissatisfied	2	108	508
	1.4%	4.9%	4.5%
Dissatisfied	20	272	1347
	13.9%	12.4%	11.8%
Neutral	22	406	2273
	15.3%	18.5%	19.9%
Satisfied	79	1112	5385
	54.9%	50.8%	47.2%
Very satisfied	20	258	1343
	13.9%	11.8%	11.8%
Total respondent count (Percentages sum to 100%)	144	2190	11405
	100.0%	100.0%	100.0%

4.9a. LMS usage	Appalachian State University	MA public institutions	All US institutions
I don't use the LMS at all	18	239	1702
	12.4%	10.8%	14.9%
To push out information	101	1451	6998
	69.7%	65.8%	61.1%
To promote interaction outside the classroom	82	1139	5042
	56.6%	51.7%	44.0%
To teach partially online courses or programs	30	542	2379
	20.7%	24.6%	20.8%
To teach completely online courses or programs	23	568	3196
	15.9%	25.8%	27.9%
Total respondent count	145	2205	11459

4.9b. How often do you typically use the LMS?	Appalachian State University	MA public institutions	All US institutions
Daily	68	1075	5706
	54.0%	54.9%	58.5%
Weekly	54	783	3518
	42.9%	40.0%	36.1%
Monthly	4	65	327
	3.2%	3.3%	3.4%

Less than monthly	0	36	195
	0.0%	1.8%	2.0%
Total respondent count (Percentages sum to 100%)	126	1959	9746
	100.0%	100.0%	100.0%

4.9c. What LMS do you typically use?	Appalachian State University	MA public institutions	All US institutions
Blackboard	7	1111	3632
	5.5%	56.6%	37.3%
D2L	1	256	1169
	0.8%	13.0%	12.0%
Canvas	0	47	1759
	0.0%	2.4%	18.1%
Jenzabar e-Racer	0	0	8
	0.0%	0.0%	0.1%
Moodle (Moodle Trust)	81	265	663
	63.8%	13.5%	6.8%
Moodlerooms Joule	0	1	42
	0.0%	0.1%	0.4%
Pearson eCollege	0	4	175
	0.0%	0.2%	1.8%
Sakai	0	38	317
	0.0%	1.9%	3.3%
Homegrown/locally developed	5	27	273
	3.9%	1.4%	2.8%
Other product; please specify	26	199	1601
	20.5%	10.1%	16.4%
Don't know	7	15	104
	5.5%	0.8%	1.1%
Total respondent count (Percentages sum to 100%)	127	1963	9743
	100.0%	100.0%	100.0%

4.9. LMS satisfaction: Ease of use in general	Appalachian State University	MA public institutions	All US institutions
N/A	0	11	60
	0.0%	0.6%	0.6%
Very dissatisfied	5	96	523
	4.0%	4.9%	5.4%
Dissatisfied	14	278	1430
	11.1%	14.3%	14.7%
Neutral	22	372	1803
	17.5%	19.1%	18.6%
Satisfied	73	997	4839
	57.9%	51.1%	49.9%
Very satisfied	12	196	1051
	9.5%	10.1%	10.8%
Total respondent count (Percentages sum to 100%)	126	1950	9706
	100.0%	100.0%	100.0%

4.9. LMS satisfaction: Ease of use from a mobile device	Appalachian State University	MA public institutions	All US institutions
	40	598	3041

N/A	31.7%	30.7%	31.4%
Very dissatisfied	10	221	1155
	7.9%	11.3%	11.9%
Dissatisfied	22	356	1816
	17.5%	18.2%	18.7%
Neutral	31	449	2054
	24.6%	23.0%	21.2%
Satisfied	20	277	1337
	15.9%	14.2%	13.8%
Very satisfied	3	50	292
	2.4%	2.6%	3.0%
Total respondent count (Percentages sum to 100%)	126	1951	9695
	100.0%	100.0%	100.0%

4.9. LMS satisfaction: Engaging in meaningful interactions with students	Appalachian State University	MA public institutions	All US institutions
N/A	24	316	1531
	19.2%	16.2%	15.8%
Very dissatisfied	3	80	434
	2.4%	4.1%	4.5%
Dissatisfied	16	243	1176
	12.8%	12.4%	12.1%
Neutral	32	516	2589
	25.6%	26.4%	26.7%
Satisfied	41	673	3245
	32.8%	34.4%	33.4%
Very satisfied	9	126	730
	7.2%	6.4%	7.5%
Total respondent count (Percentages sum to 100%)	125	1954	9705
	100.0%	100.0%	100.0%

4.9. LMS satisfaction: System availability	Appalachian State University	MA public institutions	All US institutions
N/A	1	6	36
	3.3%	1.0%	1.3%
Very dissatisfied	1	11	65
	3.3%	1.9%	2.4%
Dissatisfied	1	27	159
	3.3%	4.7%	5.8%
Neutral	2	79	460
	6.7%	13.8%	16.7%
Satisfied	15	341	1517
	50.0%	59.6%	55.0%
Very satisfied	10	108	522
	33.3%	18.9%	18.9%
Total respondent count (Percentages sum to 100%)	30	572	2759
	100.0%	100.0%	100.0%

4.9. LMS satisfaction: System response time	Appalachian State University	MA public institutions	All US institutions
N/A	0	16	63

	0.0%	2.8%	2.3%
Very dissatisfied	2	28	151
	6.9%	4.9%	5.5%
Dissatisfied	1	59	330
	3.4%	10.3%	12.0%
Neutral	4	114	581
	13.8%	20.0%	21.0%
Satisfied	16	284	1298
	55.2%	49.7%	47.0%
Very satisfied	6	70	338
	20.7%	12.3%	12.2%
Total respondent count (Percentages sum to 100%)	29	571	2761
	100.0%	100.0%	100.0%

