# **GE SLO V5 Life-Long Learning Assessment**

**NSSE 2013** 

Spring 2013 NSSE 2013 items were selected to assess Kean Students' Life-long Learning skills based on AAC&U rubric identified dimensions

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### GE SLO V5 Life-long Learning

#### **NSSE 2013**

Semester: Spring 2013

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#### Introduction

The purpose of the National Survey of Student Engagement (NSSE) is to collect annually the nature and quality of undergraduate experience of freshmen (FY) and seniors (SR) from participating institutions in the United States and Canada. In 2013, 563 institutions participated in the NSSE administration. Kean University has participated in the administration of NSSE in 2001, 2003, 2010 and 2013.

In 2013, Kean University provided NSSE with contact information (name and Kean University e-mail address) of first-year and senior-level students prior to the spring semester in which the survey was administered. The NSSE project team then emailed Kean students via the emails provided by Kean asking for their participation to complete the online survey. 275 freshmen and 335 seniors completed the survey. The 2013 overall response rate of Kean students is 19%. Kean FY response rate is 19% while the comparison groups' response rate is 16%-18%. SR response rate at Kean is 18% while Kean's competitors are 20%-24%.

The sample group is generally representative of Kean's 2013 FY and SR populations except that females are slightly overrepresented. The peer institutions used in the comparisons are listed in appendix A.

		First	-year					
		Selected				Selected	Competitive	Kean but
	Kean	Peers	Master's	Doctoral	Kean	Peers	Master's	Doctoral
Response rate	19%	16%	17%	18%	18%	20%	22%	24%
Sampling error <sup>b</sup>	+/- 5.3%	+/- 2.1%	+/- 0.9%	+/- 1.2%	+/- 4.8%	+/- 1.4%	+/- 0.7%	+/- 0.9%

 $a.\ Comparison\ group\ response\ rate\ and\ sampling\ error\ are\ computed\ at\ the\ student\ level\ (i.e.,\ they\ are\ not\ institution\ averages).$ 

(NSSE13 Administration Summary)

b. Also called "margin of error," sampling error is an estimate of the amount the true score on a given item could differ from the estimate based on a sample. For example, if the sampling error is +/- 5.0% and 40% of your students reply "Very often" to a particular item, then the true population value is most likely between 35% and 45%.

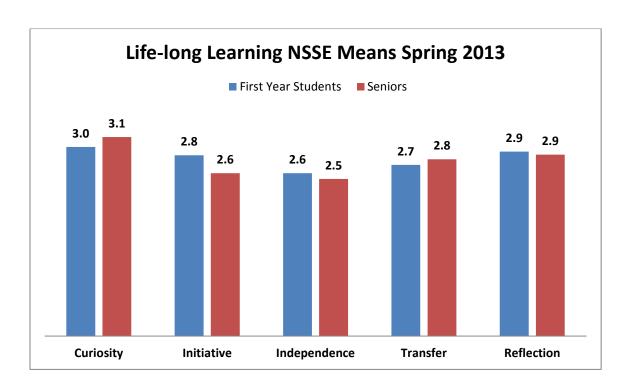
# Measure Life-long Learning Using NSSE Data and AAC&U Life-long Learning Rubric (attached in Appendix B)

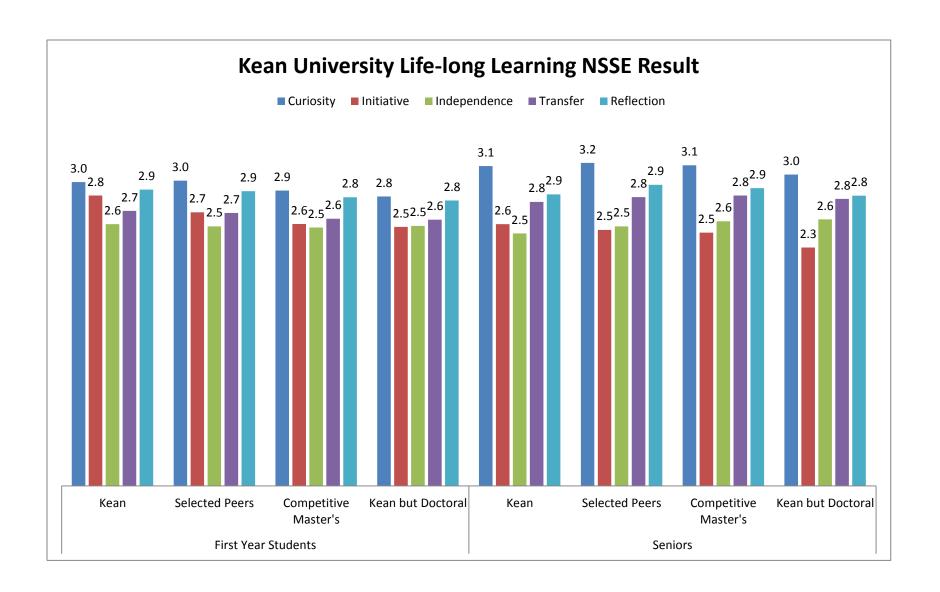
Twenty-two NSSE items were selected to measure the five elements as identified in AAC&U rubric: Curiosity, Initiative, Independence, Transfer and Reflection. This is an indirect measurement because NSSE rely on students' self-reported information.

