



# National Survey of Student Engagement 2005: Benchmarks for Texas A&M and Other Peer Institutions

Mark Troy, Janie Yu and Andrew J. Slaughter  
*Measurement and Research Services*



# Overview

- Introduction: National Survey of Student Engagement (NSSE)
- Purpose of talk and variables of interest
- Audience participation: Family Feud Game
- Research Questions
- Results and Discussion
- Future research directions



# What is NSSE? (Nessie)



National Survey of Student Engagement --

<http://www.nsse.iub.edu>

- Evaluates the extent to which first-year and senior students engage in educational practices associated with high levels of learning and development
- Supported by grants from Lumina Foundation for Education and the Center of Inquiry in the Liberal Arts at Wabash College
- Co-sponsored by The Carnegie Foundation for the Advancement of Teaching and the Pew Forum on Undergraduate Learning

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# NSSE Colleges

- In the first 8 years, more than 1100 colleges and universities have participated in NSSE
  - 610 colleges and universities participated in the [spring 2007](#) administration.
  - 557 colleges and universities participated in the [spring 2006](#) administration.
  - 529 colleges and universities participated in the [spring 2005](#) administration.
  - 473 colleges and universities participated in the [spring 2004](#) administration.
  - 437 colleges and universities participated in the [spring 2003](#) administration.
  - 367 colleges and universities participated in the [spring 2002](#) administration.
  - 321 colleges and universities participated in the [spring 2001](#) administration.
  - 276 colleges and universities participated in the [spring 2000](#) administration.



# NSSE at Texas A&M

- Sample selected by NSSE from populations supplied by TAMU
  - Spring 2001 (FY 230 **55%**, Sr 189 **45%**)
  - Spring 2002 (FY 323 55%, Sr 261 45%)
  - Spring 2003 (FY 255 **53%**, 215 **46%**)
  - Spring 2005 (FY 1,175 **31%**, Sr 1,244 **32%**)
  - Spring 2007 (FY 1,230 **25%** Sr 1,428 **29%**)



# NSSE Comparison Groups

- Texas A&M University System Institutions
- Carnegie Peers -- Doctoral Extensive Universities
- AAUDE -- Association of American Universities Data Exchange



## What Do We Know about College Student Engagement?

**Community Service or volunteer work.**

**TAMU First-Year**

More than **58%**

**Doc-ext First-Year**

More than **39%**

**TAMU Senior**

More than **79%**

**Doc-ext Senior**

More than **62%**



# The Association of American Universities Data Exchange (AAUDE)

## ○ Some AAUDE Institutions:

Arizona • Colorado • Florida • Illinois • Indiana •  
Iowa • Iowa St • Kansas • Maryland • Michigan •  
Michigan St • Missouri • N Carolina • Nebraska •  
Ohio St • Oregon • Penn St • Pittsburgh • Purdue  
• SUNY-Buffalo • SUNY-Stony Brook • Texas •  
Texas A&M • Virginia • Washington • Wisconsin.



# NSSE Benchmarks

- Level of Academic Challenge
- Active and Collaborative Learning
- Student-Faculty Interaction
- Enriching Educational Experiences
- Supportive Campus Environment