4.9. LMS satisfaction: Initial use training	Appalachian State University	MA public institutions	All US institutions
N/A	2	56	260
	6.7%	9.8%	9.4%
Very dissatisfied	2	43	240
	6.7%	7.5%	8.7%
Dissatisfied	4	81	456
	13.3%	14.2%	16.5%
Neutral	7	145	633
	23.3%	25.4%	23.0%
Satisfied	11	190	920
	36.7%	33.3%	33.4%
Very satisfied	4	55	249
	13.3%	9.6%	9.0%
Total respondent count (Percentages sum to 100%)	30	570	2758
	100.0%	100.0%	100.0%

4.9. LMS satisfaction: Ongoing training/professional development	Appalachian State University	MA public institutions	All US institutions
N/A	4	68	381
	13.3%	11.9%	13.8%
Very dissatisfied	1	32	205
	3.3%	5.6%	7.4%
Dissatisfied	2	73	424
	6.7%	12.8%	15.4%
Neutral	11	179	775
	36.7%	31.3%	28.1%
Satisfied	6	170	779
	20.0%	29.7%	28.2%
Very satisfied	6	50	196
	20.0%	8.7%	7.1%
Total respondent count (Percentages sum to 100%)	30	572	2760
	100.0%	100.0%	100.0%

4.9. LMS satisfaction: Posting content	Appalachian State University	MA public institutions	All US institutions
N/A	0	5	25
	0.0%	0.9%	0.9%

Very dissatisfied	0	15	93
	0.0%	2.6%	3.4%
Dissatisfied	2	37	217
	6.7%	6.5%	7.8%
Neutral	1	46	339
	3.3%	8.0%	12.3%
Satisfied	12	319	1478
	40.0%	55.7%	53.5%
Very satisfied	15	151	613
	50.0%	26.4%	22.2%
Total respondent count (Percentages sum to 100%)	30	573	2765
	100.0%	100.0%	100.0%

4.9. LMS satisfaction: Managing assignments	Appalachian State University	MA public institutions	All US institutions
N/A	3	42	207
	10.0%	7.3%	7.5%
Very dissatisfied	0	23	122
	0.0%	4.0%	4.4%
Dissatisfied	2	58	306
	6.7%	10.1%	11.1%
Neutral	6	97	521
	20.0%	17.0%	18.9%
Satisfied	12	275	1242
	40.0%	48.1%	45.0%
Very satisfied	7	77	362
	23.3%	13.5%	13.1%
Total respondent count (Percentages sum to 100%)	30	572	2760
	100.0%	100.0%	100.0%

4.9. LMS satisfaction: Monitoring or managing enrollments	Appalachian State University	MA public institutions	All US institutions
N/A	2	72	352
	6.7%	12.6%	12.8%
Very dissatisfied	1	21	110
	3.3%	3.7%	4.0%
Dissatisfied	2	62	277
	6.7%	10.9%	10.0%
Neutral	6	103	583
	20.0%	18.1%	21.1%
Satisfied	10	248	1151
	33.3%	43.5%	41.7%
Very satisfied	9	64	287
	30.0%	11.2%	10.4%
Total respondent count (Percentages sum to 100%)	30	570	2760
	100.0%	100.0%	100.0%

4.9. LMS satisfaction: Entering student progress information	Appalachian State University	MA public institutions	All US institutions
N/A	1	31	171
	3.3%	5.4%	6.2%
	3	42	196

Very dissatisfied	10.0%	7.3%	7.1%
Dissatisfied	7	87	402
	23.3%	15.2%	14.5%
Neutral	3	80	440
	10.0%	13.9%	15.9%
Satisfied	13	259	1183
	43.3%	45.1%	42.7%
Very satisfied	3	75	378
	10.0%	13.1%	13.6%
Total respondent count (Percentages sum to 100%)	30	574	2770
	100.0%	100.0%	100.0%

4.9. LMS satisfaction: Receiving course assignments reliably	Appalachian State University	MA public institutions	All US institutions
N/A	3	50	260
	10.0%	8.7%	9.4%
Very dissatisfied	0	15	60
	0.0%	2.6%	2.2%
Dissatisfied	1	39	173
	3.3%	6.8%	6.3%
Neutral	4	69	412
	13.3%	12.0%	14.9%
Satisfied	13	307	1370
	43.3%	53.6%	49.6%
Very satisfied	9	93	485
	30.0%	16.2%	17.6%
Total respondent count (Percentages sum to 100%)	30	573	2760
	100.0%	100.0%	100.0%

4.9. LMS satisfaction: Integrating third-party content	Appalachian State University	MA public institutions	All US institutions
N/A	6	162	790
	20.0%	28.4%	28.6%
Very dissatisfied	4	42	222
	13.3%	7.4%	8.0%
Dissatisfied	6	74	407
	20.0%	13.0%	14.8%
Neutral	7	132	651
	23.3%	23.2%	23.6%
Satisfied	6	135	563
	20.0%	23.7%	20.4%
Very satisfied	1	25	125
	3.3%	4.4%	4.5%
Total respondent count (Percentages sum to 100%)	30	570	2758
	100.0%	100.0%	100.0%

4.9. LMS satisfaction: Integration with other institutional systems	Appalachian State University	MA public institutions	All US institutions
N/A	1	82	420
	3.3%	14.3%	15.2%
Very dissatisfied	3	49	274

	10.0%	8.6%	9.9%
Dissatisfied	4	88	455
	13.3%	15.4%	16.5%
Neutral	8	130	606
	26.7%	22.7%	21.9%
Satisfied	10	181	799
	33.3%	31.6%	28.9%
Very satisfied	4	42	208
	13.3%	7.3%	7.5%
Total respondent count (Percentages sum to 100%)	30	572	2762
	100.0%	100.0%	100.0%

