### How to Improve Student Survey Response Rates: Contributing Factors and Marketing Strategies

Tongshan Chang, Xiaohui Zheng, Yang Yang, Sereeta Alexander, Anna Sher, Gina Johnson, William Armstrong The University of California

> Presentation at CAIR Conference Anaheim, CA November 7<sup>th</sup>, 2012

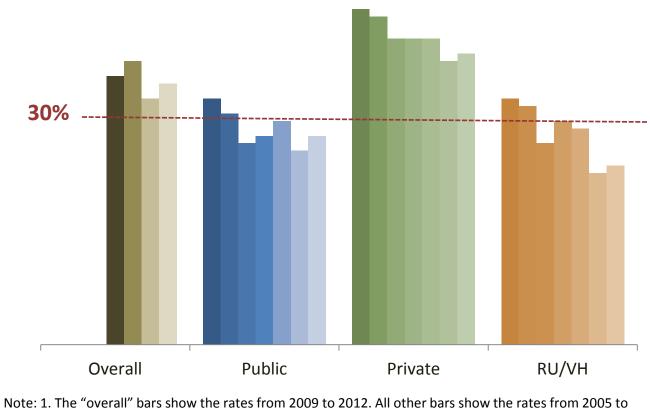
### Presentation Outline

- Background Overview
- Contributing Factors
- Marketing Strategies
- Discussion

## Web-Based Survey—Challenges

- Response rate: one of the biggest challenges
- The rate of most major national surveys has been falling...

#### NSSE U.S. Response Rate Trend, 2005-2012



2012, but excluding the rate for 2008. 2. RU/VH: Research Universities (very high activity) Source: http://nsse.iub.edu

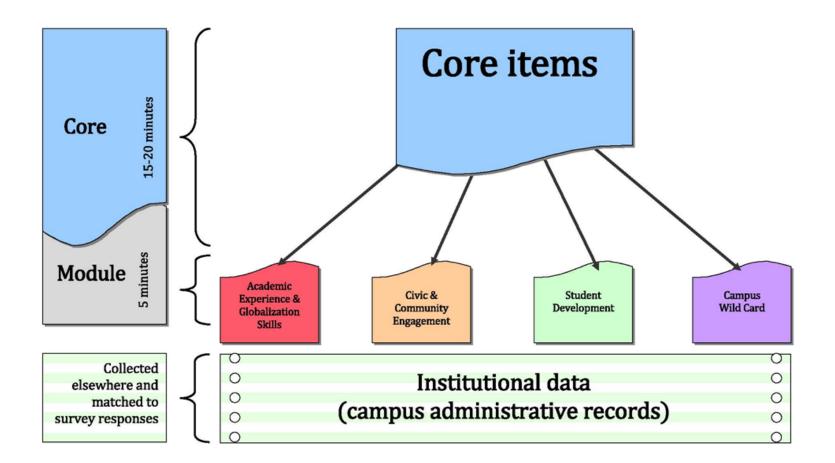
### Purpose of the Study

- Examine factors that influence student experience survey response rates
- Review marketing strategies that may help improve response rates

## Population

- Enrolled students on 9 undergraduate campuses of the University of California (UC) in the spring 2012
- Invited to participate in University of California
  - Undergraduate Experience Survey (UCUES)

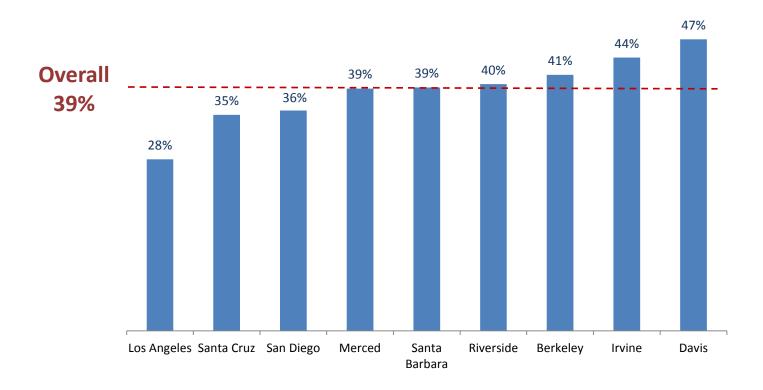
### UCUES Structure ...



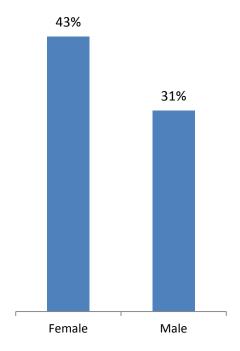
**UCUES Administration...** 

- Census survey administered once every two years
- Used to be administered by Berkeley survey team
- The Office of Institutional Research at UC Office of the President administered in the spring term, 2012

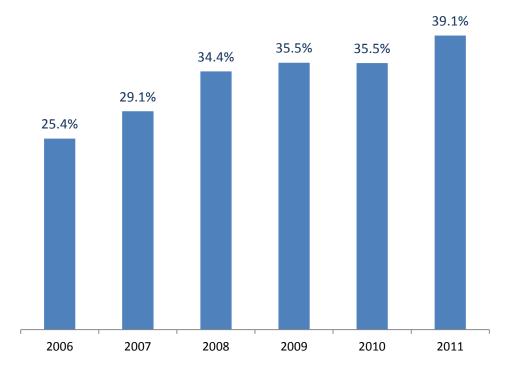
#### UCUES Response Rate of 2012 Administration by Campus



