

NSSE 2013 Learning with Technology Module

Grand Valley State University

IPEDS: 170082

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Administration Summary Grand Valley State University

Learning with Technology Module

Developed in partnership with EDUCAUSE, these questions examine the role of technology in student learning, focusing on student use of technology and perceptions of institutional support.

Learning with Technology Comparison Group

This section summarizes how your Learning with Technology module's comparison group was identified, including selection criteria and whether the default option was taken. This is followed by the resulting list of institutions represented in the 'Learning with Tech' column of this report.

Group label	Learning with Tech
Date submitted	Not applicable; comparison group not customized.
How was this comparison group constructed?	Your institution did not customize this comparison group; the default group (all module participants) was used.

Group description

Default comparison group

'Learning with Tech' institutions (N=78)

Learning with reen institutions (N=70)	
Abilene Christian University (Abilene, TX)	Hope College (Holland, MI)
Alaska Pacific University (Anchorage, AK)	Johnson & Wales University (Providence, RI)
Alverno College (Milwaukee, WI)	Johnson & Wales University-Charlotte (Charlotte, NC)
Auburn University at Montgomery (Montgomery, AL)	Johnson & Wales University-Denver (Denver, CO)
Bacone College (Muskogee, OK)	Johnson & Wales University-North Miami (North Miami, FL)
Baptist Memorial College of Health Sciences (Memphis, TN)	Lebanon Valley College (Annville, PA)
Barton College (Wilson, NC)	Liberty University (Lynchburg, VA)
Benedictine University (Lisle, IL)	Limestone College (Gaffney, SC)
Brigham Young University (Provo, UT)	Lubbock Christian University (Lubbock, TX)
Brigham Young University-Hawaii (Laie, HI)	Manhattanville College (Purchase, NY)
Buena Vista University (Storm Lake, IA)	Maranatha Baptist Bible College (Watertown, WI)
Capital University (Columbus, OH)	Marist College (Poughkeepsie, NY)
Centre College (Danville, KY)	Martin Methodist College (Pulaski, TN)
Coleman University (San Diego, CA)	McPherson College (McPherson, KS)
Colorado College (Colorado Springs, CO)	Methodist University (Fayetteville, NC)
Concordia University (Portland, OR)	Metropolitan State University of Denver (Denver, CO)
Concordia University-Wisconsin (Mequon, WI)	Mississippi University for Women (Columbus, MS)
Cornerstone University (Grand Rapids, MI)	Ohio State University at Newark, The (Newark, OH)
Culver-Stockton College (Canton, MO)	Ohio State University-Mansfield Campus (Mansfield, OH)
DeVry University-California (Pomona, CA)	Ohio State University-Marion Campus (Marion, OH)
DeVry University-Georgia (Decatur, GA)	Pace University (New York, NY)
DeVry University-Illinois (Addison, IL)	Rivier University (Nashua, NH)
DeVry University-Texas (Irving, TX)	Rochester Institute of Technology (Rochester, NY)
Emporia State University (Emporia, KS)	Savannah College of Art and Design (Savannah, GA)
Franklin W. Olin College of Engineering (Needham, MA)	School of Visual Arts (New York, NY)
George Fox University (Newberg, OR)	Shenandoah University (Winchester, VA)
Goshen College (Goshen, IN)	Simpson University (Redding, CA)
Grand Canyon University (Phoenix, AZ)	Southern Utah University (Cedar City, UT)
Greensboro College (Greensboro, NC)	Texas A&M University - Kingsville (Kingsville, TX)
Holy Family University (Philadelphia, PA)	Tyndale University College and Seminary (Toronto, ON)