4.9. LMS satisfaction: Overall satisfaction	Appalachian State University	MA public institutions	All US institutions
N/A	0	9	52
	0.0%	0.5%	0.5%
Very dissatisfied	1	62	403
	0.8%	3.2%	4.2%
Dissatisfied	14	220	1170
	11.1%	11.3%	12.1%
Neutral	29	490	2383
	23.0%	25.1%	24.6%
Satisfied	72	1023	4903
	57.1%	52.4%	50.6%
Very satisfied	10	149	774
	7.9%	7.6%	8.0%
Total respondent count (Percentages sum to 100%)	126	1953	9685
	100.0%	100.0%	100.0%

4.9e. The LMS is critical to my teaching.	Appalachian State University	MA public institutions	All US institutions
Don't know	2	21	109
	1.6%	1.1%	1.1%
Strongly disagree	2	105	563
	1.6%	5.4%	5.8%
Disagree	16	240	1191
	12.7%	12.3%	12.3%
Neutral	24	380	1790
	19.0%	19.5%	18.4%
Agree	55	703	3372
	43.7%	36.0%	34.8%
Strongly agree	27	502	2677
	21.4%	25.7%	27.6%
Total respondent count (Percentages sum to 100%)	126	1951	9702
	100.0%	100.0%	100.0%

4.9e. The LMS is very useful as a tool to enhance my teaching.	Appalachian State University	MA public institutions	All US institutions
Don't know	2	22	117
	1.6%	1.1%	1.2%
Strongly disagree	1	56	288
	0.8%	2.9%	3.0%

Disagree	4	113	624
	3.2%	5.8%	6.4%
Neutral	21	296	1546
	16.7%	15.2%	15.9%
Agree	70	962	4649
	55.6%	49.3%	47.9%
Strongly agree	28	504	2481
	22.2%	25.8%	25.6%
Total respondent count (Percentages sum to 100%)	126	1953	9705
	100.0%	100.0%	100.0%

4.9e. The LMS is very useful as a tool to enhance student learning.	Appalachian State University	MA public institutions	All US institutions
Don't know	3	31	167
	2.4%	1.6%	1.7%
Strongly disagree	1	46	270
	0.8%	2.4%	2.8%
Disagree	3	111	618
	2.4%	5.7%	6.4%
Neutral	25	373	1851
	19.8%	19.1%	19.1%
Agree	71	934	4488
	56.3%	47.8%	46.3%
Strongly agree	23	457	2307
	18.3%	23.4%	23.8%
Total respondent count (Percentages sum to 100%)	126	1952	9701
	100.0%	100.0%	100.0%

4.10. In-class mobile device policy: Smartphone	Appalachian State University	MA public institutions	All US institutions
Ban students from using it in class	47	551	2510
	32.4%	25.2%	22.2%
Discourage students from using it in class	53	627	3073
	36.6%	28.7%	27.2%
Neither discourage nor encourage its use	35	643	4000
	24.1%	29.4%	35.4%
Encourage students to use it in class	10	321	1551
	6.9%	14.7%	13.7%
Require students to use it in class	0	42	161
	0.0%	1.9%	1.4%
Total respondent count (Percentages sum to 100%)	145	2184	11295
	100.0%	100.0%	100.0%

4.10. In-class mobile device policy: Tablet	Appalachian State University	MA public institutions	All US institutions
Ban students from using it in class	20	224	972
	13.8%	10.3%	8.6%
Discourage students from using it in class	25	264	1169
	17.2%	12.1%	10.4%
Neither discourage nor encourage its use	70	1023	5697
	48.3%	46.9%	50.5%
	28	589	3151

Encourage students to use it in class	19.3%	27.0%	27.9%
Require students to use it in class	2	81	300
	1.4%	3.7%	2.7%
Total respondent count (Percentages sum to 100%)	145	2181	11289
	100.0%	100.0%	100.0%

4.10. In-class mobile device policy: Laptop	Appalachian State University	MA public institutions	All US institutions
Ban students from using it in class	22	194	807
	15.2%	8.9%	7.1%
Discourage students from using it in class	23	249	1047
	15.9%	11.4%	9.3%
Neither discourage nor encourage its use	63	974	5165
	43.4%	44.5%	45.7%
Encourage students to use it in class	33	642	3545
	22.8%	29.4%	31.3%
Require students to use it in class	4	128	746
	2.8%	5.9%	6.6%
Total respondent count (Percentages sum to 100%)	145	2187	11310
	100.0%	100.0%	100.0%

4.10. In-class mobile device policy: Wearable technologies	Appalachian State University	MA public institutions	All US institutions
Ban students from using it in class	28	352	1702
	19.6%	16.3%	15.2%
Discourage students from using it in class	26	301	1509
	18.2%	13.9%	13.5%
Neither discourage nor encourage its use	84	1395	7392
	58.7%	64.5%	66.0%
Encourage students to use it in class	5	110	565
	3.5%	5.1%	5.0%
Require students to use it in class	0	6	37
	0.0%	0.3%	0.3%
Total respondent count (Percentages sum to 100%)	143	2164	11205
	100.0%	100.0%	100.0%

4.11. Use smartphone in class	Appalachian State University	MA public institutions	All US institutions
Use to take notes	1	79	333
	3.2%	12.7%	10.8%
Use to engage in nonclass activities	16	345	1692
	51.6%	55.5%	55.1%
Use to make other connections with the learning material	4	213	941
	12.9%	34.2%	30.7%
Use specialized software or Internet for directed activities	4	97	425
	12.9%	15.6%	13.8%
Do not typically use	13	180	915
	41.9%	28.9%	29.8%
Total respondent count	31	622	3070

4.11. Use tablet in class	Appalachian State University	MA public institutions	All US institutions
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Use to take notes	9	284	1334
	28.1%	45.6%	43.4%
Use to engage in nonclass activities	13	268	1246
	40.6%	43.0%	40.5%
Use to make other connections with the learning material	13	275	1347
	40.6%	44.1%	43.8%
Use specialized software or Internet for directed activities	6	152	717
	18.8%	24.4%	23.3%
Do not typically use	11	146	785
	34.4%	23.4%	25.5%
Total respondent count	32	623	3076