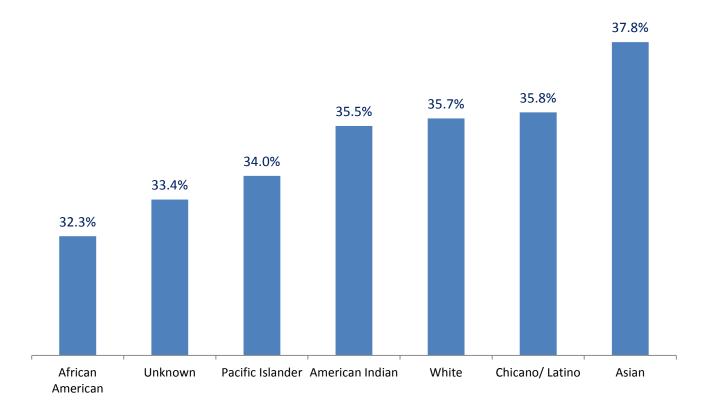
#### UCUES Response Rate of 2012 Administration by Gender



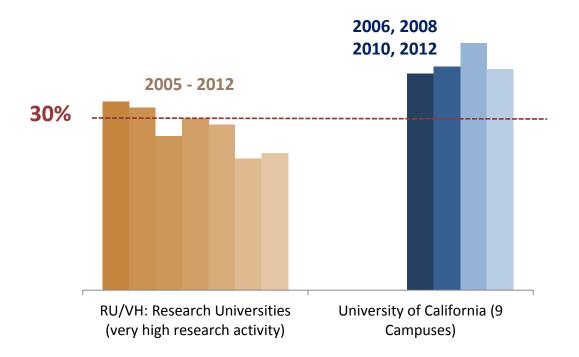
#### UCUES Response Rate of 2012 Administration by Entering Cohort



#### UCUES Response Rate of 2012 Administration by Ethnicity



# Response Rate Trend of NSSE U.S. Research Universities and the University of California



### **Contributing Factors: Outline**

### • Instrument Design

- Consent Form
- Passphrase Feature
- Major Drop-down List

### • Email Invitation

- Number
- Frequency
- Timing of delivery

### **Contributing Factors: Outline**

### • Completion Time

- Time Interval
- Survey Completeness

#### Student Services

- Student interaction with administrators
- Student Requests and Status

### Factors: Instrument Design—Consent Form

#### • What is a Consent Form?

- A document endorsed by survey participants
- Comes with an informational letter to allow informed decisions

#### Voluntary Participation

Participation in this research is entirely voluntary. Your decision whether or not to participate in the survey will not affect your grades or your relationship with UC Santa Cruz. You may choose to withdraw at any time without penalty; however, to be entered in the drawing for prizes you must submit the survey. You may choose not to answer particular questions and still be eligible for prizes.

#### Benefits

While there may not any direct benefit to you from participating, UCUES gives students an opportunity to comment on the quality of the education they are receiving, student services, and other aspects of their undergraduate experience that help the University evaluate and improve programs and services.

#### Protecting your privacy

Any personally identifiable information that is obtained in connection with this study will be stored on a secured server and remain confidential. It will be disclosed to the third parties only with your permission or as required by law. Please be assured that except to allow for the matching with your academic records, your identity will not be connected to your survey responses, your responses will be confidential, and the results of the study will be reported only as aggregate data. Any quotations from responses to open ended questions used in public reporting will be reviewed to ensure that your identity cannot be ascertained.

Responses to the survey may not be reviewed immediately. If any of your responses concern matters in need of immediate action or disclose dangerous situations, you should immediately report those matters to the appropriate authorities. If you need immediate assistance, please go to http://www2.ucsc.edu/healthcenter, a website that lists student services on campus.

#### CONSENT TO PARTICIPATE

I have read this document and agree to participate in this survey.

I understand and will participate. • Agree • Disagree

### Factors: Instrument Design—Consent Form (Cont'd)

#### Alternative Form

- A common belief: consent form discourages participation
- Three campuses used an alternative statement in 2012 administration

#### Voluntary Participation

Participation in this research is entirely voluntary. Your decision whether or not to participate in the survey will not affect your grades or your relationship with UC Santa Cruz. You may choose to withdraw at any time without penalty, however, to be entered in the drawing for prizes you must submit the survey. You may choose not to answer particular questions and still be eligible for prizes.

#### Benefits

While there may not any direct benefit to you from participating, UCUES gives students an opportunity to comment on the quality of the education the are receiving, student services, and other aspects of their undergraduate experience that help the University evaluate and improve programs and services.

#### Protecting your privacy

Any personally identifiable information that is obtained in connection with this study will be stored on a secured server and remain confidential. It will be disclosed to the third parties only with your permission or as required by law. Please be assured that except to allow for the matching with your academic records, your identity will not be connected to your survey responses, your responses will be confidential, and the results of the study will be reported only as aggregate data. Any quotations from responses to open ended questions used in public reporting will be reviewed to ensure the your identity cannot be ascertained.

Responses to the survey may not be reviewed immediately. If any of your responses concern matters in need of immediate action or disclose dangerous situations, you should immediately report those matters to the appropriate authorities. If you need immediate assistance, please go to http://www2.ucsc.edu/healthcenter, a website that lists student services on campus.

