



South African Survey of Student Engagement

Interpreting your SASSE report

Melody Mentz
User's Workshop
March 2010

Studente Ontwikkeling en Sukses • Student Development and Success

UNIVERSITEIT VAN DIE VRYSTAAT • UNIVERSITY OF THE FREE STATE • YUNIVESITHI YA FREISTATA

Tel (051) 401 3000 • E-mail: info@ufs.ac.za • www.ufs.ac.za





What we will cover

- Purpose of SASSE data
- Weighting Data
- Respondent Characteristics
- Frequency Distribution
- Mean Comparisons
- Benchmark Comparisons
- Benchmark Item Frequency



Purpose of SASSE data



- Provide reliable indicators of the frequency with which students engage in educationally effective activities
- Problem identification in areas that institutions can do something about
- Paint a picture of the institution
- Evidence of outcomes and processes
- Refocus the conversation on quality
- Inform decision making
- Mobilise action



Weighting Data



- Why weight data?
 - Make the sample representative of the population
- How was SASSE data weighted?
 - Applied to institutional reports to adjust respondents within institutions by campus enrolment
 - Between institutions to reflect the institutions' relative population size.





Where to start?

Approaches to your SASSE data

1. What do you most want to know?

- Burning questions about your students
- Hot topics on your campus/strategic plan
- What does SASSE say about these topics

2. Scan the results

- Are there trends that you did not expect?
- What is your institution doing well?
- Where is your institution lacking?



Making sense of your data



Three approaches

- **Normative** – compare your students with students at other institutions
- **Criterion** – compare your students to a predetermined value or level
- **Longitudinal** – compare your students' responses over time





South African Survey of Student Engagement

Your SASSE report

Studente Ontwikkeling en Sukses • Student Development and Success

UNIVERSITEIT VAN DIE VRYSTAAT • UNIVERSITY OF THE FREE STATE • YUNIVESITHI YA FREISTATA

Tel (051) 401 3000 • E-mail: info@ufs.ac.za • www.ufs.ac.za



Respondent Characteristics



This section of the report provides a snapshot of how well your sample of respondents represents your university's actual student population, and compares your sample with the sample of students who responded nationally and within your institutional type.

This data is not weighted.



Interpreting the Respondent Characteristics

Groups

The Respondent Characteristics report details the demographic profile of your institution's sample, the overall sample of students who participated nationally at all institutions, and the sample of students within your institutional type who participated. The report also allows you to compare the sample of respondents at your institution with the profile of all registered students at your institution.

Your Institution

The first column represents the responses of the *sample of students* at your institution who have participated in the study.

Institutional Profile

The second column reflects the profile of students who are registered at your institution. This information has been provided by your institution.

SASSE Overall

The third column represents the responses of the *sample of students* nationally who have participated in the study.

SASSE Institutional Type

The last column represents the responses of the *sample of students* within your particular institutional type that have participated in the study (i.e. University, Comprehensive University or University of Technology).

Variable

Demographic items from the SASSE appear in the first column.

Count (N)

The N column represents the actual number of students who responded to the particular option in each question. *Counts are unweighted.*

Percentage %

This column represents the *unweighted* percentage of students responding to the particular options in each question.

	Your Institution		Institutional Profile		SASSE Overall		SASSE Institutional Type	
	N	%	N	%	N	%	N	%
Gender								
Male	1765	55.16	15290	53.00	7811	51.51	2800	54.21
Female	1435	44.84	13567	47.00	7354	48.49	2365	45.79
Race								
Black African	1675	52.34	14398	49.89	6987	46.07	2500	48.40
Coloured	807	25.22	9412	32.62	2265	14.94	900	17.42
Indian/Asian	50	1.56	355	1.23	278	1.83	99	1.92
White	550	17.19	4673	16.19	5265	34.72	1543	29.87
Other	60	1.88	19	0.07	300	1.98	58	1.12
Prefer not to answer	58	1.81	-	-	70	0.46	65	1.26

Take a look at your Respondent Characteristics



- Identify on which variables your students are well represented
- Identify on which variables your students are not well represented
- How could your sampling have influenced this?



Frequency Distribution



- Intra-institutional data
 - No comparisons are made with other institutions
- Unweighted counts for each item
- Weighted percentages
- All survey items are reported
 - First-year and senior student split



Interpreting the Frequency Distribution



Sample

The Frequency Distribution report is based on the responses of students at your institution only. The frequency (count and percentage) is reflected for the overall sample, the first-year sample and the sample of senior students.

Variable

The items from the SASSE-survey appear in the left column in the same order and wording as they appear on the survey instrument.