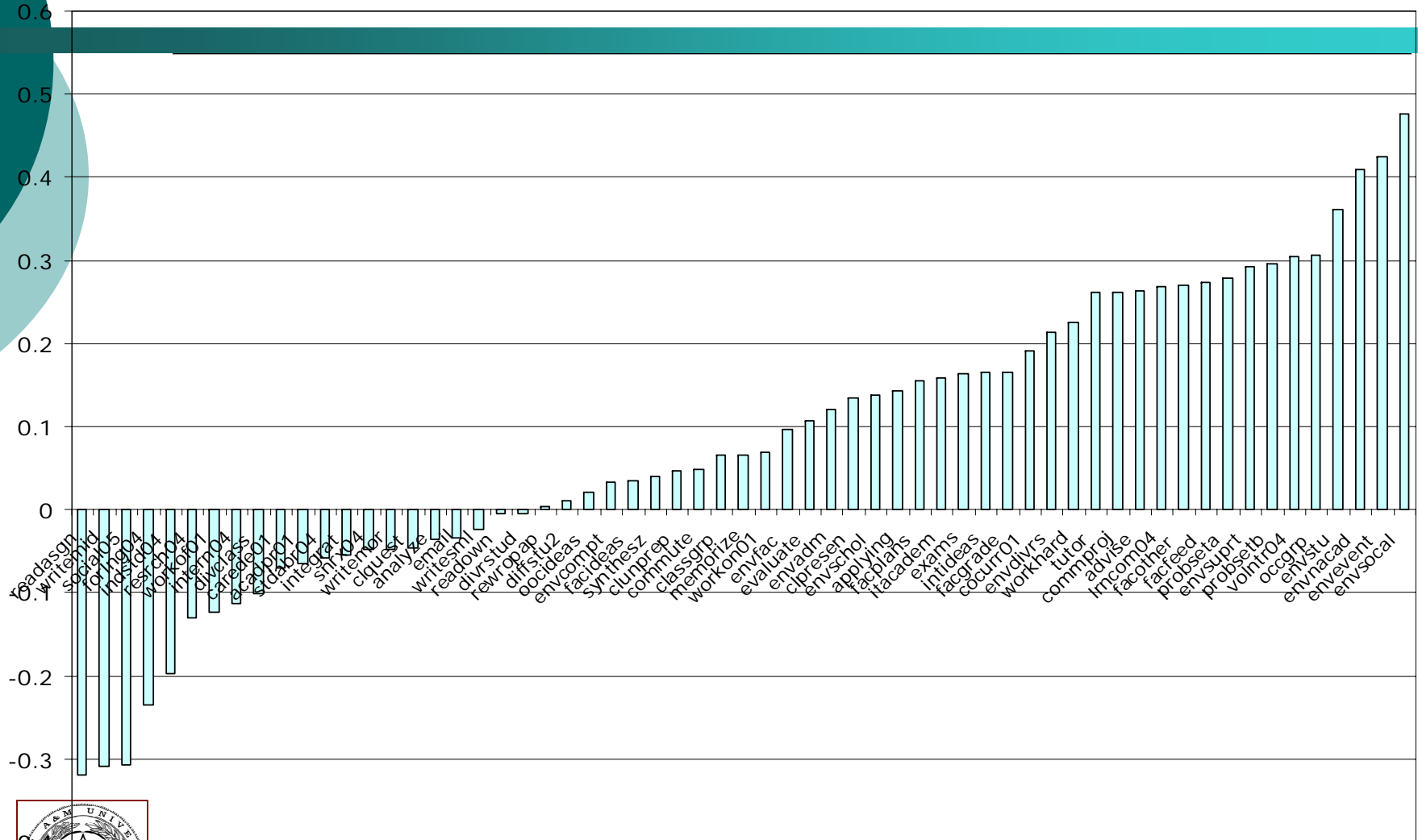
# Benchmark Scores

- **Benchmark score calculation:**
  - Benchmark mean calculated across all institutions for the years 2000-2004
  - Benchmark mean subtracted from TAMU 2005 mean
  - Difference divided by standard deviation of the benchmark mean
  - Also known as an effect size (ES)
    - .2 = small ES
    - .5 = medium ES
    - .8 = large ES





## TAMU 2005-AAUDE Differences, Seniors



# Family Feud: MARS Style



- **Purpose:** To have fun!
- **Select Players**
- **Rules of Play**





# Family Feud: MARS Style

- **Picking Players:** Form two teams of 5 players (per team). Are there any volunteers?
- If there are more than 10 volunteers, each must pick a number from 1 – 50. The 10 players whose number is closest to the host's number will play.





# Family Feud: MARS Style

- **Rules of Play:** Each team will be given a list of 10 – 14 options from which to choose 5 answers to the question posed by the host. The teams will receive 2 minutes to discuss/select their top 5 answers. Once time is called, one member from each team will report the team's answers. In the event of a tie – the teams must answer a bonus question or play



# Q#1 – Benchmark Variables

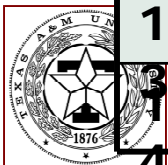


- Let's look at A&M versus other universities who participated in the NSSE 2005 survey. Freshmen from A&M scored .3 standard deviations BELOW the benchmark mean on 12 variables. **On which of the 5 variables did freshmen from A&M score the furthest below the benchmark mean?**
- (TIP: 2 of the variables are above the benchmark mean – you will lose points if you select them.)