4.11. Use laptop in class	Appalachian State University	MA public institutions	All US institutions
Use to take notes	16	374	1776
	48.5%	59.7%	57.4%
Use to engage in nonclass activities	18	282	1370
	54.5%	45.0%	44.3%
Use to make other connections with the learning material	18	306	1597
	54.5%	48.9%	51.6%
Use specialized software or Internet for directed activities	10	199	1008
	30.3%	31.8%	32.6%
Do not typically use	5	94	429
	15.2%	15.0%	13.9%
Total respondent count	33	626	3095

4.12. In-class mobile: The use of mobile devices in-class can enhance learning.	Appalachian State University	MA public institutions	All US institutions
Don't know	9	77	527
	6.3%	3.5%	4.6%
Strongly disagree	20	167	820
	14.0%	7.6%	7.2%
Disagree	16	229	1184
	11.2%	10.5%	10.4%
Neutral	36	622	3210
	25.2%	28.4%	28.3%
Agree	56	869	4474
	39.2%	39.7%	39.4%
Strongly agree	6	224	1128
	4.2%	10.2%	9.9%
Total respondent count (Percentages sum to 100%)	143	2188	11343
	100.0%	100.0%	100.0%

4.12. In-class mobile: In-class use of mobile devices is distracting for me.	Appalachian State University	MA public institutions	All US institutions
Don't know	4	38	330
	2.8%	1.7%	2.9%
Strongly disagree	8	163	879
	5.6%	7.4%	7.7%
Disagree	21	429	2204
	14.7%	19.5%	19.4%
Neutral	22	471	2557

	15.4%	21.5%	22.5%
Agree	52	663	3403
	36.4%	30.2%	30.0%
Strongly agree	36	431	1981
	25.2%	19.6%	17.4%
Total respondent count (Percentages sum to 100%)	143	2195	11354
	100.0%	100.0%	100.0%

4.12. In-class mobile: In-class use of mobile devices is distracting for the students.	Appalachian State University	MA public institutions	All US institutions
Don't know	5	48	402
	3.5%	2.2%	3.5%
Strongly disagree	4	107	490
	2.8%	4.9%	4.3%
Disagree	13	269	1486
	9.1%	12.3%	13.1%
Neutral	24	451	2431
	16.8%	20.5%	21.4%
Agree	53	777	3935
	37.1%	35.4%	34.7%
Strongly agree	44	543	2604
	30.8%	24.7%	22.9%
Total respondent count (Percentages sum to 100%)	143	2195	11348
	100.0%	100.0%	100.0%

4.12. In-class mobile: I am concerned about the security/privacy problems of mobile technology.	Appalachian State University	MA public institutions	All US institutions
Don't know	14	113	572
	9.9%	5.2%	5.0%
Strongly disagree	4	158	768
	2.8%	7.2%	6.8%
Disagree	27	479	2388
	19.0%	21.9%	21.0%
Neutral	36	588	3258
	25.4%	26.9%	28.7%
Agree	45	658	3295
	31.7%	30.1%	29.0%
Strongly agree	16	192	1068
	11.3%	8.8%	9.4%
Total respondent count (Percentages sum to 100%)	142	2188	11349
	100.0%	100.0%	100.0%

4.12. In-class mobile: I'd like to have more training around effectively incorporating mobile devices into my courses.	Appalachian State University	MA public institutions	All US institutions
Don't know	5	48	371
	3.5%	2.2%	3.3%
Strongly disagree	19	219	1104
	13.3%	10.0%	9.7%
Disagree	31	366	1737
	21.7%	16.7%	15.3%
Neutral	34	481	2677

	23.8%	21.9%	23.6%
Agree	44	797	4082
	30.8%	36.3%	36.0%
Strongly agree	10	282	1377
	7.0%	12.9%	12.1%
Total respondent count (Percentages sum to 100%)	143	2193	11348
	100.0%	100.0%	100.0%

4.12. In-class mobile: I create assignments that take advantage of student access to mobile technologies.	Appalachian State University	MA public institutions	All US institutions
Don't know	6	56	431
	4.2%	2.6%	3.8%
Strongly disagree	31	372	1903
	21.8%	17.0%	16.8%
Disagree	38	631	3092
	26.8%	28.9%	27.3%
Neutral	31	414	2466
	21.8%	18.9%	21.8%
Agree	29	553	2699
	20.4%	25.3%	23.8%
Strongly agree	7	160	742
	4.9%	7.3%	6.5%
Total respondent count (Percentages sum to 100%)	142	2186	11333
	100.0%	100.0%	100.0%

4.12. In-class mobile: My institution makes mobile learning a priority.	Appalachian State University	MA public institutions	All US institutions
Don't know	29	378	2195
	20.4%	17.3%	19.4%
Strongly disagree	23	315	1461
	16.2%	14.4%	12.9%
Disagree	43	661	3087
	30.3%	30.2%	27.2%
Neutral	39	627	3302
	27.5%	28.6%	29.1%
Agree	4	169	1030
	2.8%	7.7%	9.1%
Strongly agree	4	39	256
	2.8%	1.8%	2.3%
Total respondent count (Percentages sum to 100%)	142	2189	11331
	100.0%	100.0%	100.0%

5.1. Research: I receive adequate and appropriate support from IT staff to conduct my research.	Appalachian State University	MA public institutions	All US institutions
Don't know	2	56	244
	2.0%	4.4%	4.0%
Strongly disagree	7	141	622
	7.0%	11.0%	10.2%
Disagree	13	178	825
	13.0%	13.9%	13.6%
Neutral	24	306	1363
	24.0%	23.9%	22.5%

Agree	36	388	1946
	36.0%	30.3%	32.1%
Strongly agree	8	86	467
	8.0%	6.7%	7.7%
Not applicable to my research	10	126	602
	10.0%	9.8%	9.9%
Total respondent count (Percentages sum to 100%)	100	1281	6069
	100.0%	100.0%	100.0%