'Learning with Tech' institutions (N=78), continued

University of Advancing Technology (Tempe, AZ) University of Alabama (Tuscaloosa, AL) University of Alabama in Huntsville (Huntsville, AL) University of Maine at Augusta (Augusta, ME) University of Northern British Columbia (Prince George, BC) University of Pittsburgh-Bradford (Bradford, PA) University of Rhode Island (Kingston, RI) University of Tennessee Martin, The (Martin, TN) University of Texas at Arlington, The (Arlington, TX) University of Texas at El Paso, The (El Paso, TX) Valley City State University (Valley City, ND) Virginia Wesleyan College (Norfolk, VA) Walla Walla University (College Place, WA) Warner University (Lake Wales, FL) Wheaton College (Norton, MA) Wichita State University (Wichita, KS) William Jewell College (Liberty, MO) Wright State University (Dayton, OH)



Frequencies and Statistical Comparisons Grand Valley State University

First-Year Students

				Frequen	cy D	istributio	ns ^a	Statistical Comparisons ^b		
				0.4511		Learning w	/ith		Learning with	
				GVSU		Tech		GVSU	Tech	
Item wording or description	Variable name	Values ^c	Response options	Count	%	Count	%	Mean	Effect Mean size ^d	
. During the current school year,	how much ha	as your use	of technology contribut	ed to the follo	owing:	:				
a. Your understanding of course	TEC01a	1	Very little	39	3	418	3			
materials and ideas		2	Some	232	16	2,383	14			
		3	Quite a bit	653	46	6,335	38	3.1	3.3 ***17	
		4	Very much	492	35	7,867	46			
			Total	1,416	100	17,003	100			
b. Demonstrating your understanding	TEC01b	1	Very little	38	3	515	3			
of course content		2	Some	294	21	2,778	17			
		3	Quite a bit	648	46	6,537	38	3.0	3.2 ***18	
		4	Very much	430	30	7,071	42			
			Total	1,410	100	16,901	100			
c. Learning, studying, or completing	TEC01c	1	Very little	33	2	267	2			
coursework on your own		2	Some	150	11	1,551	9			
		3	Quite a bit	558	40	5,421	32	3.3	3.4 ***16	
		4	Very much	671	47	9,715	57			
			Total	1,412	100	16,954	100			
d. Learning, studying, or completing	TEC01d	1	Very little	143	10	2,036	14			
coursework with other students		2	Some	413	30	4,175	25			
		3	Quite a bit	500	36	5,102	30	2.7	2.8 *06	
		4	Very much	344	24	5,566	32			
			Total	1,400	100	16,879	100			
e. Distracting you from completing	TEC01e	1	Very little	86	6	2,974	20			
your coursework		2	Some	423	30	5,411	32			
		3	Quite a bit	483	34	4,407	25	2.9	2.5 *** .32	
		4	Very much	418	29	4,116	24			
			Total	1,410	100	16,908	100			
. During the current school year,	how much ha	ive your co	ourses improved your un	derstanding a	nd us	e of technolo	ogy?			
	TEC02	1	Very little	273	20	2,355	15			
		2	Some	574	41	5,717	33			
		3	Quite a bit	400	29	5,494	33	2.3	2.6 ***28	
		4	Very much	150	11	3,293	20			
			Total	1,397	100	16,859	100			
. During the current school year,	about how of	ften have v	you used the following te	chnologies in	vour	courses?				
a. Electronic textbooks	TEC03a	1	Never	722	50	6,851	38			
		2	Sometimes	444	32	4,669	27			
		3	Often	157	11	2,474	15	1.7	2.2 ***39	
		4	Very often	82	6	2,867	20	1.,	2.2 .57	
		_	I don't know what this is	11	1	127	1			
			Total	1,416	100	16,988	100			
b. Online portfolios or e-portfolios	TEC03b	1	Never	681	48	8,237	48			
1 1		2	Sometimes	371	27	3,613	22			
		3	Often	139	10	1,595	10	1.6	1.8 ***12	
				45	3	1,240	8	1.0	1.0 ···12	
		4	verv often	41						
		4	Very often I don't know what this is	43	12	2,217	13			