Items selected for Life-long Learning assessment are listed in Appendix C

NSSE Means by Life-long Learning Elements

		First Y	ear Students					
	Kean	Selected Peers	Competitive Master's	Kean but Doctoral	Kean	Selected Peers	Competitive Master's	Kean but Doctoral
Curiosity	3.0	3.0	2.9	2.8	3.1	3.2	3.1	3.0
Initiative	2.8	2.7	2.6	2.5	2.6	2.5	2.5	2.3
Independence	2.6	2.5	2.5	2.5	2.5	2.5	2.6	2.6
Transfer	2.7	2.7	2.6	2.6	2.8	2.8	2.8	2.8
Reflection	2.9	2.9	2.8	2.8	2.9	2.9	2.9	2.8





#### **Analysis:**

Both Kean freshmen and seniors reported highest means on Curiosity (3.0 for FY and 3.1 for SR), followed by Reflection, Initiative, Transfer and Independence (the lowest, 2.6 for FY and 2.5 for SR).

For Curiosity, Kean students significantly more frequently "asked questions or contributed to course discussions in other ways" than "Competitive Master" group (P<.05 for FY) and "Kean but Doctoral" Group (P<.001 for both FY and SR).

For Reflection, Kean freshmen also significantly more frequently "examined the strengths and weaknesses of their own views on a topic or issue" than "Kean but Doctoral" competitors (P<.05). Additionally, Kean freshmen also reported "learned something that changed the way they understand an issue or concept" than peers in "Competitive Masters" group and "Kean but Doctoral" group. (P<.05) Seniors, on the other hand, are lower than their competitors, especially the "Selected Peers" group (P<.05), on how often they "examined the strengths and weaknesses of their own views on a topic or issue", and "learned something that changed the way they understand an issue or concept."

For Independence, Kean seniors are not as frequent as their peers in comparison groups in "reaching conclusions based on their own analysis of numerical information (numbers, graphs, statistics, etc.)." Seniors are significantly lower (P<.05) when compared with "Competitive Masters" group and "Kean but Doctoral" group. Kean freshmen, on the other hand, are slightly higher than their peers in comparison groups, but the difference is not statistically significant.

For Initiative, Kean students, both freshmen and seniors, reported more frequently "prepared two or more drafts of a paper or assignment before turning it" than all three comparison groups. The difference is statistically significant between Kean freshmen and the other three comparison groups (P<.01--P<.001), and between Kean seniors and "Kean but Doctoral" group (P<.001).

For Transfer, first-year students at Kean reported significantly more frequently "connected their learning to societal problems or issues" than students from the "Competitive Masters" group (P<.01) and "Kean but Doctoral" group (P<.001). However, seniors at Kean are less likely to report than their counterparts in peer institutions that they "applying facts, theories, or methods to practical problems or new situations." The difference between Kean seniors and "Selected Peers" group is statistically significant. (P<.05)

### **Discussion/Action/Closing the Loop:**

In general, Kean first-year students are on par with their peers in comparison groups, if not higher, on all five skills measured in NSSE: Curiosity, Reflection, Initiative, Transfer and Independence. Meanwhile seniors at Kean show both strengths and weaknesses. Compared with peer institutions, Kean students are significantly more often engaged in activities including "Asked questions or contributed to course discussions in other ways" (Curiosity) or "Prepared two or more drafts of a paper or assignment before turning it in" (Initiative). However, Kean seniors spend significantly less amount of time "reach[ing] conclusions based on their own analysis of numerical information"

(Independence). Additionally, seniors at Kean are less likely than their peers to report that they "Examined the strengths and weaknesses of their own views on a topic or issue" (Reflection), "Learned something that changed the way they understand an issue or concept" (Reflection), and "applying facts, theories, or methods to practical problems or new situations" (Transfer).