5.1. Research: I have access to IT staff with specialized knowledge about RC in support of my academic discipline.	Appalachian State University	MA public institutions	All US institutions
Don't know	6	126	491
	6.1%	9.8%	8.1%
Strongly disagree	13	231	857
	13.1%	18.0%	14.1%
Disagree	24	251	1095
	24.2%	19.6%	18.1%
Neutral	15	213	1026
	15.2%	16.6%	16.9%
Agree	23	266	1508
	23.2%	20.8%	24.9%
Strongly agree	9	77	451
	9.1%	6.0%	7.4%
Not applicable to my research	9	117	634
	9.1%	9.1%	10.5%
Total respondent count (Percentages sum to 100%)	99	1281	6062
	100.0%	100.0%	100.0%

5.1. Research: I have access to the specialized software/applications I need to conduct my research.	Appalachian State University	MA public institutions	All US institutions
Don't know	1	54	249
	1.0%	4.2%	4.1%
Strongly disagree	4	139	523
	4.0%	10.8%	8.6%
Disagree	15	209	847
	15.0%	16.3%	14.0%
Neutral	20	231	1065
	20.0%	18.0%	17.6%
Agree	47	452	2294
	47.0%	35.3%	37.8%
Strongly agree	7	97	531
	7.0%	7.6%	8.8%
Not applicable to my research	6	100	558
	6.0%	7.8%	9.2%
Total respondent count (Percentages sum to 100%)	100	1282	6067
	100.0%	100.0%	100.0%

5.1. Research: I receive adequate support for federally funded IT and cyberinfrastructure resources.	Appalachian State University	MA public institutions	All US institutions
Don't know	7	86	379
	25.9%	20.7%	20.6%

Strongly disagree	0	44	177
	0.0%	10.6%	9.6%
Disagree	0	37	136
	0.0%	8.9%	7.4%
Neutral	1	36	159
	3.7%	8.7%	8.7%
Agree	3	18	80
	11.1%	4.3%	4.4%
Strongly agree	0	4	14
	0.0%	1.0%	0.8%
Not applicable to my research	16	190	891
	59.3%	45.8%	48.5%
Total respondent count (Percentages sum to 100%)	27	415	1836
	100.0%	100.0%	100.0%

5.1. Research: My institution makes electronic laboratory notebooks available to those whose projects require them.	Appalachian State University	MA public institutions	All US institutions
Don't know	13	177	762
	48.1%	42.7%	41.5%
Strongly disagree	2	45	165
	7.4%	10.8%	9.0%
Disagree	0	32	118
	0.0%	7.7%	6.4%
Neutral	1	22	94
	3.7%	5.3%	5.1%
Agree	1	12	53
	3.7%	2.9%	2.9%
Strongly agree	0	4	18
	0.0%	1.0%	1.0%
Not applicable to my research	10	123	627
	37.0%	29.6%	34.1%
Total respondent count (Percentages sum to 100%)	27	415	1837
	100.0%	100.0%	100.0%

5.1. Research: I receive timely support from IT staff to conduct my research.	Appalachian State University	MA public institutions	All US institutions
Don't know	1	30	143
	3.7%	7.2%	7.8%
Strongly disagree	1	49	217
	3.7%	11.8%	11.8%
Disagree	3	42	200
	11.1%	10.1%	10.9%
Neutral	3	93	349
	11.1%	22.5%	19.0%
Agree	12	109	493
	44.4%	26.3%	26.8%
Strongly agree	4	34	143
	14.8%	8.2%	7.8%
Not applicable to my research	3	57	293
	11.1%	13.8%	15.9%
Total respondent count	27	414	1838

(Percentages sum to 100%)	100.0%	100.0%	100.0%
5.1. Research: My institution ensures that faculty doing research are provided ongoing tech support	Appalachian State University	MA public institutions	All US institutions
Don't know	3	81	406
	11.1%	19.5%	22.1%
Strongly disagree	1	76	304
	3.7%	18.3%	16.6%
Disagree	9	82	305
	33.3%	19.8%	16.6%
Neutral	6	75	288
	22.2%	18.1%	15.7%
Agree	4	58	267
	14.8%	14.0%	14.5%
Strongly agree	2	10	45
	7.4%	2.4%	2.5%
Not applicable to my research	2	33	221
	7.4%	8.0%	12.0%
Total respondent count (Percentages sum to 100%)	27	415	1836
	100.0%	100.0%	100.0%

5.1. Research: My institution provides effective software to support grant applications and management.	Appalachian State University	MA public institutions	All US institutions
Don't know	3	101	408
	11.1%	24.3%	22.2%
Strongly disagree	4	68	258
	14.8%	16.4%	14.1%
Disagree	1	52	251
	3.7%	12.5%	13.7%
Neutral	10	72	288
	37.0%	17.3%	15.7%
Agree	6	58	301
	22.2%	14.0%	16.4%
Strongly agree	0	12	53
	0.0%	2.9%	2.9%
Not applicable to my research	3	52	275
	11.1%	12.5%	15.0%
Total respondent count (Percentages sum to 100%)	27	415	1834
	100.0%	100.0%	100.0%

5.1. Research: My institution's text-analysis capabilities are adequate.	Appalachian State University	MA public institutions	All US institutions
Don't know	7	141	644
	25.9%	33.8%	35.1%
Strongly disagree	3	49	167
	11.1%	11.8%	9.1%
Disagree	3	47	171
	11.1%	11.3%	9.3%
Neutral	4	46	199
	14.8%	11.0%	10.9%
Agree	1	18	97
	3.7%	4.3%	5.3%

Strongly agree	0	5	18
	0.0%	1.2%	1.0%
Not applicable to my research	9	111	538
	33.3%	26.6%	29.3%
Total respondent count (Percentages sum to 100%)	27	417	1834
	100.0%	100.0%	100.0%