Frequencies and Statistical Comparisons Grand Valley State University

First-Year Students

				Frequen	cy D	i <mark>stributio</mark>	ns ^a	Statistical	Comparisons
						Learning w	vith		Learning with
				GVSU		Tech		GVSU	Tech
Item wording or description	Variable name	Values ^c	Response options	Count	%	Count	%	Mean	Effec Mean size
c. Blogs	TEC03c	1	Never	938	66	9,711	57		
6		2	Sometimes	328	24	4,395	26		
		3	Often	100	7	1,572	10	1.5	1.6 ***22
		4	Very often	32	2	949	6		
		_	I don't know what this is	10	1	193	1		
			Total	1,408	100	16,820	100		
d. Collaborative editing software	TEC03d	1	Never	377	27	4,830	31		
(Wikis, Google Docs, etc.)		2	Sometimes	558	40	5,364	31		
		3	Often	295	21	3,674	21	2.2	2.2 *05
		4	Very often	152	11	2,677	16		
		_	I don't know what this is	17	1	309	2		
			Total	1,399	100	16,854	100		
e. Multimedia software (drawing,	TEC03e	1	Never	807	57	8,119	47		
audio or video production, editing,		2	Sometimes	334	24	4,238	25		
etc.)		3	Often	161	12	2,287	14	1.7	1.9 ***22
		4	Very often	88	6	2,008	12		
		_	I don't know what this is	12	1	234	1		
			Total	1,402	100	16,886	100		
f. Social networking (Facebook, Twitter, etc.)	TEC03f	1	Never	596	42	6,998	42		
		2	Sometimes	395	28	4,566	26		
		3	Often	183	13	2,388	14	2.0	2.103
		4	Very often	225	15	2,816	17		
		_	I don't know what this is	8	1	115	1		
			Total	1,407	100	16,883	100		
g. Mobile computing (handheld	TEC03g	1	Never	523	37	5,095	29		
devices such as smartphones,		2	Sometimes	402	29	4,500	26		
tablets, etc.)		3	Often	199	14	3,095	19	2.2	2.4 ***20
		4	Very often	285	20	4,108	25		
		_	I don't know what this is	4	0	91	1		
			Total	1,413	100	16,889	100		
. During the current school year,	about how of	ten have	you used technology to c	ommunicate	with tl	ne following	people	?	
a. Students	TEC04a	1	Never	12	1	504	4		
		2	Sometimes	203	15	2,163	15		
		3	Often	366	26	3,801	23	3.4	3.4 * .06
		4	Very often	831	58	10,500	59		
			Total	1,412	100	16,968	100		
b. Academic advisors	TEC04b	1	Never	299	21	2,119	14		
		2	Sometimes	535	38	5,474	33		
		3	Often	340	24	4,669	27	2.4	2.7 ***31
		4	Very often	237	16	4,688	27		
			Total	1,411	100	16,950	100		
c. Faculty	TEC04c	1	Never	77	5	1,047	7		
		2	Sometimes	395	28	4,825	30		
		3	Often	557	40	5,481	32	2.9	2.901
		4	Very often	378	26	5,529	31		
			Total	1,407	100	16,882	100		

*p<.05, **p<.01, ***p<.001 (2-tailed)