The issue at senior level might be due to various reasons. One possible explanation is that more than half (60%) of the seniors are transfer students who were not required to take GE courses that are mandatory for Kean freshmen and sophomores. Teachers need to provide instructions to senior students emphasizing on how to work independently by utilizing the resources they have. Seniors should also be encouraged to examine their own ideas and ways of understanding issues or topics from multiple angles. Further, senior-level students should be given more practice that requires them to apply what they learned in class (facts, theories, or methods) in new situations or problems in real-world.

#### **Recommendations:**

Issue: Kean seniors spend significantly less amount of time "reach[ing] conclusions based on their own analysis of numerical information"

- Partner with MATH 1000-level and GE 202x faculty to improve students' ability to reach conclusions based on their own analysis of numerical information (numbers, graphs, statistics, etc.).
- Please see the "GES3: Solve problems using quantitative reasoning (KU1, 4)" for specific actions that foster student acquisition of numerical analysis.

Issue: Students' ability to reflect on and adapt their own views.

 Collaborate with faculty teaching GE values-designated courses (i.e. GE 1000 and ID 1225) to increase opportunities for students to engage in self-reflection in where course content is appropriate for student self-reflection activities (e.g. GE 1000, ID 1225, etc.)

#### References

**NSSE13 Administration Summary Report** 

NSSE13 Frequencies and Statistical Comparisons (Kean)

#### Appendix A: Comparison Groups

Selected Peers: Public; Master's larger programs; enrolled 5,000-20,000; NJ, NY, CT, MA, PA and RI; Six are in suburb large, one in city medium and one in city large. (N=8)

Competitive Master's: Public; Master's larger programs; enrolled 5,000-20,000; competitive and nationwide. (N=33)

Kean but Doctoral: Public; Master's larger programs; enrolled 10,001-20,000; Doctoral and research universities; competitive and nationwide. (N=12)

#### Appendix B: AAC&U Life-Long Learning Rubric

Note: Selected NSSE items were only analyzed based on the comprehensive definition generated from level 3-4 of the five elements from the AAC&U Life-long learning Rubric

#### FOUNDATIONS AND SKILLS FOR LIFELONG LEARNING VALUE RUBRIC

for more information, please contact scales@aacu.org



#### Definition

Lifelong learning is "all purposeful learning activity, undertaken on an ongoing basis with the aim of improving knowledge, skills and competence". An endeavor of higher education is to prepare students to be this type of learner by developing typecific dispositions and skills (described in this rubric) while in school. (From The European Commission, 2000. Commission staff working paper: A memorandum on lifelong learning. Retrieved September 3, 2003, from wwwsee-educoopnet/education\_in/pdf/lifelong-oth-enl-t02.pdf.)

Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (cell one) level performance.

	and creative) way that knowledge and those skills to demonstrate comprehension and performance in novel situations.	Miles	tones	Benchmark
	4	3	2	1
Curiosity	awareness and/or little-known information indicating interes interest in	Explores a topic in depth, yielding insight and/or information indicating interest in the subject.	Explores a topic with some evidence of depth, providing occasional insight and/or information indicating mild interest in the subject.	Explores a topic at a surface level, providing little insight and/or information beyond the very basic facts indicating low interest in the subject.
Initiative	pursues opportunities to expand	Completes required work, identifies and pursues opportunities to expand knowledge, skills, and abilities.	Completes required work and identifies opportunities to expand knowledge, skills, and abilities.	Completes required work
Independence	and flourish outside dassroom requirements. Knowledge and/or	Beyond classroom requirements, pursues substantial, additional knowledge and/or actively pursues independent educational experiences.	Beyond classroom requirements, pursues additional knowledge and/or shows interest in pursuing independent educational experiences.	Begins to look beyond classroom requirements, showing interest in pursuing knowledge independently.
Transfer	karning and applies in an innovative (new and creative) way that knowledge and those skills to demonstrate comprehension and performance in novel	shows evidence of applying that knowledge and those skills to demonstrate comprehension and performance in novel	Makes references to previous learning and attempts to apply that knowledge and those skills to demonstrate comprehension and performance in novel situations.	Makes vague references to previous learning but does not apply knowledge and skills to demonstrate comprehension and performance in novel situations.
Reflection	Reviews prior learning (past experiences inside and outside of the classroom) in depth to reveal significantly changed perspectives about educational and life experiences, which provide foundation for expanded knowledge, growth, and maturity over time.	Reviews prior learning (past experiences inside and outside of the classroom) in depth, revealing fully clarified meanings or indicating broader perspectives about educational or life events.	Reviews prior learning (past experiences inside and outside of the classroom) with some depth, revealing slightly clarified meanings or indicating a somewhat broader perspectives about educational or life events.	Reviews prior learning (past experiences inside and outside of the classroom) at a surface level, without revealing clarified meaning or indicating a broader perspective about educational or life events.