Variable Name

The name of each variable appears in the third column for easy reference to your data file.

Benchmark

Items that make up the five "Benchmarks of Effective Educational Practice" are flagged by the following codes:

AC	Level of Academic Challenge
ACL	Active and Collaborative Learning
SSI	Student-Staff Interaction
EEE	Enriching Educational Experiences
SCE	Supportive Campus Environment

		Variable Name	Response Options	Overall Sample		First-Year Students		Senior Students	
				Count	%	Count	%	Count	%
4a	Asked questions in class or contributed to class discussions?	clquest (ACL)	Never	6	8.45%	1	5.00%	5	10.42%
			Sometimes	41	57.75%	11	55.00%	28	58.33%
			Often	17	23.94%	5	25.00%	11	22.92%
			Very Often	7	9.86%	3	15.00%	4	8.33%
			Total	71	100.00%	20	100.00%	48	100.00%
4b	Made a class presentation?	clpresen (ACL)	Never	35	49.30%	5	25.00%	30	62.50%
			Sometimes	21	29.58%	7	35.00%	12	25.00%
			Often	10	14.08%	6	30.00%	4	8.33%
			Very Often	5	7.04%	2	10.00%	2	4.17%
			Total	71	100.00%	20	100.00%	48	100.00%

Response Options

Response options appear in the fourth column just as they appear on the instrument.

Count

The count column represents the actual number of students who responded to the particular option in each question. *Counts are unweighted.*

Weighting

Weights adjusting for campus enrolment are applied to the percentage column (%) of this report.

Weighted results present a more accurate representation of your institutions students.

Only the column percents are weighted. The counts are the actual number of respondents.

Because the counts are unweighted and the column percentages are weighted, you will not be able to calculate the column percent directly from the count numbers.

Percentage %

This column represents the *weighted* percentage of students responding to the particular options in each question.



What does this data tell us?



- Provides a focused look at your students on the item level
 - Examine the never responses.
 - What % are very high?
 - Do these make sense?
 - Which should you focus on eliminating?
 - Examine the “positive percents”
 - What pleasant surprises are there?



Take a look at your Frequency Distributions



- Identify an item that you are personally interested in
- Identify an item that is related to a hot topic on your campus
- Identify a high never response
- Identify a high positive response



Mean Comparisons



- Intra-institutional comparison
- Weighted means
- Statistical tests and effect sizes for all items
- Identify key differences in the behaviour of first-years and seniors





Interpreting the Means Comparison

Sample

The Means Comparison report is based on the responses of students at your institution only. The mean for each item is reflected for the overall sample, the first-year sample and the sample of senior students.

Statistical Significance

Items with mean differences that are larger than would be expected by chance alone are noted with one, two, or three asterisks, referring to three significance levels (* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$).

The smaller the significance level, the smaller the likelihood that the difference is due to chance.

Statistical significance does not guarantee the result is substantive or important. Large sample sizes tend to generate more statistically significant results even though the magnitude of mean differences may be inconsequential. **It is recommended to consult effect sizes to judge the practical meaning of the results.**

Variable

The items from the SASSE survey appear in the left column in the same order and wording as they appear on the instrument.

Variable Name

The name of each variable appears in the third column for easy reference to your data file.

	Variable Name	Benchmark	Sample Mean	Sample N	Group	N	Mean ^a	Significance ^b	Effect Size ^c
4	Academic and Intellectual Experiences <i>Think about the current academic year. How often have you done each of the following?</i> <i>1=never, 2=sometimes, 3=often, 4=very often</i>								
a	Asked questions in class or contributed to class discussions?	clquest	2.35	71	FY	20	2.50		
		ACL			SNR	48	2.29		0.27
b	Made a class presentation?	clpresen	1.79	71	FY	20	2.25	**	
					SNR	48	1.54	**	0.86
c	Prepared two or more drafts of a paper or assignment before handing it in?	rewropap	2.54	71	FY	20	2.95	**	
					SNR	48	2.27	**	0.74

Benchmark

Items that make up the five "Benchmarks of Effective Educational Practice" are flagged by the following codes:

- AC** Level of Academic Challenge
- ACL** Active and Collaborative Learning
- SSI** Student-Staff Interaction
- EEE** Enriching Educational Experiences
- SCE** Supportive Campus Environment

Mean

The mean is the *weighted* arithmetic average of student responses on a particular item.

Means are provided for the overall sample, first-years and seniors.

Effect Size

Effect size indicates the "practical significance" of the mean difference. It is calculated by dividing the mean difference by the standard deviation of the groups being compared.