Frequencies and Statistical Comparisons Grand Valley State University

First-Year Students

				Frequen	cy Di	stributio	ns ^a	Statistical	Comparis	sons
						Learning w	ith		Learning	
				GVSU		Tech		GVSU	Tecl	h
	Variable									Effect
Item wording or description	name	Values ^c	Response options	Count	%	Count	%	Mean	Mean	size ^d
d. Student services staff (career	TEC04d	1	Never	367	26	4,909	33			
services, student activities, housing, etc.)		2	Sometimes	607	43	5,874	33			
housing, etc.)		3	Often	254	18	2,980	17	2.2	2.2	03
		4	Very often	178	12	3,119	18			
			Total	1,406	100	16,882	100			
e. Other administrative staff and	TEC04e	1	Never	515	36	3,890	25			
offices (registrar, financial aid, etc.)		2	Sometimes	549	40	6,714	39			
		3	Often	187	13	2,966	17	2.0	2.3 ***	30
		4	Very often	154	11	3,281	19			
			Total	1,405	100	16,851	100			
. How much does your institution	emphasize t	he followi	ng?							
a. Teaching with new, cutting-edge	TEC05a	1	Very little	155	11	1,739	11			
technologies		2	Some	566	40	5,410	32			
		3	Quite a bit	508	36	5,979	35	2.5	2.7 ***	17
		4	Very much	184	13	3,828	22	2.0	2.7	17
			Total	1,413	100	16,956	100			
b. Providing technology to help you	TEC05b	1	Very little	78	6	1,026	7			
learn, study or complete		2	Some	360	25	3,767	23			
coursework		3	Quite a bit	635	45	6,654	39	2.9	2.9 **	07
		4	Very much	339	24	5,483	31		2.9	.07
			Total	1,412	100	16,930	100			
c. Teaching you how to use available	TEC05c	1	Very little	103	7	1,241	8			
technologies to learn, study, or		2	Some	434	31	4,379	27			
complete coursework		3	Quite a bit	578	41	6,278	36	2.8	2.9 ***	11
		4	Very much	292	21	5,037	29		2.9	
			Total	1,407	100	16,935	100			
d. Providing support services to assist	TEC05d	1	Very little	154	11	1,361	9			
you with your use of technology		2	Some	473	33	4,477	27			
		3	Quite a bit	520	38	6,043	35	2.6	2.8 ***	21
		4	Very much	262	19	5,015	29	2.0	2.0	21
			Total	1,409	100	16,896	100			



Frequencies and Statistical Comparisons Grand Valley State University

				Frequency Distributions ^a				Statistical Comparisons ^b			
				GVSU		Learning w Tech	vith	GVSU	Learning with Tech		
	Variable								Effect		
Item wording or description	name	Values ^c	Response options	Count	%	Count	%	Mean	Mean size ^d		
L. During the current school year,	how much ha	s your use	of technology contribut	ed to the follo	wing:						
a. Your understanding of course	TEC01a	1	Very little	39	3	684	3				
materials and ideas		2	Some	262	19	3,301	12				
		3	Quite a bit	525	38	9,198	33	3.2	3.3 ***24		
		4	Very much	550	40	15,273	52				
			Total	1,376	100	28,456	100				
b. Demonstrating your understanding	TEC01b	1	Very little	50	4	835	3				
of course content		2	Some	310	22	3,912	14				
		3	Quite a bit	520	38	9,421	34	3.1	3.3 ***25		
		4	Very much	489	36	14,122	49				
			Total	1,369	100	28,290	100				
c. Learning, studying, or completing	TEC01c	1	Very little	13	1	398	2				
coursework on your own		2	Some	157	11	2,032	8				
		3	Quite a bit	463	34	7,847	29	3.4	3.5 ***15		
		4	Very much	744	54	18,075	62				
			Total	1,377	100	28,352	100				
d. Learning, studying, or completing	TEC01d	1	Very little	104	8	2,961	11				
coursework with other students		2	Some	305	22	5,671	21				
		3	Quite a bit	485	36	7,892	28	3.0	3.001		
		4	Very much	478	34	11,765	40				
			Total	1,372	100	28,289	100				
e. Distracting you from completing	TEC01e	1	Very little	146	11	6,645	24				
your coursework		2	Some	381	28	9,351	33				
		3	Quite a bit	422	31	6,303	22	2.8	2.4 *** .37		
		4	Very much	420	30	6,004	21				
			Total	1,369	100	28,303	100				
. During the current school year,	how much ha	ve your co	ourses improved your un	derstanding a	nd us	e of technolo	gy?				
	TEC02	1	Very little	271	19	4,102	15				
		2	Some	553	40	8,714	30				
		3	Quite a bit	385	28	8,665	31	2.3	2.6 ***29		
		4	Very much	166	13	6,847	24				
			Total	1,375	100	28,328	100				
. During the current school year,	about how of	ten have v	ou used the following te	chnologies in	your	courses?					
a. Electronic textbooks	TEC03a	1	Never	789	57	11,659	41				
		2	Sometimes	365	26	8,724	29				
		3	Often	142	11	3,812	14	1.6	2.1 ***37		
		4	Very often	75	6	4,117	16				
		_	I don't know what this is	5	0	117	0				
			Total	1,376	100	28,429	100				
b. Online portfolios or e-portfolios	TEC03b	1	Never	760	55	14,074	50				
- •		2	Sometimes	298	22	6,035	21				
		3	Often	120	9	2,758	10	1.6	1.7 ***15		
		4	Very often	67	5	2,318	9				
		_	I don't know what this is	127	9	3,116	10				
			Total	1,372	100	28,301	100				