### Appendix C NSSE Items selected for Life-long Learning Assessment



# NSSE 2013 Frequencies and Statistical Comparisons Kean University

	First-Year Stu	udents					Frequency Di	stributio	ns <sup>a</sup>								
								Competitive		Kean but				Competitive		Kean but	
					Kean	_	Selected Peers	Master's		Doctoral	Kean	Selected Peers		Master's		Docto	
	Item wording or description	Variable name °	Value s d	Response options	Count	%	Count %	Count	%	Count %	Mean	Mean	Effect size °	Mean	Effect size °	Mean	Effect size °
•	1. During the curren	nt school ye	ar, abo	ut how often hav	e you done	the	following?										
	a. Asked questions	askquest	1	Never	10	3		337	3	260 5							
Curiosi	or contributed to course		2	Sometimes	80	29		3,680	34	2,248 39							
	discussions in		3	Often	97	36		3,879	37	2,010 34	3.0	3.0	.02	2.8 *	.15	2.7 ***	.26
ty	other ways		4	Very often	86	32		2,658	26	1,296 22							
	h Drangrad two or	drafts		Total Never	273	100		10,554	100	5,814 100 953 17							
	<ul> <li>b. Prepared two or more drafts of a</li> </ul>	arans	2	Sometimes	80	30		3,559	33	1,945 34							
Initiati	paper or		3	Often	90	33		3,078	29	1,682 29	2.8	2.7 **	.17	2.6 ***	.28	2.5 ***	.31
ve	assignment before turning it in		4	Very often	81	29		2,174	21	1,201 21	2.0	2.1	.17	2.0	.20	2.5	.31
				Total	271	100		10,498	100	5,781 100							
	2 Duning the summer					41	fallowin a2									. – – –	
	<ol><li>During the current</li><li>Combined ideas</li></ol>	Rlintegrate	ar, abo	Never	e you done	8	109 7	695	7	372 7							
	from different		2	Sometimes	85	33		3,826	38	2,066 38							
Transf	courses when completing		3	Often	103	41	641 38	3,621	36	2,087 38	2.7	2.7	02	2.7	.05	2.7	.05
er	assignments		4	Very often	48	18	331 20	1,828	19	949 17							
				Total	255	100	1,661 100	9,970	100	5,474 100							
	b. Connected your	RIsocietal	1	Never	20	8	126 8	893	9	533 10							
Transf	learning to societal problems or issues		2	Sometimes	79	32	619 37	3,950	39	2,161 40							
er	problems or issues		3	Often	94	38	582 35	3,423	35	1,893 34	2.8	2.7	.10	2.6 **	.20	2.5 ***	.24
			4	Very often	57	22		1,576	16	823 15							
				Total	250	100		9,842	100	5,410 100							
	d. Examined the strengths and	Rlownview	1	Never	8	3	77 5	534	5	301 5							
Reflect	weaknesses of		2	Sometimes	78	31		3,364	33	1,846 34	• •						
ion	your own views on		3	Often	112	45		4,130	42	2,231 42	2.8	2.8	.05	2.8	.10	2.7 *	.13
1011	a topic or issue		4	Very often	54	21		1,814		1,005 19							
	f. Learned something	RInewview		Total Never	252 8	100		9,842	100	5,383 100 162 3							
	that changed the	Killewview	2	Sometimes	64	26		3,130	32	1,808 34							
Reflect	way you understand		3	Often	110	45	696 42	4,193	42	2,229 42	2.9	2.9	.09	2.8 *	.13	2.8 *	.15
ion	an issue or concept		4	Very often	65	26	386 24	2,121	22	1,171 22	2.7	2.5	.09	2.0	.13	2.0	.13
	,			Total	247	100		9,762	100	5,370 100							
	4. During the curren	at school ve	ar hov	v much has vour	coursework	em	nhasized the fo	llowing?									
	b. Applying facts,	HOapply	1	Very little	11	4	54 4	371	4	202 4							
	theories, or	,	2	Some	54	22		2,380	24	1,294 25							
Transf	methods to practical problems		3	Quite a bit	107	44	749 46	4,442	46	2,320 44	3.0	3.0	02	2.9	.04	2.9	.03
er	or new situations		4	Very much	70	29	468 29	2,503	26	1,490 27							
				Total	242	100	1,619 100	9,696	100	5,306 100							
	c. Analyzing an idea,	HOanalyze	1	Very little	10	4	56 4	405	4	231 4							
Curiosi	experience, or line of reasoning in		2	Some	57	24	380 23	2,463	25	1,375 26							
	depth by examining		3	Quite a bit	102	43	653 40	4,198	43	2,249 42	3.0	3.0	05	2.9	.05	2.9	.07
ty	its parts		4	Very much	74	30	518 33	2,587	27	1,434 27							
				Total	243	100		9,653	100	5,289 100		L					
	e. Forming a new idea or understanding	HOform	1	Very little	16	7	59 4	462	5	308 6							
Reflect	from various		2	Some	56	23	370 23	2,631	27	1,527 29	2.0						
ion	pieces of information		3 4	Quite a bit	101	43 28	708 44 465 29	4,183	43	2,157 41	2.9	3.0	08	2.9	.05	2.8	.11
	mormation		4	Very much Total	67 240	100		2,363 9,639	25 100	1,284 24 5,276 100							
									100	3,270 100		·					
	<ol><li>During the current</li><li>a. Reached</li></ol>	QRconclude		Never	e you done	the 14		1,472	14	721 13							
Indepe	conclusions based		2	Sometimes	81	33		3,528	35	1,970 36							
ndenc	on your own		3	Often	84	35		3,184	34	1,784 34	2.6	2.5	.02	2.5	.04	2.5	.02
	analysis of numerical		4	Very often	41	17		1,510		842 16				-		-	
е	information		_	Total	241	100	1,616 100	9,694	100	5,317 100							
	b. Used numerical	QRproblem	1	Never	53	21	355 22	2,281	23	1,217 22							
	information to examine a real-		2	Sometimes	87	36		3,840	39	2,140 40							
Transf	world problem or		3	Often	73	31	430 27	2,479	26	1,396 27	2.3	2.3	.03	2.3	.06	2.3	.07
	issue		4	Very often	28	12		1,065	12	551 11							
er					0.44	400											
er	(unemployment, climate change,			Total	241	100	1,613 100	9,665	100	5,304 100							