5.1. Research: My institution provides adequate resources to support cross-institutional research collaborations.	Appalachian State University	MA public institutions	All US institutions
Don't know	10	120	545
	37.0%	28.8%	29.7%
Strongly disagree	2	51	198
	7.4%	12.3%	10.8%
Disagree	2	46	171
	7.4%	11.1%	9.3%
Neutral	2	43	206
	7.4%	10.3%	11.2%
Agree	2	41	188
	7.4%	9.9%	10.3%
Strongly agree	1	9	42
	3.7%	2.2%	2.3%
Not applicable to my research	8	106	484
	29.6%	25.5%	26.4%
Total respondent count (Percentages sum to 100%)	27	416	1834
	100.0%	100.0%	100.0%

5.1. Research: In general, I am satisfied with my institution's support for my research needs.	Appalachian State University	MA public institutions	All US institutions
Don't know	3	42	200
	3.1%	3.3%	3.3%
Strongly disagree	9	183	686
	9.2%	14.3%	11.3%
Disagree	14	222	1022
	14.3%	17.3%	16.9%
Neutral	32	339	1448
	32.7%	26.5%	23.9%
Agree	31	373	2009
	31.6%	29.1%	33.2%
Strongly agree	8	77	394
	8.2%	6.0%	6.5%
Not applicable to my research	1	44	295
	1.0%	3.4%	4.9%
Total respondent count (Percentages sum to 100%)	98	1280	6054
	100.0%	100.0%	100.0%

5.2. Do you conduct research you consider to be data-intensive research?	Appalachian State University	MA public institutions	All US institutions
No	55	811	3873
	53.9%	62.6%	63.2%
Yes	47	484	2260
	46.1%	37.4%	36.8%

Total respondent count	102	1295	6133
(Percentages sum to 100%)	100.0%	100.0%	100.0%

5.3. How much data per year do you generate?	Appalachian State University	MA public institutions	All US institutions
Don't know	1	33	140
	7.7%	26.0%	24.6%
< 1 terabyte (TB)	7	61	230
	53.8%	48.0%	40.5%
1–10 TB	5	26	146
	38.5%	20.5%	25.7%
>10–100 TB	0	5	45
	0.0%	3.9%	7.9%
>100 TB–1 petabyte (PB)	0	1	6
	0.0%	0.8%	1.1%
> 1 PB	0	1	1
	0.0%	0.8%	0.2%
Total respondent count	13	127	568
(Percentages sum to 100%)	100.0%	100.0%	100.0%

5.4. Data: I have adequate network bandwidth available to conduct my research activities.	Appalachian State University	MA public institutions	All US institutions
Don't know	2	21	106
	4.3%	4.4%	4.8%
Strongly disagree	2	21	135
	4.3%	4.4%	6.1%
Disagree	6	66	234
	12.8%	14.0%	10.6%
Neutral	7	80	334
	14.9%	16.9%	15.1%
Agree	22	205	1032
	46.8%	43.3%	46.5%
Strongly agree	7	54	268
	14.9%	11.4%	12.1%
Not applicable to my research	1	26	108
	2.1%	5.5%	4.9%
Total respondent count	47	473	2217
(Percentages sum to 100%)	100.0%	100.0%	100.0%

5.4. Data: I have adequate data storage for my research initiatives.	Appalachian State University	MA public institutions	All US institutions
Don't know	3	16	71
	6.5%	3.4%	3.2%
Strongly disagree	2	44	229
	4.3%	9.3%	10.3%
Disagree	9	76	311
	19.6%	16.1%	14.0%
Neutral	8	63	264
	17.4%	13.3%	11.9%
Agree	17	200	1003
	37.0%	42.3%	45.2%
	6	58	283

Strongly agree	13.0%	12.3%	12.8%
Not applicable to my research	1	16	58
	2.2%	3.4%	2.6%
Total respondent count (Percentages sum to 100%)	46	473	2219
	100.0%	100.0%	100.0%

5.4. Data: Most of my research data are stored in a cloud-based/virtual environment.	Appalachian State University	MA public institutions	All US institutions
Don't know	1	12	65
	2.1%	2.5%	2.9%
Strongly disagree	10	108	531
	21.3%	22.9%	24.1%
Disagree	13	125	650
	27.7%	26.5%	29.5%
Neutral	4	58	212
	8.5%	12.3%	9.6%
Agree	10	105	460
	21.3%	22.2%	20.8%
Strongly agree	3	29	157
	6.4%	6.1%	7.1%
Not applicable to my research	6	35	132
	12.8%	7.4%	6.0%
Total respondent count (Percentages sum to 100%)	47	472	2207
	100.0%	100.0%	100.0%

5.4. Data: IT professionals are proactive rather than reactive in responding to my research computing needs.	Appalachian State University	MA public institutions	All US institutions
Don't know	7	43	156
	14.9%	9.1%	7.0%
Strongly disagree	5	94	476
	10.6%	19.8%	21.5%
Disagree	10	119	535
	21.3%	25.1%	24.1%
Neutral	11	102	467
	23.4%	21.5%	21.1%
Agree	9	49	277
	19.1%	10.3%	12.5%
Strongly agree	2	19	88
	4.3%	4.0%	4.0%
Not applicable to my research	3	48	218
	6.4%	10.1%	9.8%
Total respondent count (Percentages sum to 100%)	47	474	2217
	100.0%	100.0%	100.0%

5.4. Data: The wait time for research computing consultation assistance is too long.	Appalachian State University	MA public institutions	All US institutions
Don't know	12	77	348
	25.5%	16.3%	15.7%
Strongly disagree	3	27	129
	6.4%	5.7%	5.8%
Disagree	6	56	337