Frequencies and Statistical Comparisons Grand Valley State University

				Frequen	cy D	i <mark>stributio</mark>	ns ^a	Statistical	Comparisons
						Learning w	/ith		Learning with
				GVSU		Tech		GVSU	Tech
Item wording or description	Variable name	Values ^c	Response options	Count	%	Count	%	Mean	Effec Mean size
c. Blogs	TEC03c	1	Never	772	57	15,738	56		incuir size
2. 2.050	120000	2	Sometimes	407	30	7,908	27		
		3	Often	134	10	2,613	9	1.6	1.6 *05
		4	Very often	47	3	1,635	6	1.0	1.005
		_	I don't know what this is	5	0	248	1		
			Total	1,365	100	28,142	100		
d. Collaborative editing software	TEC03d	1	Never	200	15	7,807	29		
(Wikis, Google Docs, etc.)		2	Sometimes	510	38	8,235	30		
		3	Often	417	31	6,216	21	2.5	2.3 *** .19
		4	Very often	236	17	5,604	18	2 .0	2.5 .15
		_	I don't know what this is	3	0	384	1		
			Total	1,366	100	28,246	100		
e. Multimedia software (drawing,	TEC03e	1	Never	728	52	12,353	44		
audio or video production, editing,		2	Sometimes	343	25	7,766	27		
etc.)		3	Often	165	12	3,965	14	1.8	2.0 ***17
		4	Very often	130	10	3,884	14	1.0	2.017
		_	I don't know what this is	7	1	308	1		
			Total	1,373	100	28,276	100		
f. Social networking (Facebook,	TEC03f	1	Never	537	39	13,095	47		
Twitter, etc.)	120001	2	Sometimes	415	30	7,409	26		
		3	Often	209	15	3,704	13	2.1	1.9 *** .12
		4	Very often	211	15	3,813	14	2.1	1.912
			I don't know what this is	4	0	236	1		
			Total	1,376	100	28,257	100		
g. Mobile computing (handheld	TEC03g	1	Never	484	35	8,541	29		
devices such as smartphones,		2	Sometimes	359	26	7,232	25		
tablets, etc.)		3	Often	245	18	5,403	19	2.2	2.4 ***15
		4	Very often	279	21	7,024	26		2.415
		_	I don't know what this is	4	0	137	0		
			Total	1,371	100	28,337	100		
During the current school year,	about how of	ten have v	you used technology to c	ommunicate	with th	e following	neonle		
a. Students	TEC04a	1	Never	14	1	693	3		
		2	Sometimes	149	11	3,380	13		
		3	Often	311	23	5,829	21	3.5	3.5 * .06
		4	Very often	902	64	18,496	64	5.5	5.5 .00
			Total	1,376	100	28,398	100		
b. Academic advisors	TEC04b	1	Never	233	17	3,877	14		
		2	Sometimes	491	36	8,716	31		
		3	Often	305	22	6,675	24	2.5	2.7 ***17
		4	Very often	348	25	9,077	31	200	2.717
			Total	1,377	100	28,345	100		
c. Faculty	TEC04c	1	Never	32	3	925	4		
~ • 2		2	Sometimes	293	22	6,331	24		
		3	Often	498	36	8,828	31	3.1	3.1 .03
								5.1	5.1 .03
		4	Very often	547	39	12,150	41		