# NSSE 2013 Frequencies and Statistical Comparisons Kean University

	Seniors					-	Frequency [	istributi	ons		Statistical Comparisons <sup>b</sup>							
					Competitive Kean but						ıt		Competitive				Kean	but
				Kean		Selected Peers	Master's		Doctoral		Kean	Selected	Peers	Maste	er's	Docto	oral	
	Item wording or description	Variable name °	Value s d	Response options	Count	%	Count %	Count	%	Count	%	Mean	Mean	Effect size °	Mean	Effect size °	Mean	Effec size
-	1. During the curren	t school yea	ar, abo	ut how often hav	e you done	the	following?											
	a. Asked questions	askquest	1	Never	7	2	79 2	277	2	255	3							
ıriosi	or contributed to course		2	Sometimes	66	19	783 2	1 3,322	21	2,455	26							
ty	discussions in		3	Often	109	33	1,254 33	5,055	32	3,085	33	3.2	3.2	.05	3.2	.05	3.1 ***	.20
•	other ways		4	Very often	152	46	1,697 44	7,119	45	3,547	38							
				Total	334	100	3,813 10	15,773	100	9,342	100							
	b. Prepared two or	drafts	1	Never	48	15	746 1	3,041	19	2,207	24							
itiati	more drafts of a paper or		2	Sometimes	117	35	1,277 33	5,512	35	3,284	35							
	assignment before		3	Often	95	29	991 27	4,038	26	2,237	24	2.6	2.5	.05	2.5	.08	2.3 ***	.22
ve	turning it in		4	Very often	72	21	776 2	1 3,11	20	1,584	17							
				Total	332	100	3,790 10	15,702	100	9,312	100							
	2. During the curren	t school vea	ar. abo	ut how often hav	e vou done	the	following?											
	a. Combined ideas	Rlintegrate	1	Never	8	2	137 4	462	3	263	3							
	from different		2	Sometimes	86	29	942 27	3,637	24	2,324	26							
ransf	courses when completing		3	Often	127	43	1,445 39		39	3,492	39	2.9	2.9	02	3.0	10	3.0	08
er	assignments		4	Very often	80	26	1,118 30		33	2,896	32		0		0		0	.50
	-			Total	301	100				8,975	100							
	b. Connected your	RIsocietal		Never	23	7	183 6		7	623	7							
ransf	learning to societal		2	Sometimes	93	32	1,102 30		30	2,924	33							
	problems or issues		3	Often	111		1,349 37		36	3,143	35	2.8	2.9	10	2.8	08	2.8	.0
er			4	Very often	70	23	980 27		27	2,200	24	2.0	2.3	10	2.0	00	2.0	.0
				Total	297	100			100	8,890	100							
	d. Examined the	Rlownview	, -	Never	14	4	168 5		5	498	6							
	strengths and	RIOWINICW	2	Sometimes	111	36	1,091 30		30	2,854	32							
eflect	weaknesses of		3	Often	119	41	1,460 40		40	3,551	40	2.7	00.	40	0.0	44	0.0	0.4
ion	your own views on a topic or issue		4		56	19			25	1,970	22	2.1	2.8 *	12	2.8	11	2.8	04
	a topic or issue		4	Very often Total	300	100			100	8,873	100							