#### If you wish to participate in this survey, simply click Next below.

#### • Did including the consent form affect student behavior at login?

Instrument Type	Campus	% Agreed	% Left	% Declined
	Berkeley	91.6%	7.2%	1.2%
	Irvine	91.4%	8.0%	0.6%
Concont Form	Los Angeles	87.1%	12.2%	0.7%
Consent Form	San Diego	93.3%	6.1%	0.6%
	Santa Barbara	92.4%	7.1%	0.5%
	Santa Cruz	92.9%	6.8%	0.3%
No Consent Form	Davis	93.3%	6.1%	0.6%
	Merced	94.5%	5.5%	0.0%
	Riverside	90.7%	7.9%	1.4%

### Factors: Instrument Design—Consent Form (Cont'd)

 Hypothesis testing for the relationship between instrument type and student behavior

Instrument Type	Agreed	Left	Declined	Total
With Form	40,678	3,483	312	44,473
No Form	17,107	1,229	152	18,488
Total	57,785	4,712	464	62,961
Instrument Type	Agreed	Left	Declined	
With Form	91.5%	7.8%	0.7%	
No Form	92.5%	6.6%	0.8%	

 Cramer's V=0.02 => student behaviors at login were independent of the instrument type.

### Factors: Instrument Design—Passphrase

#### • Passphrase

- Protect student privacy
- Require students to set a passphrase for re-entering the survey

Welcome Back!
If you forgot your passphrase, please contact Yang Yang, Institutional Research Analyst at the University of California Office of the President by email (ucues@ucop.edu) or by phone (510-987-3378).
Enter Your Passphrase

## Factors: Instrument Design—Passphrase (Cont'd)

• Did requiring a passphrase discourage non-completers from re-accessing the survey?

How Many Times Did Students Access the Survey					
Total Accesses	1	2	3	4	4+
Completers	71%	20%	6%	2%	1%
Partial Completer	74%	19%	5%	1%	0%
Opt-outs	80%	15%	4%	1%	1%
Overall	72%	20%	6%	2%	1%

A second the second of the second s

- Number of access independent of completion status (Cramer's V=0.03)
- Non-completers re-accessed the survey as much as the completers
- Passphrase feature did not affect non-completers

### Factors: Instrument Design—Major Drop-Down

### • Use of major drop-down list

- Hide the current major for students with FERPA blocks
- Most campuses excluded such students
- UCLA used drop-down list for all students

## Show major(s) Use major drop-down list

•

#### Which major would you like to evaluate?

O Computer Science

o Economics

o Other If OTHER: Please select your major from this list.

Which major would you like to evaluate?

## Factors: Instrument Design—Major Drop-Down (Cont'd)

- Did using a major drop-down list affect student participation in major evaluation?
  - Exit at Major Evaluation (attrition): students who responded to at least 50% of the questions in the previous section and exited at major evaluation.

Compute	UCL	UCLA		All Others	
Campus	Count	Percent	Count	Percent	
Exited	8	0.1%	32	0.1%	
Persisted	5,569	99.9%	50,211	99.9%	

- No significant difference in the attribution rates

## Factors: Instrument Design—Major Drop-Down (Cont'd)

• Did the attrition rate vary across sections within and between campus?

Exit Point	UCLA	All Others
Academic Engagement	-	-
Time Allocation	4.7%	3.5%
Academic & Personal Development	2.6%	2.2%
Campus Climate for Diversity	1.7%	1.2%
Plans & Aspirations	0.1%	0.1%
<b>Overall Satisfaction &amp; Agreement</b>	0.2%	0.2%
Evaluation of the Major/Educational Experience	0.1%	0.1%

- Within campus, higher attrition rates at earlier sections.
- Between campus, similar attrition rates across sections.

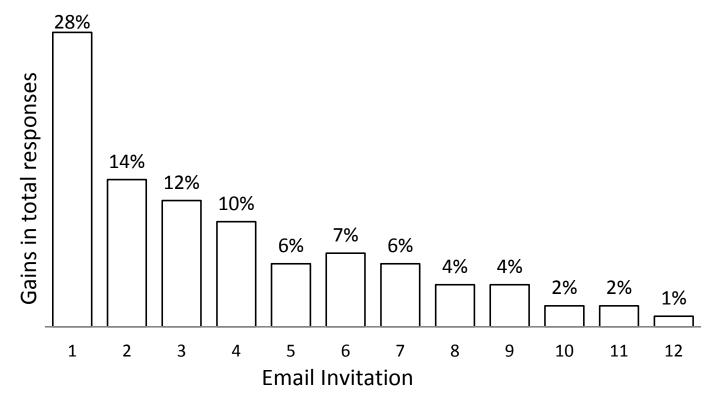
#### • The more, the better?

Campus	# Invitations	Response Rate
Davis	8	47%
Irvine	15	44%
Berkeley	14	41%
Riverside	22	40%
Santa Barbara	8	39%
Merced	5	39%
San Diego	13	36%
Santa Cruz	10	35%
Los Angeles	12	28%

- The association varies by campus, no direct relationship
- Campus factors and strategies play an important role

## Factors: Email invitation—Number (Cont'd)

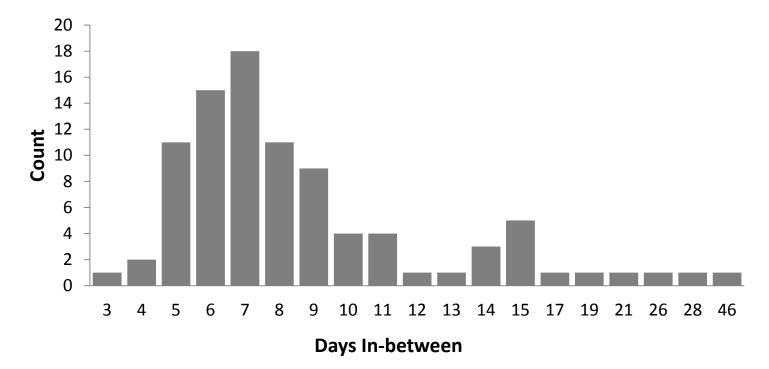
#### • How many total responses were gained by each invitation?