Frequencies and Statistical Comparisons Grand Valley State University

			Frequen	cy Di	stributio	ns ^a	Statistical (Comparisons	
					Learning w	vith		Learning with	
			GVSU		Tech		GVSU	Tech	
Variable								Effect	
name	Values ^c	Response options	Count	%	Count	%	Mean	Mean size ^d	
TEC04d	1	Never	598	44	10,594	39			
	2	Sometimes	470	34	8,480	29			
	3	Often	152	11	3,866	13	1.9	2.1 ***19	
	4	Very often	153	11	5,297	18			
		Total	1,373	100	28,237	100			
TEC04e	1	Never	472	34	6,268	25			
	2	Sometimes	606	44	11,468	40			
	3	Often	152	11	4,710	16	2.0	2.3 ***31	
	4	Very often	143	10	5,778	19			
		Total	1,373	100	28,224	100			
emphasize t	he followi	ng?							
TEC05a	1	•	166	12	2,989	11			
	2		555	40	,	33			
						- , -		2.5	2.7 ***18
		-			. ,		<u> </u>	2.716	
		•			,				
TEC05b	1		96	7	2,107	8			
	2	5	435	31	6.819	25			
	3	Ouite a bit	559	41	10.692	37	2.8	2.9 ***13	
	4	Verv much	285	21	8,692	29	2.0	2.915	
		•	1.375	100	,	100			
TEC05c	1		· · · · · ·	12	,				
		•			,				
					,		26	2.8 ***17	
		-			- /		2.0	2.817	
	·				.,				
TEC05d	1		· · · · · ·		,				
-10000					,				
					,		2.5	2.7 ***22	
		-			,		4.0	2.7 ****22	
	4	•			,				
_	name TEC04d TEC04e emphasize t TEC05a	name Values ^c TEC04d 1 2 3 4 2 TEC04e 1 2 3 4 2 3 4 TEC04e 1 2 3 4 2 3 4 TEC05a 1 2 3 4 2 3 4 TEC05b 1 2 3 4 2 3 4 TEC05c 1 2 3 4 2	nameValues'Response optionsTEC04d1Never2Sometimes3Often4Very oftenTotalTEC04e1Never2Sometimes3Often4Very often2Sometimes3Often4Very oftenTEC04e1Very often2Some3Often4Very oftenTEC05a1Very little2Some3Quite a bit4Very muchTEC05b1Very little2Some3Quite a bit4Very muchTEC05c1Very little2Some3Quite a bit4Very muchTEC05c1Very little2Some3Quite a bit4Very muchTEC05d1Very little2Some3Quite a bit4Very much2Some3Quite a bit4Very much2Some3Quite a bit4Very little2Some3Quite a bit4Very little2Some3Quite a bit4Very little2Some3Quite a bit4Very little3	Variable name Values ⁶ Response options Count TEC04d 1 Never 598 2 Sometimes 470 3 Often 152 4 Very often 153 TEC04e 1 Never 472 2 Sometimes 606 3 Often 152 4 Very often 153 7EC04e 1 Never 472 2 Sometimes 606 3 0ften 152 4 Very often 143 7Dal 14 Very often 143 7Dal Very often 1373 1373 Teco5a 1 Very nuch 183 7Dal Very much 183 1371 TEC05b 1 Very much 285 7Dal Very much 285 7Dal Very much 285 7Dal Very much 285	Variable name Values ⁶ Response options Count % TEC04d 1 Never 598 44 2 Sometimes 470 34 3 Often 152 11 4 Very often 153 11 Total 1,373 100 TEC04e 1 Never 472 34 2 Sometimes 606 44 3 Often 152 11 4 Very often 153 100 TEC04e 1 Never 472 34 2 Sometimes 606 44 3 Often 152 11 4 Very often 143 100 TEC05a 1 Very litle 166 12 2 Some 555 40 3 Quite a bit 473 35 4 Very much 183 13 2	Variable name Values' Response aptions Count $\%$ Count TEC04d 1 Never 598 44 10.594 2 Sometimes 470 34 8.480 3 Often 152 11 3.866 4 Very often 153 10 28.237 TEC04e 1 Never 472 34 6.268 2 Sometimes 606 44 14,710 4 Very often 153 10 28.237 TEC04e 1 Never 472 34 6.268 3 Often 152 11 4.710 4 Very often 143 10 5.778 3 Often 13.373 100 28.224 Total 1.373 10 28.237 TEC05a 1 Very futh 166 12 2.989 2 Some 555 40 9.115	Variable name Volues ⁶ Response options Count % Count % TEC04d 1 Never 598 44 10,594 39 2 Sometimes 470 34 8,480 29 3 Often 152 11 3,866 13 4 Very often 153 11 5,297 18 TEC04e 1 Never 472 34 6,268 25 2 Sometimes 606 44 11,468 40 3 Often 152 11 4,718 10 4 Very often 143 10 5,718 19 Total 1,373 100 28,224 100 Erecosa 1 Very intle 166 12 2,989 11 2 Some 555 40 9,115 33 34 4 Very much 183 13 6,536 22 29	Variable name Values* Response options Count π Count π GVSU Mean TEC04d 1 Never 598 44 10.594 39 2 Sometimes 470 34 8,480 29 1 3 Often 152 11 3,866 13 1 4 Very often 153 11 5,297 18 1 7EC04e 1 Never 472 34 6,268 25 2 Sometimes 606 44 11,468 40 3 Often 152 11 4,710 16 4 Very often 143 10 5,778 19 TEC05a 1 Very little 166 12 2,989 11 3 Quite a bit 473 35 9,733 34 2,55 4 Very much 183 13 6,536 22 2	