## Q# 1 – Possible Answers

	NSSE Code	Possible Answers
1	envsocal	Received support needed to thrive socially
2	readasg	Num of assigned course readings
3	rewropa	Prepared 2 or more drafts of assignments/papers
4	Intern04	Practicum, internship, field exp., etc.
5	writesml	Num of written assignments fewer than 5 pages
6	envnaca	Received support on non-academic
7	clpresen	Made a class presentation
8	writmid	Num of written assignments btwn 5-19
9	clquest	Asked questions in class or participated in class
1	stdabr0	Study abroad
1	social05	Relaxing and socializing (e.g. watch TV, party)
1	resrch0	Work on research w/ faculty outside of
1	snrx04	Culminating senior exp. (e.g., capstone course)
3	forlng04	Foreign language coursework



3  
1  
4

## Q# 1 – Possible Answers

	NSSE Code	Possible Answers	FY Score	POINT
1	snrx04	Culminating senior exp. (e.g., capstone course)	-.69	40
2	writmid	Num of written assignments btwn 5-6 of course	-.68	25
3	resrch0	Work on research w/ faculty outside of course	-.57	20
4	intern0	Practicum, internship, field exp., etc.	-.53	10
5	writes	Num of written assignments fewer than 5 pages	-.46	5
6	forlng0	Foreign language coursework	-.44	0
7	clprese	Made a class presentation	-.43	0
8	readasg	Num of assigned course readings	-.42	0
9	clquest	Asked questions in class or participated in class	-.42	0
1	stdabr0	Study abroad	-.37	0
1	social0	Relaxing and socializing (e.g. watch TV, party)	-.36	0
1	rewrop	Prepared 2 or more drafts of papers	-.32	0
1	envsoc	Received support needed to thrive socially	.35	0
3	ethnac	Received support on non-academic duties	.36	0



## Q#3 – Benchmark Variables



**BONUS QUESTIONS:** (1 point per question):

- (a) Which AAUDE University scores highest on NSSE questions related to research?
- (b) Which AAUDE University scores lowest on NSSE questions related to research?





## Q#3 – Benchmark Variables

**BONUS QUESTION:** 1 point per question:

(a) Which AAUDE University scores highest on NSSE questions related to research?

**ANSWER:** Michigan

(b) Which AAUDE University scores lowest on NSSE questions related to research?

**ANSWER:** Texas



## Q #4 – Academically Challenging Tasks



- This item assesses the degree to which **SENIORS** at A&M study and spend time on academic work. The emphasis is on preparing for class by studying, reading, writing, doing homework or lab work, analyzing data, and other academic activities.

On which academic tasks did **SENIORS** report to expending the most effort?



## Q4 - Possible Answers

	NSSE Code	Tasks
1	Workhard	Exerts effort to meet faculty expectations
2	acadpr0	Do homework for 20 hours
3	acadpr0	Do homework for 11 hour (per week)
4	1 integrat	Integrate ideas from multiple
5	gnanaly	Analyze information
6	applying	Apply theory
7	synthes	Synthesize information
8	7 evaluate	Make judgments
9	rewropa	Prepare at least 2 drafts of a paper
1	0 writemi	Write at least one 5-19 page
1	writmor	Write at least one 20 page
1	readasn	report Read btwn 5 – 20 assigned materials
2	g	



## Q4 - Possible Answers

	NSSE Code	Tasks	Sr. %	POINT
1	Workhard	Exerts effort to meet faculty expectations	50%	0
2	acadpr0	Do homework for 20 hours	20%	0
3	acadpr0	Do homework for 11 hour (per	50%	0
4	1 integrat	Integrate ideas from multiple	79%	20
5	gnanaly	Analyze information	82%	40
6	applying	Apply theory	82%	25
7	synthes	Synthesize information	71%	5
8	evaluate	Make judgments	67%	0
9	rewropa	Prepare at least 2 drafts of a	75%	10
1	1 writemi	paper Write at least one 5-19 page	50%	0
1	writmor	Write at least one 20 page	50%	0
1	1 readasn	report Read btwn 5 – 20 assigned	50%	0
2	g	materials		

## Q #5 – Collaborative Learning/Research Experiences



- This item assesses the degree to which **SENIORS** at A&M interact with other students and faculty to do research or enrich their learning experience.

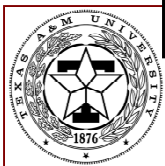
Which collaborative learning and research activities do **SENIORS** experience?