- 28% of total responses gained by the first invitation
- Cumulatively, 91% of responses gained by the first 9 invitations

### Factors: Email invitation—Frequency

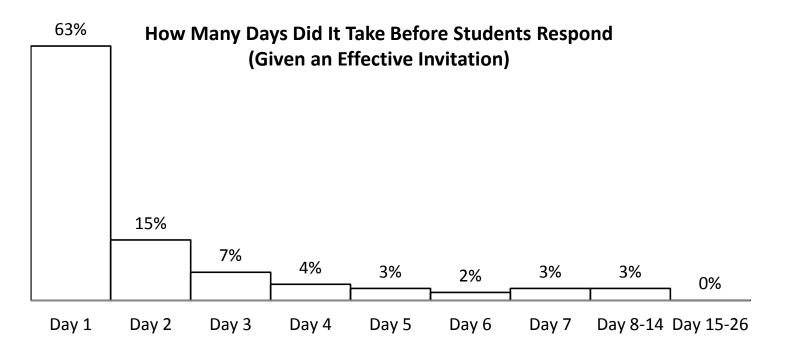
### • At what interval(s) were the invitations sent?



- Limit to the first 12 (or less) campus invitations, total 91 invites
- Positively skewed, median=7, mean=9.2, mode=7
- 47 invites in-between 3-7 days, 44 invites in-between 8-28 days

## Factors: Email Invitation—Frequency (Cont'd)

### • How long did the effect of an invitation last?



- The majority (63%) responded on the first day
- Cumulatively, 78% responded within 2 days, 97% within a week
- Interacting psychological factors (feeling fresh-> disturbing)

## Factors: Email Invitation—Timing of Delivery

### • On which days of the week were the invitations sent?

Week Day	Count	20
Mon	17	15 -
Tue	7	
Wed	16	<b>10</b> - 00 - 00 - 00 - 00 - 00 - 00 - 00 -
Thu	14	о С
Fri	19	5 -
Sat	10	
Sun	8	0
		Mon Tue Wed Thu Fri Sat Sun

Week Day

- Fairly uniform, all over the week
- Friday is most popular, followed by Monday
- Tuesday is least popular

## Factors: Email Invitation—Timing of Delivery (Cont'd)

### • Which day of the week is the best for sending invitations?

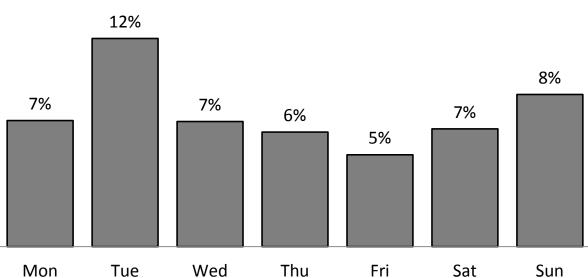
Wook Day	Total	Day 1		Day 2	
Week Day	Invitations	Responded	% Responded	Responded	% Responded
Mon	126,319	7,057	6%	1770	1%
Tue	54,704	5,700	10%	612	1%
Wed	119,606	6,948	6%	1350	1%
Thu	111,715	5,741	5%	1357	1%
Fri	147,992	6,024	4%	1513	1%
Sat	73,326	3,377	5%	1409	2%
Sun	49,695	3,376	7%	815	2%

- When students respond depends on when they received the invitations

- Analysis conditional on the invitation date

## Factors: Email Invitation—Timing of Delivery (Cont'd)

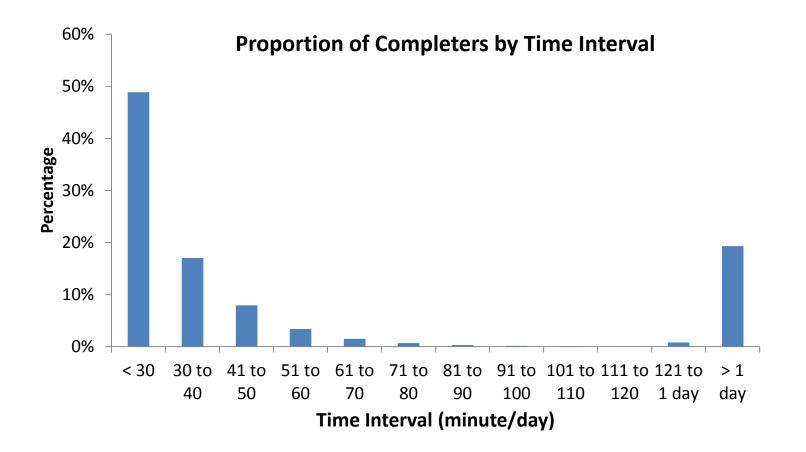
• What is the best day of the week to send invitations?



Percent Responded within 2 Days

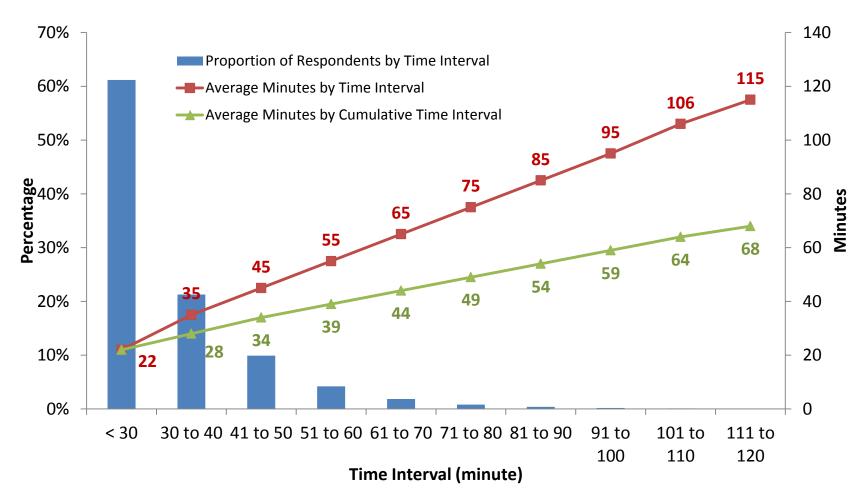
- Tuesday is the best day of the week, and Friday is least optimal
- For 2012 admin, Friday is most popular and Tuesday is least popular