Detailed Statistics^e Grand Valley State University

First-Year Students

						Star	dard			Effect
	N	Me	an	Standa	rd error ^f	devia	ation ^g	DF ^h	Sig. ⁱ	size ^d
Variable	GVSU	GVSU	GVSU Learning with Tech		Learning with Tech	GVSU	Learning with Tech		parisons with	
name								Lear	ning with Tec	h
TEC01a	1,416	3.1	3.3	.02	.00	0.8	0.8	1,563	.000	17
TEC01b	1,410	3.0	3.2	.02	.00	0.8	0.8	1,563	.000	18
TEC01c	1,412	3.3	3.4	.02	.00	0.8	0.7	30,505	.000	16
TEC01d	1,400	2.7	2.8	.03	.01	0.9	1.0	1,569	.017	06
TEC01e	1,410	2.9	2.5	.02	.01	0.9	1.1	1,599	.000	.32
TEC02	1,396	2.3	2.6	.02	.01	0.9	1.0	1,553	.000	28
TEC03a	1,406	1.7	2.2	.02	.01	0.9	1.1	1,643	.000	39
TEC03b	1,241	1.6	1.8	.02	.01	0.8	1.0	1,423	.000	12
TEC03c	1,399	1.5	1.6	.02	.01	0.7	0.9	1,613	.000	22
TEC03d	1,382	2.2	2.2	.03	.01	0.9	1.1	1,555	.039	05
TEC03e	1,391	1.7	1.9	.02	.01	0.9	1.1	1,573	.000	22
TEC03f	1,399	2.0	2.1	.03	.01	1.1	1.1	1,544	.252	03
TEC03g	1,409	2.2	2.4	.03	.01	1.1	1.2	1,555	.000	20
TEC04a	1,412	3.4	3.4	.02	.01	0.8	0.9	1,590	.018	.06
TEC04b	1,411	2.4	2.7	.03	.01	1.0	1.0	1,556	.000	31
TEC04c	1,407	2.9	2.9	.02	.01	0.9	0.9	1,571	.822	01
TEC04d	1,406	2.2	2.2	.03	.01	1.0	1.1	1,584	.210	03
TEC04e	1,405	2.0	2.3	.03	.01	1.0	1.0	1,570	.000	30
TEC05a	1,413	2.5	2.7	.02	.01	0.9	0.9	1,584	.000	17
TEC05b	1,412	2.9	2.9	.02	.01	0.8	0.9	1,576	.004	07
TEC05c	1,407	2.8	2.9	.02	.01	0.9	0.9	1,568	.000	11
TEC05d	1,410	2.6	2.8	.02	.01	0.9	0.9	30,383	.000	21