In practice, an effect size of 0.2 is often considered small, 0.5 moderate, and 0.8 large. A positive sign indicates your first years' mean was greater and a negative sign indicates your senior students' mean was greater for a particular item.

What is a significance test?



- t-test for independent groups
 - Compares the mean for one group with the mean for another
- Mean differences that are larger than would be expected by chance alone are noted with one, two, or three asterisks
 - Known as the significance levels
 - $*p < 0.05$, $**p < 0.01$, $***p < 0.001$
- The smaller the significance level, the smaller the likelihood that the difference is due to chance.
- Effect of large sample sizes



What are effect sizes?

- Significant difference vs. Practical significance
 - “Statestese” – dividing the difference between the means by their pooled SD
- Cohen’s d
 - Small: $d=0.2$
 - Medium: $d=0.5$
 - Large: $d=0.8$
- What does the sign mean
 - Negative (your mean is lower)
 - Positive (your mean is higher)



Take a look at your Mean Comparisons



- Identify items that are highly significant
 - What does this tell you?
 - Is this expected?
 - Is this positive or negative?
- Identify an item with a large effect size
 - What does this tell you?
 - Is this expected?
 - Is this positive or negative?



Benchmark Comparisons



- Inter-institutional comparison
- Results for the five benchmarks
- Compare your institution to the rest of the SASSE 2009 sample, as well as students within institutional type (where applicable)
- Included in the results are weighted means, statistical tests and effect sizes
- A graphical representation of the results is given





Interpreting the Benchmark Comparison

Statistical Significance

Benchmarks with mean differences that are larger than would be expected by chance alone are noted with one, two, or three asterisks, referring to three significance levels (* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$).

The smaller the significance level, the smaller the likelihood that the difference is due to chance.

Statistical significance does not guarantee the result is substantive or important. Large sample sizes tend to generate more statistically significant results even though the magnitude of mean differences may be inconsequential. **It is recommended to consult effect sizes to judge the practical meaning of the results.**

Level of Academic Challenge Benchmark Comparison

Mean

The mean is the *weighted* arithmetic average of student responses for a particular benchmark.

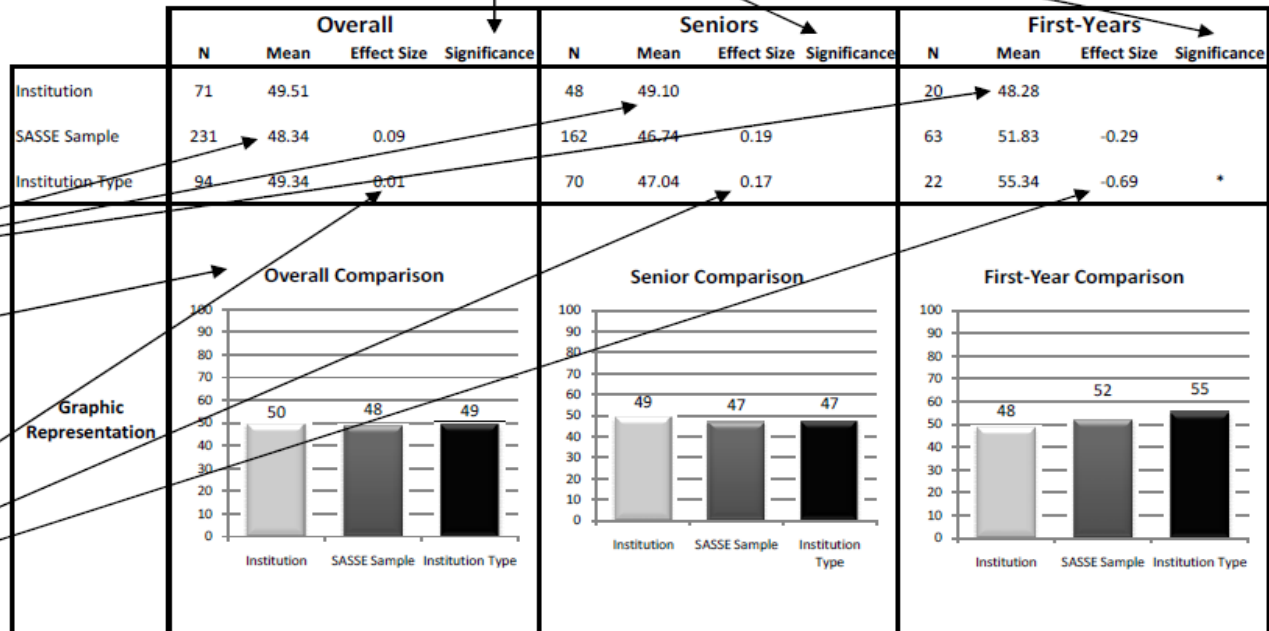
Means are provided for the overall sample, first-years and seniors for your institution, the 2009 sample and your institutional type.