#### • Time Duration It Took to Complete the Survey



### Factors: Completion Time (Cont'd)

#### • How long did it take to complete the survey with one access?



### Factors: Completion Time (Cont'd)

• N and Percent of Items Completed by Time Interval for Oneaccess Completers

Minutes	N of Completers	% of Items Completed
0-20	7,572	70%
21-30	13,365	74%
31-40	7,449	78%
41-50	3,487	78%
51-120	2,650	78%

### Factors: Response to Student Requests

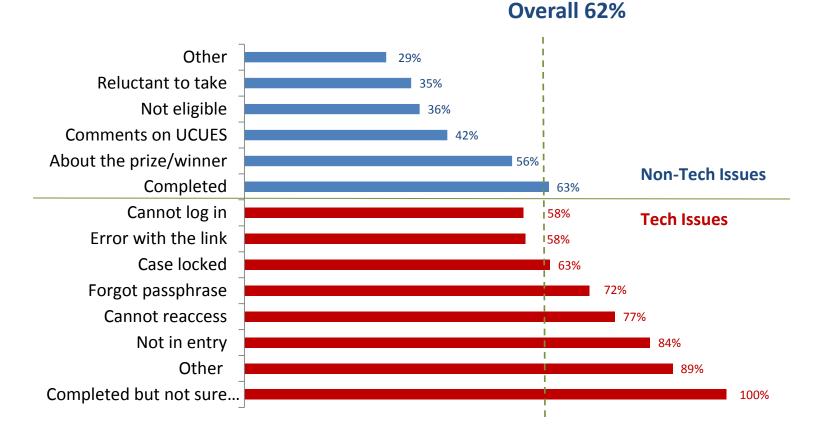
#### **Student Interaction With Administrators**

- Service Accounts provide a platform for students to submit their requests while participating in the survey and interact with survey administrators
- 10 service accounts: one for each campus and one for central
- Service accounts were monitored regularly
- Student requests were handled and recorded
- Campus coordinators also receive requests from students

### Student Requests/Completion by Request Category

Issues	Requests	Completion
Tech Issues		
Cannot log in	38	22
Cannot re-access	13	10
Case locked	41	26
Completed but not sure ever did	4	4
Error with the link	24	14
Forgot passphrase	123	88
Not in entry	19	16
Other	9	8
Sub-total	271	188
Non-Tech Issues		
About the prize/winner	9	5
Comments on UCUES	19	8
Completed	19	12
Not eligible/right person	11	4
Reluctant to take	26	9
Other	17	5
Sub-total	101	43
Overall	372	231

# Completion Rate of Those Who Submitted a Request by Request Category

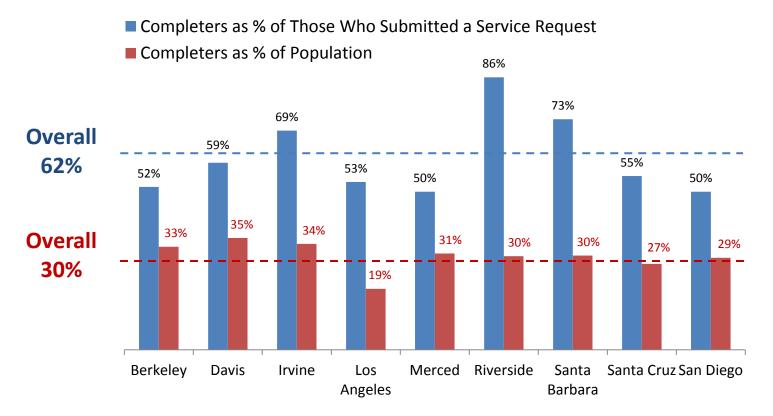


## Student Requests/Completion by Campus

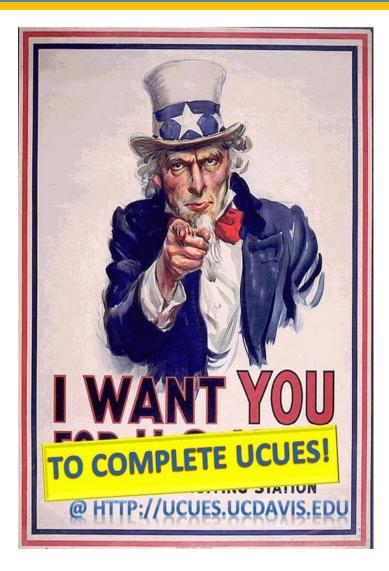
	Requests			Completion		
	Tech Issues	Other Issues	Total	Tech Issues	Other Issues	Total
UCB	12	21	33	9	8	17
UCD	82	38	120	55	16	71
UCI	54	8	62	37	6	43
UCLA	23	9	32	16	1	17
UCM	9	1	10	5	0	5
UCR	21	8	29	19	6	25
UCSB	30	7	37	25	2	27
UCSC	17	3	20	9	2	11
UCSD	24	6	30	13	2	15
Overall	272	101	373	188	43	231