	f. Learned something	RInewview		Never	6	2	72 2		3	227	3							
	that changed the	Killewview				33			29		32							
eflect	way you understand		2	Sometimes	100		1,010 28			2,792		2.0						
ion	an issue or concept		4	Often	127 62	45 21	1,519 43 987 27		40 27	3,585 2,215	40 25	2.8	3.0 *	14	2.9	11	2.9	03
	сопсерт		4	Very often Total	295	100			100	8,819								
-									100	0,019	100							
	4. During the curren		ar, how															
	<ul> <li>Applying facts, theories, or</li> </ul>	HOapply	1	Very little	6	2			3	249	3							
ransf	methods to		2	Some	63	22	589 1		18	1,634	19							
er	practical problems		3	Quite a bit	123	44	1,484 42		42	3,749	43	3.1	3.2 *	12	3.1	08	3.1	05
eı	or new situations		4	Very much	98	32	1,389 39		37	3,135	35							
				Total	290	100			100	8,767	100							
	c. Analyzing an idea,	HOanalyze	1	Very little	12	4	113 3		4	336	4							
ıriosi	experience, or line of reasoning in		2	Some	62	21	643 1		20	1,893	22							
	depth by examining		3	Quite a bit	122	43	1,436 4		40	3,572	41	3.0	3.1 *	13	3.1	07	3.0	01
ty	its parts		4	Very much	92	31	1,338 38		36	2,936	33							
				Total	288	100				8,737	100							
	e. Forming a new idea	HOform	1	Very little	15	5	134 4	666	5	512	6							
eflect	or understanding from various		2	Some	64	22	793 22	3,504	24	2,326	27							
	pieces of		3	Quite a bit	125	44	1,441 4	6,048	41	3,531	40	3.0	3.0	08	3.0	.00	2.9	.11
ion	information		4	Very much	83	29	1,164 33	4,474	30	2,369	26							
				Total		100	3,532 10	14,692	100	8,738	100							
	6. During the curren	t school yea	ar, abo	ut how often hav	e you done	the	following?											
	a. Reached	QRconclude	1	Never	51	16		2,188	14	1,217	13							
depe	conclusions based		2	Sometimes	104	36	1,204 33	5,037	33	2,983	33							
denc	on your own analysis of		3	Often	89	32	1,063 30	4,630	32	2,806	32	2.5	2.5	07	2.6 *	12	2.6 *	14
	numerical		4	Very often	47	16	675 20	2,933	21	1,771	21							
e	information			Total	291	100		14,788	100	8,777	100							
	b. Used numerical	QRproblem	1	Never	64	20	814 22	3,059	20	1,820	20							
			2	Sometimes	112	38	1,317 36	5,560	37	3,339	38							
	information to		2	Sometimes														
	examine a real-		3	Often	74	27	928 27	3,849	27	2,273	26	2.4	2.3	.02	2.4	03	2.4	01
ransf						27 15				2,273 1,334	26 16	2.4	2.3	.02	2.4	03	2.4	01
	examine a real- world problem or		3	Often	74		498 1	5 2,310	16			2.4	2.3	.02	2.4	03	2.4	01

(NSSE13 Frequencies and Statistical Comparisons)