	12.8%	11.9%	15.2%
Neutral	12	122	557
	25.5%	25.8%	25.2%
Agree	4	71	303
	8.5%	15.0%	13.7%
Strongly agree	0	16	108
	0.0%	3.4%	4.9%
Not applicable to my research	10	103	428
	21.3%	21.8%	19.4%
Total respondent count (Percentages sum to 100%)	47	472	2210
	100.0%	100.0%	100.0%

5.4. Data: Communication between my research team and IT professionals regarding RC needs is adequate and appropriate.	Appalachian State University	MA public institutions	All US institutions
Don't know	0	9	35
	0.0%	7.2%	6.3%
Strongly disagree	2	24	99
	15.4%	19.2%	17.8%
Disagree	4	19	101
	30.8%	15.2%	18.2%
Neutral	2	28	119
	15.4%	22.4%	21.4%
Agree	5	28	119
	38.5%	22.4%	21.4%
Strongly agree	0	4	25
	0.0%	3.2%	4.5%
Not applicable to my research	0	13	57
	0.0%	10.4%	10.3%
Total respondent count (Percentages sum to 100%)	13	125	555
	100.0%	100.0%	100.0%

5.4. Data: IT professionals play an integral part in providing research computing services for me/my research team.	Appalachian State University	MA public institutions	All US institutions
Don't know	1	7	33
	7.7%	5.6%	6.0%
Strongly disagree	3	31	168
	23.1%	24.8%	30.5%
Disagree	2	32	112
	15.4%	25.6%	20.3%
Neutral	2	14	78
	15.4%	11.2%	14.2%
Agree	3	16	64
	23.1%	12.8%	11.6%
Strongly agree	1	4	37
	7.7%	3.2%	6.7%
Not applicable to my research	1	21	59
	7.7%	16.8%	10.7%
Total respondent count (Percentages sum to 100%)	13	125	551
	100.0%	100.0%	100.0%

5.4. Data: I have enough computational resources at my disposal to conduct my research.	Appalachian State University	MA public institutions	All US institutions
Don't know	0	1	24
	0.0%	0.8%	4.3%
Strongly disagree	2	22	80
	15.4%	17.7%	14.5%
Disagree	1	23	93
	7.7%	18.5%	16.8%
Neutral	4	25	104
	30.8%	20.2%	18.8%
Agree	4	36	182
	30.8%	29.0%	32.9%
Strongly agree	2	9	47
	15.4%	7.3%	8.5%
Not applicable to my research	0	8	23
	0.0%	6.5%	4.2%
Total respondent count (Percentages sum to 100%)	13	124	553
	100.0%	100.0%	100.0%

5.4. Data: I have enough data storage resources at my disposal to conduct my research.	Appalachian State University	MA public institutions	All US institutions
Don't know	1	8	30
	7.7%	6.5%	5.4%
Strongly disagree	2	18	90
	15.4%	14.5%	16.3%
Disagree	4	21	87
	30.8%	16.9%	15.7%
Neutral	2	19	77
	15.4%	15.3%	13.9%
Agree	2	39	191
	15.4%	31.5%	34.5%
Strongly agree	2	14	61
	15.4%	11.3%	11.0%
Not applicable to my research	0	5	17
	0.0%	4.0%	3.1%
Total respondent count (Percentages sum to 100%)	13	124	553
	100.0%	100.0%	100.0%

5.4. Data: I have enough visualization resources at my disposal to conduct my research.	Appalachian State University	MA public institutions	All US institutions
Don't know	0	11	77
	0.0%	8.9%	14.0%
Strongly disagree	1	20	98
	7.7%	16.1%	17.8%
Disagree	3	22	90
	23.1%	17.7%	16.3%
Neutral	3	18	80
	23.1%	14.5%	14.5%
Agree	2	20	91
	15.4%	16.1%	16.5%
Strongly agree	0	5	20
	0.0%	4.0%	3.6%

Not applicable to my research	4	28	95
	30.8%	22.6%	17.2%
Total respondent count (Percentages sum to 100%)	13	124	551
	100.0%	100.0%	100.0%

5.4. Data: My institution provides adequate resources for data backup/restore in the event of loss or corruption.	Appalachian State University	MA public institutions	All US institutions
Don't know	0	16	82
	0.0%	12.9%	14.8%
Strongly disagree	2	24	140
	15.4%	19.4%	25.3%
Disagree	4	26	97
	30.8%	21.0%	17.5%
Neutral	2	19	67
	15.4%	15.3%	12.1%
Agree	2	24	114
	15.4%	19.4%	20.6%
Strongly agree	2	6	30
	15.4%	4.8%	5.4%
Not applicable to my research	1	9	24
	7.7%	7.3%	4.3%
Total respondent count (Percentages sum to 100%)	13	124	554
	100.0%	100.0%	100.0%

5.4. Data: Overall, I have the IT cyberinfrastructure resources and support I need to effectively pursue my research.	Appalachian State University	MA public institutions	All US institutions
Don't know	1	7	40
	7.7%	5.6%	7.3%
Strongly disagree	1	24	109
	7.7%	19.4%	19.8%
Disagree	3	28	103
	23.1%	22.6%	18.7%
Neutral	4	28	116
	30.8%	22.6%	21.1%
Agree	2	21	125
	15.4%	16.9%	22.7%
Strongly agree	2	7	30
	15.4%	5.6%	5.5%
Not applicable to my research	0	9	27
	0.0%	7.3%	4.9%
Total respondent count (Percentages sum to 100%)	13	124	550
	100.0%	100.0%	100.0%

5.4. Data: I am generally satisfied with the provision of research computing technologies at my institution.	Appalachian State University	MA public institutions	All US institutions
Don't know	2	13	69
	4.3%	2.7%	3.1%
Strongly disagree	2	57	279
	4.3%	12.1%	12.6%
Disagree	9	93	391
	19.1%	19.7%	17.7%

Neutral	16	132	541
	34.0%	27.9%	24.5%
Agree	14	139	729
	29.8%	29.4%	33.0%
Strongly agree	4	28	137
	8.5%	5.9%	6.2%
Not applicable to my research	0	11	66
	0.0%	2.3%	3.0%
Total respondent count (Percentages sum to 100%)	47	473	2212
	100.0%	100.0%	100.0%

For the next set of questions, respondents were asked to rate themselves on a scale of 0–100.