# Factors: Response to Student Requests (Cont'd)

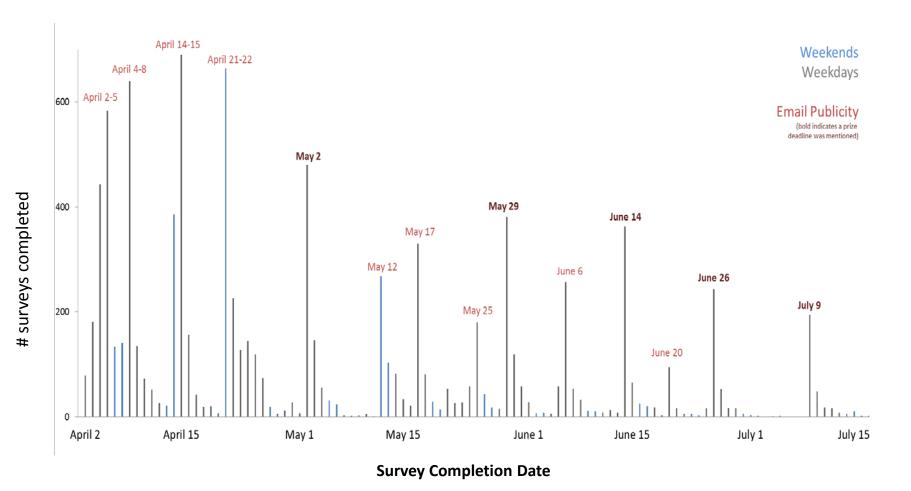
# Completion Rate of Those Who Submitted a Request by Campus



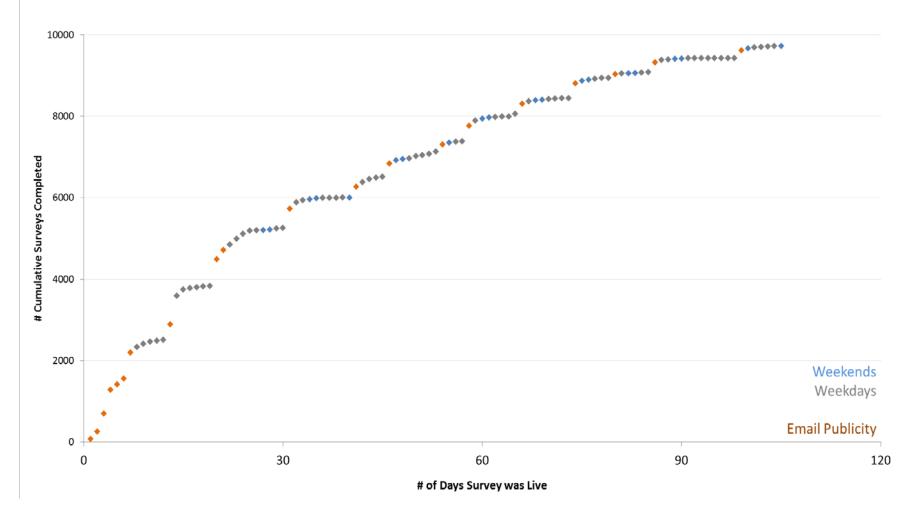
# Marketing Strategies



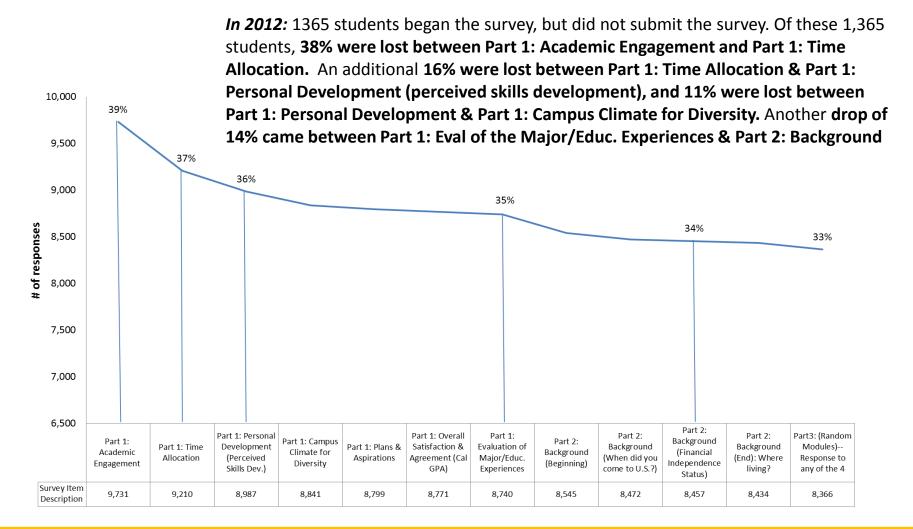
### UC Berkeley UCUES Completion Date Trends, 2012



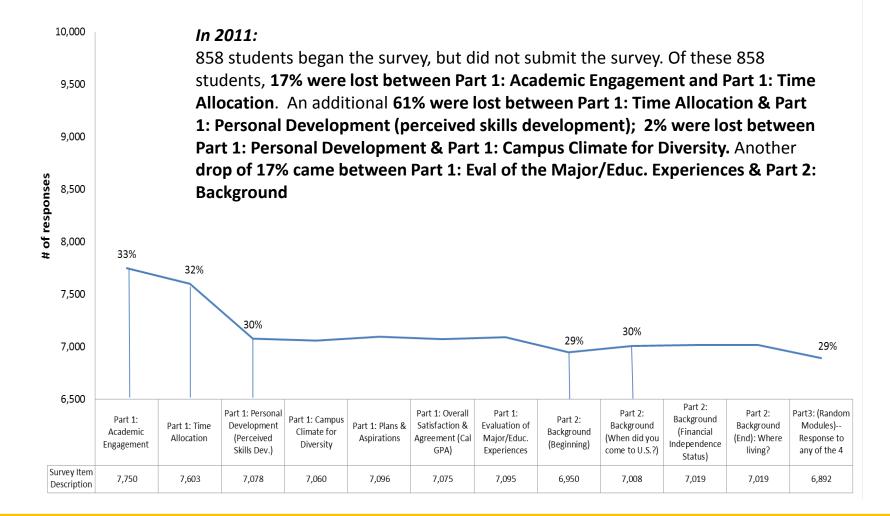
#### UCUES Survey Response Rates and Counts by Day, 2012