Bar Charts

A visual display of the overall, first-year and senior means for your institution, the overall 2009 sample and your institutional type.

Effect Size

Effect size indicates the "practical significance" of the mean difference between your group and the comparison group (i.e. either the SASSE sample or your institutional type). It is calculated by dividing the mean difference by the standard deviation of the group which is being compared.



In practice, an effect size of 0.2 is often considered small, 0.5 moderate, and 0.8 large. A positive sign indicates that your institution's mean was greater, thus showing an affirmative result for the institution. A negative sign indicates your institution lags behind the comparison group.

Take a look at your Benchmark Comparison



- Identify the significant differences
 - Overall comparison
 - Typology comparison (where applicable)
- Identify the large effect sizes
 - Is this positive or negative?



Benchmark Item Frequency



- Intra-institutional results
- Grouped results for individual items on the five benchmarks
- Which of the benchmark items students are participating in most frequently
- Helps to identify the “positive percents”
- Presented for overall sample, first-year students and senior students



Interpreting the Benchmark Item Frequency



The Benchmark Item Frequency Report summarises how many students at your institution report frequently engaging in each of the benchmark activities. The summary is provided for the overall sample, for first-year students and for senior students. This summary report provides you with a quick and easy reference tool enabling you to get an overall impression of the trends in key areas of interest.

The Benchmark Item Frequency Report reports the grouped item results reflecting the number of students who report frequently participating in a particular activity. Each item is numerically cross-referenced to the interpretation guide that indicates how responses for the particular item have been grouped.

Example: Item 4r: *Worked harder than you thought you could to meet a lecturer's standards or expectations¹* is cross-referenced by the number 1. Using the interpretation guide, we can see that students who responded Often or Very Often were grouped together. We can conclude then that 46% of the overall institutional sample frequently worked harder than they thought they could, half of the first years indicated they frequently did so and 40% of the senior students did.

Each of the benchmark items is represented individually to provide an indication of which benchmark activities are participated in most frequently at your institution. The information is provided for the overall sample at your institution, for the first-year students and for the senior students.

Students indicating:

1 Often or Very Often 2 At least 5 on a 7-point scale 3 Very much or Quite a Bit 4 At least 5 5 At least 6 hours per week 6 Done

		Overall Count	Overall %	First-year Count	First-year %	Senior Count	Senior %
	Level of Academic Challenge						
14a.	Campus Environment Emphasises: Spending significant amounts of time studying and on academic work ³	62	89%	20	100%	40	83%
4r.	Worked harder than you thought you could to meet a lecturer's standards or expectations? ¹	32	46%	10	50%	19	40%
5b.	Coursework Emphasises: Analysing the basic elements of an idea, experience or theory, for example by examining a particular case or situation in depth and considering its components ³	51	72%	14	70%	34	71%

Benchmark

Items are grouped together according to the five benchmarks. The number of the item as it appears on the survey is indicated to allow cross-referencing with the frequency and means reports, and for data analysis based on the original data file.

Count

The count column represents the actual number of students who responded to the particular option in each question. Counts are unweighted

Count %

This column represents the weighted percentage of students responding to the particular options in each question.

Take a look at your Benchmark Item Frequencies



- **Active and Collaborative Learning**
 - 4a: Asked questions in class or contributed to discussions
 - What % said “Often or Very often”?
- **Supportive Campus Environment**
 - 11a: Quality of relationships with other students
 - What % said at least 5 on a 7-point scale
- **Level of Academic Challenge**
 - 5e: Coursework emphasises applying theories or concepts
 - What % said “Very much or Quite a Bit”



Take a look at your Benchmark Item Frequencies



- **Level of Academic Challenge**
 - 6c: Number of written pages/assignments 20+ pages
 - What % said “At least 5”?
- **Level of Academic Challenge**
 - 12a: Preparing for class
 - What % said “At least 6 hours per week?”
- **Enriching Educational Experiences**
 - 10b: Participated in community service or volunteer work?
 - What % said “Done”?





Thank you



Studente Ontwikkeling en Sukses • Student Development and Success

UNIVERSITEIT VAN DIE VRYSTAAT • UNIVERSITY OF THE FREE STATE • YUNIVESITHI YA FREISTATA

Tel (051) 401 3000 • E-mail: info@ufs.ac.za • www.ufs.ac.za