6.1a. Disposition towards IT		Appalachian State University	MA public institutions	All US institutions
Reluctant vs. Enthusiast	Mean	71.5	71.3	71.9
	SD	24.5	23.1	22.6
	N	136	2084	11139
Late adopter vs. Early adopter	Mean	60.5	61.5	61.4
	SD	26.8	25.7	25.6
	N	133	2028	10882
Technophobe vs. Technophile	Mean	62.2	63.7	63.9
	SD	26.2	23.9	24.0
	N	136	1982	10440
Skeptic vs. Cheerleader	Mean	59.1	60.5	61.0
	SD	25.2	24.3	24.0
	N	129	1983	10508
By-the-book vs. Experimenter	Mean	66.0	65.5	64.8
	SD	20.8	22.3	22.4
	N	130	2005	10686
Critic vs. Supporter	Mean	64.9	64.6	65.0
	SD	24.6	24.0	23.5
	N	130	1992	10572
Conservative vs. Radical	Mean	56.1	56.8	56.3
	SD	17.9	20.4	20.2
	N	121	1860	9855

6.1b. Attitude towards IT		Appalachian State University	MA public institutions	All US institutions
Dissatisfied vs. Satisfied	Mean	64.7	64.7	65.7
	SD	20.0	20.7	20.7
	N	134	2032	10869
Discontent vs. Content	Mean	63.9	63.3	64.1
	SD	20.5	20.6	20.7
	N	130	1982	10601
Perturbed vs. Pleased	Mean	63.3	63.4	63.9
	SD	19.5	20.9	21.2
	N	125	1953	10433
Burdensome vs. Beneficial	Mean	67.3	67.0	67.6
	SD	24.0	23.4	23.3
	N	134	2018	10722

Useless vs. Useful	Mean	73.4	73.2	73.4
	SD	20.5	21.9	21.6
	N	130	2010	10762
Distraction vs. Enhancement	Mean	66.1	66.3	67.1
	SD	22.6	23.7	23.4
	N	125	1964	10568

6.1c. Usage of IT		Appalachian State University	MA public institutions	All US institutions
Never connected vs. Always connected	Mean	78.5	76.6	77.1
	SD	21.5	22.0	21.9
	N	134	2093	11238
Peripheral vs. Central	Mean	70.5	69.7	70.5
	SD	22.2	21.9	21.8
	N	130	2001	10647
Old media vs. New media	Mean	67.3	67.6	68.1
	SD	20.8	21.2	21.2
	N	125	1979	10627
Infrequent vs. Frequent	Mean	76.7	76.6	77.0
	SD	22.1	22.0	21.8
	N	134	2050	11042

6.2. Gender		Appalachian State University	MA public institutions	All US institutions
Male		65	952	5357
		43.6%	42.5%	44.9%
Female		78	1205	6224
		52.3%	53.7%	52.2%
Other		0	5	20
		0.0%	0.2%	0.2%
Prefer not to answer		6	80	326
		4.0%	3.6%	2.7%
Total respondent count (Percentages sum to 100%)		149	2242	11927
		100.0%	100.0%	100.0%

6.3. Age		Appalachian State University	MA public institutions	All US institutions
Prefer not to answer		15	163	759
		10.3%	7.3%	6.4%
Under 50		61	1034	5286
		42.1%	46.6%	44.8%
50 or older		69	1022	5767
		47.6%	46.1%	48.8%
Total respondent count (Percentages sum to 100%)		145	2219	11812
		100.0%	100.0%	100.0%

6.4. Faculty load area		Appalachian State University	MA public institutions	All US institutions
Agriculture and natural resources		3	43	396
		2.1%	1.9%	3.3%
Biological/life sciences		9	151	1029
		6.2%	6.8%	8.6%

Business, management, marketing	12	221	1117
	8.2%	9.9%	9.4%
Communications/journalism	15	114	561
	10.3%	5.1%	4.7%
Computer and information sciences	6	89	654
	4.1%	4.0%	5.5%
Education, including physical education	25	337	1419
	17.1%	15.1%	11.9%
Engineering and architecture	3	77	674
	2.1%	3.5%	5.7%
Fine and performing arts	10	153	742
	6.8%	6.9%	6.2%
Health sciences, including professional programs	14	265	1664
	9.6%	11.9%	14.0%
Humanities	24	330	1604
	16.4%	14.8%	13.5%
Liberal arts/general studies	14	197	1053
	9.6%	8.8%	8.8%
Manufacturing, construction, repair, or transportation	1	12	80
	0.7%	0.5%	0.7%
Physical sciences, including mathematical sciences	18	228	1210
	12.3%	10.2%	10.2%
Public administration, legal, social, and protective services	6	34	214
	4.1%	1.5%	1.8%
Social sciences	28	375	1759
	19.2%	16.8%	14.8%
Other	13	169	1068
	8.9%	7.6%	9.0%
Total respondent count	146	2226	11907

6.5. Ethnicity	Appalachian State University	MA public institutions	All US institutions
White	126	1651	9254
	85.1%	74.6%	78.6%
Black/African American	2	59	382
	1.4%	2.7%	3.2%
Hispanic/Latino	2	148	536
	1.4%	6.7%	4.6%
American Indian/Native/Alaskan	0	25	134
	0.0%	1.1%	1.1%
Asian/Pacific Islander	1	143	616
	0.7%	6.5%	5.2%
Other	0	35	189
	0.0%	1.6%	1.6%
Prefer not to answer	17	211	989
	11.5%	9.5%	8.4%
Total respondent count	148	2214	11773