#### UCUES Response Rates and Counts by Select Survey Items, 2012



#### UCUES Response Rates and Counts by Select Survey Items, 2011





#### What is UCUES?

The University of California Undergraduate Experience Survey (UCUES) is an online survey administered at UC Berkeley and each of the other undergraduate UC campuses. This survey is an important tool for better understanding the undergraduates' academic and co-curricular experiences at Berkeley. UCUES data is used for many institutional purposes, including providing undergraduate student input into academic program reviews and learning more about students' financial concerns. All UC Berkeley undergraduates are invited to participate in the survey.

#### Confidentiality

Your responses to this survey are confidential, and the results of the study will be reported only as aggregate data. Any quotations from responses to open ended questions used in reporting will be reviewed to ensure that your identity cannot be ascertained.

#### Prizes

Valued at over \$5,500, the prizes include four newly added iPads, twelve \$100 Cal 1 Card awards, four \$200 Cal 1 Card awards, a 1-year free Zipcar membership (with a bonus driving credit of \$90!), and two grand prizes of \$500 in cash and \$1,000 in cash. Drawings will be held approximately once per week, with a hiatus between the weeks of May 7th and May 21st. Once you complete the survey, your name will be eligible for all subsequent prize drawings, so the earlier you respond, the more chances you have to win a prize.

#### Who can I contact for more information?

For more information, please email ucues@berkeley.edu.

#### UCUES 2012 Winners...

#### Week 1

Helen Wan - \$200 on Cal 1 Card Comments: Thanks

G.E. - S100 on Cal 1 Card

#### Week 2

#### Maria Altebarmakian - iPad 3

Alan Lee - \$100 on Cal 1 Card

Comments: I think it's really great that the school wants our feedback and actually uses our responses from this survey to improve the campus environment! Not only do we get the chance to win awesome prizes, but we also get to have a say in how our campus is run! I think it's really important for us to make the most out of this opportunity and give the leaders of our campus our feedback and improve the UC Berkeley community for the future classes.

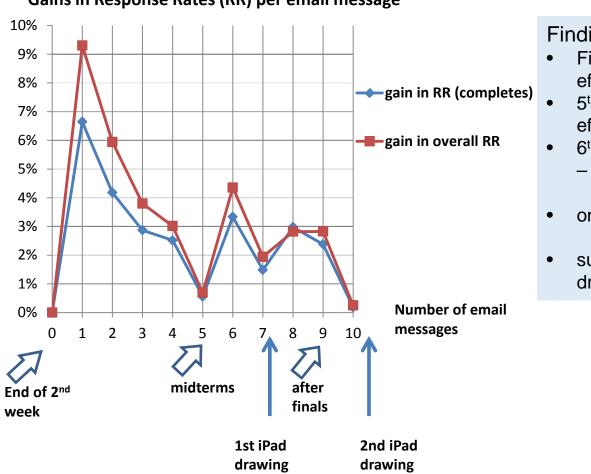
#### Shelley Fernandez - \$200 on Cal 1 Card

Comments: Even though I never heard of anyone winning these prizes, the survey did not take long to finish so I decided to take it anyway. I was surprised when I received the email calling me a winner and I strongly encourage anyone to take the time to complete the survey because the prizes do exist.

Comments: Although the UCUES survey takes a little longer than some other surveys to complete, I'm glad that I took the extra time to fill it out! I actually was fortunate and lucky to have won something and I think it was worth my time

## Marketing Strategies: UC Santa Cruz

#### Impact of mass email messages on response rates



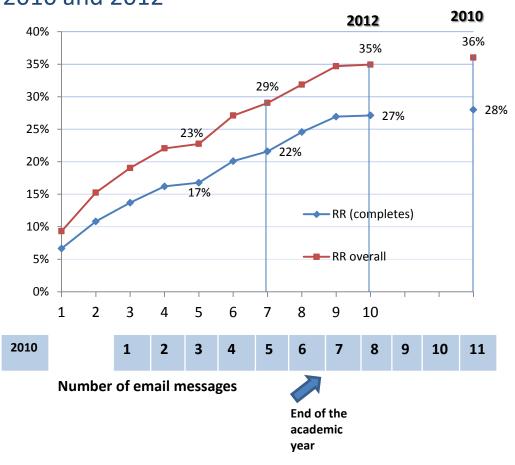
#### Gains in Response Rates (RR) per email message

#### Findings

- First 3 messages were effective
- 5<sup>th</sup> message was least effective – during midterms
- 6<sup>th</sup> message was very effective - after midterms
- only 3% gain after the finals
- surprisingly low RR prior to drawings for iPad

### Marketing Strategies: UC Santa Cruz

# Response rates and duration of survey in 2010 and 2012



Start date: in 2012 started 2 weeks earlier than in 2010. After 7 messages we had the same RR as we did after 5 messages in 2010.