Detailed Statistics^e Grand Valley State University

						Stan	dard			Effect
	N	Me	an	Standa	rd error ^f	devia	ation ^g	DF ^h	Sig. ⁱ	size ^d
Variable name	GVSU	GVSU	Learning with Tech	GVSU	Learning with Tech	GVSU	Learning with Tech		nparisons with rning with Tec	
TEC01a	1,377	3.2	3.3	.02	.00	0.8	0.8	37,700	.000	24
TEC01b	1,370	3.1	3.3	.02	.00	0.9	0.8	1,469	.000	25
TEC01c	1,378	3.4	3.5	.02	.00	0.7	0.7	1,477	.000	15
TEC01d	1,373	3.0	3.0	.03	.01	0.9	1.0	1,500	.677	01
TEC01e	1,370	2.8	2.4	.03	.01	1.0	1.1	1,493	.000	.37
TEC02	1,377	2.3	2.6	.03	.01	0.9	1.0	1,502	.000	29
TEC03a	1,371	1.6	2.1	.02	.01	0.9	1.1	1,533	.000	37
TEC03b	1,249	1.6	1.7	.02	.01	0.9	1.0	1,377	.000	15
TEC03c	1,362	1.6	1.6	.02	.00	0.8	0.9	1,490	.040	05
TEC03d	1,364	2.5	2.3	.03	.01	0.9	1.1	1,504	.000	.19
TEC03e	1,368	1.8	2.0	.03	.01	1.0	1.1	37,077	.000	17
TEC03f	1,373	2.1	1.9	.03	.01	1.1	1.1	37,152	.000	.12
TEC03g	1,368	2.2	2.4	.03	.01	1.1	1.2	1,477	.000	15
TEC04a	1,377	3.5	3.5	.02	.00	0.7	0.8	1,505	.021	.06
TEC04b	1,378	2.5	2.7	.03	.01	1.0	1.0	37,558	.000	17
TEC04c	1,372	3.1	3.1	.02	.00	0.8	0.9	1,491	.218	.03
TEC04d	1,374	1.9	2.1	.03	.01	1.0	1.1	1,508	.000	19
TEC04e	1,374	2.0	2.3	.03	.01	0.9	1.0	1,507	.000	31
TEC05a	1,378	2.5	2.7	.02	.00	0.9	0.9	1,504	.000	18
TEC05b	1,376	2.8	2.9	.02	.00	0.9	0.9	1,500	.000	13
TEC05c	1,378	2.6	2.8	.02	.01	0.9	1.0	37,509	.000	17
TEC05d	1,368	2.5	2.7	.02	.01	0.9	1.0	1,488	.000	22



NSSE 2013 Learning with Technology Endnotes Grand Valley State University

Endnotes

- a. Column percentages are weighted by gender and enrollment status (and institution size for comparison groups). Percentages may not sum to 100 due to rounding. Counts are unweighted; column percentages cannot be replicated from counts.
- b. All statistics are weighted by gender and enrollment status (and institution size for comparison groups). Unless otherwise noted, statistical comparisons are two-tailed independent t-tests. Items with categorical response sets are left blank.
- c. These are the values used to calculate means. For the majority of items, these values match the codes in the data file and codebook.
- d. Effect size for independent t-tests uses Cohen's d.
- e. Statistics are weighted by gender and enrollment status (and institution size for comparison groups). Categorical items are not listed.
- f. The 95% confidence interval for the population mean is equal to the sample mean plus or minus 1.96 times the standard error of the mean.
- g. A measure of the amount individual scores deviate from the mean of all the scores in the distribution.
- h. Degrees of freedom used to compute the t-tests. Values differ from Ns due to weighting and whether equal variances were assumed.
- i. Statistical comparisons are two-tailed independent t-tests. Statistical significance represents the probability that the difference between your students' mean and that of the comparison group is due to chance.