## Q#5 – Possible Answers

	NSSE	Variable
1	clquest	Discuss ideas in class
2	classgrp	Work w/ students on projects
3	occgrp	Work w/ students on projects
4	clpresen	Make class presentations <del>outside class</del>
5	resrch0	Does research with faculty
6	4 facother	Work w/ faculty on projects
7	facgrad e	Receive feedback on academic performance from instructor
8	facideas	Talk to instructors about class
9	4 Irncom0	Have opportunity to take honors courses and other distinctive programs
1	indstd0	Have conducted independent study

0 4



## Q#5 – Possible Answers

	NSSE Code	Variable	S %.	POINTS
1	clquest	Discuss ideas in class	58%	10
2	classgr	Work w/ students on projects	41%	0
3	occgrp	Work w/ students on projects	72%	40
4	clprese	outside class Make class presentations	50%	0
5	resrch0	Does research with faculty	20%	0
6	4 facothe	Work w/ faculty on projects	57%	0
7	facgrad e	Receive feedback on academic performance from instructor	68%	25
8	facidea	Talk to instructors about class	65%	20
9	Irncom 04	Have opportunity to take honors courses and other distinctive programs	33%	0
10	indstd0	Have conducted independent study	13%	0



# Family Feud: MARS Style



- **Thank you for your participation!**



# Inquiry/Research Questions

- Have you been involved with faculty research outside of class? [RESRCH04]
- Have you or do you expect to be involved in a culminating senior experience such as a capstone course, senior thesis or comprehensive exam? [SNRX04]
- How many papers have you written? [WRITMID]
- Talked about ideas with faculty [FACIDEAS]
- Talked about ideas out of class [OOCIDEAS]
- Course work emphasizes memorizing facts, ideas or methods from your courses and readings [MEMORIZE]
- Coursework emphasizes analyzing the basic elements of an idea experience or theory. [ANALYZE]
- Asked questions in class or contributed to class discussions [CLQUEST]



# Comparison Question

How many hours do you spend participating in co-curricular activities (organizations, campus publications, etc.) [COCURR01]



# Results--First Year GPA

- **SPR05 GPA predicted by:**
  - OOCIDEAS (B = .06, t = 2.10)
  - ANALYZE (B = .08, t = 2.11)
  - COCURR01 (B = .05, t = 3.18)



# Results--First Year Retention after 1 Year

## ○ Retention after 1 year predicted by:

MEMORIZE (B = -.55, t = -2.06)

- Probability of being retained
- '4, very much' 94.1%
- 'other' 96.5%

ANALYZE (B = .56, t = 2.8)

- Probability of being retained
- '2, some' 93%
- '4, very much' 97.6%

COCURR01 (B = .52, t = 4.04)

- Probability of being retained
- '2, 1-5 hr/week' 94.5%
- '4, 11-15 hr/week' 97.9%
- '6, 21-25 hr/week' 99.3%



# Results--First Year Retention after 2 Years

## ○ Retention after 2 years predicted by:

ANALYZE (B = .40, t = 2.20)

- Probability of being retained
- '2, some' 88.7%
- '4, very much' 94.6%

COCURR01 (B = .31, t = 3.24)

- Probability of being retained
- '2, 1-5 hr/week' 90.6%
- '4, 11-15 hr/week' 94.7%
- '6, 21-25 hr/week' 97.1%

○ WRITEMID (B = .56, t = 2.36)

- Probability of being retained
- 'none' 94.2%
- '1 or more, 92.1%



# Results--Senior GPA(05a)

- **Senior GPA predicted by:**
  - RESRCH04 (B = .11, t = 2.20)
  - SNRX041 (B = .13, t = 2.61)
- **CUMGPA (Cumulative GPA at the time of graduation) predicted by:**
  - RESRCH04 (B = .16, t = 4.2)
  - SNRX041 (B = .12, t = 4.2)



# Results--06a Senior retention

- **Spring 06 senior retention (late graduation) was predicted by:**

FACIDEAS (B = .26, t = 2.26)

probability retained

'2, some' 13%

'4, very much' 20%

WRITEMID (B = 1.08, t = 5.36)

probability retained

'none' 26.8%

'1 or more' 10.7%

SNRX04 (B = -1.81, t = -6.03)

probability retained

'have done' 3.6%

'other' 18%



# Next Steps

- Evaluation of 2007 NSSE data
- Examine the relationship between research and writing, and career choice
- Ethnicity analysis



# Questions?

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Thank you for coming!

~Measurement & Research Services~

[www.tamu.edu/mars](http://www.tamu.edu/mars)