• Did not gain much by starting 2 weeks earlier because of a slow time during midterms

<u>Close date</u>: end of June in 2012, 3 weeks earlier than in 2010.

Response rates in 2010: 36% overall and 28% based on completes

 Did not lose much by closing the survey at the end of June in 2012 rather than the end of July as we did in 1010

# Marketing Strategies: UC Santa Cruz

UC Santa Cruz UCUES Portal

# **WUC SANTA CRUZ** Undergraduate Experience Survey (UCUES)

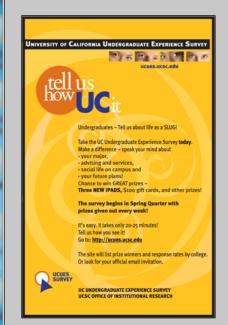
#### About the survey

Prizes & prize winners

Response rate by college

FAQ & more information

#### TO BEGIN YOUR SURVEY, CLICK HERE!



#### About The Survey

#### What is the survey about?

It's about being a student at UCSC: your academic work, access to classes, your interaction with faculty and peers, your satisfaction with advising and services, and your future plans.

#### News Flash!

Our third (and last) Grand Prize drawing for an iPad was on July 5th. The lucky winner was Gerardo Avila (*pictured at the right*), a senior at College Ten.

The two other iPad winners were Stephanie Castillo, a junior at Cowell College, and Kasturi Malaviya, a senior at College Nine.

Click <u>here</u> to read about students who won prizes for their participation in the UCUES: iPads, the \$100 Bay Tree bookstore gift cards, and Zipcar memberships.

We closed the survey on July 5th with a campus-wide response rate of 35%!

Crown college was a leader in this year's UCUES by maintaining the highest response rate among colleges since the start of the survey on April 13. **Congratulations to Crown college** on reaching a 41% response rate at the close date and thus winning a \$300 prize to support its programs! Click <u>here</u> to view response rates by college.

Thanks everyone who participated and promoted the 2012 UCUES!

#### Who can I contact if I have questions about UCUES?

Anna Sher, Research Analyst at asher@ucsc.edu or 459-4302.



# Marketing Strategies: UC Merced





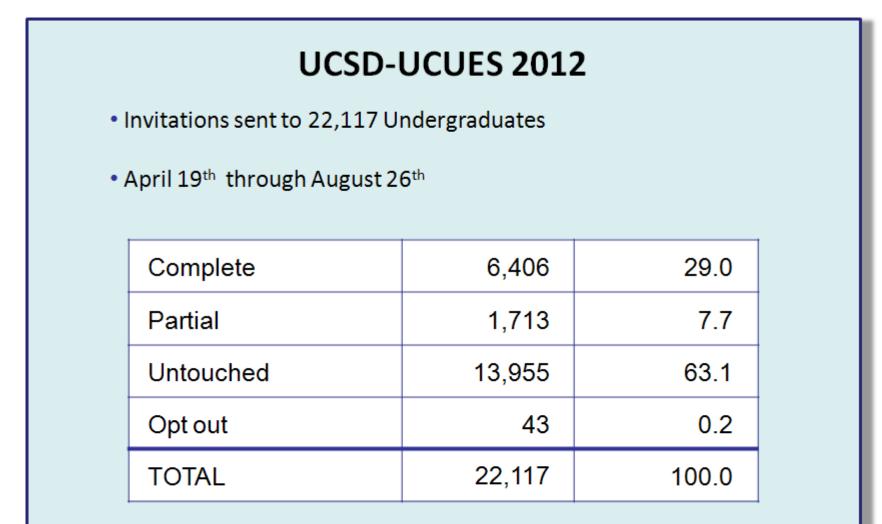
# Targeted invitation

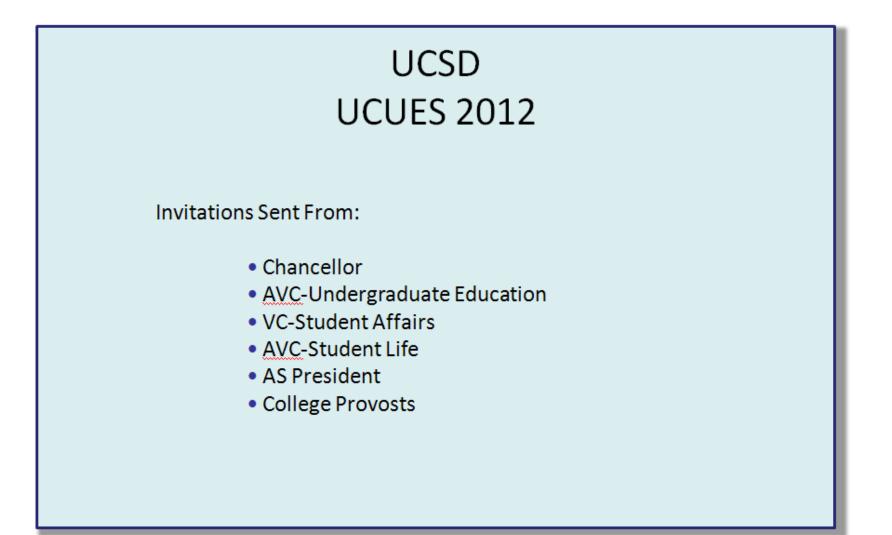


# Data sharing with students



# Data sharing with campus





# UCUES UCSD 2012

Incentives:

- 12 UCSD Bookstore gift cards valued at \$50.00 each
- 4 Apple iPads (3rd generation 16GB Wi-Fi)
- 2 Xbox 360s

Special Incentive Structure:

Apple a Day Promotion-One Apple iPod in Early May (five days)

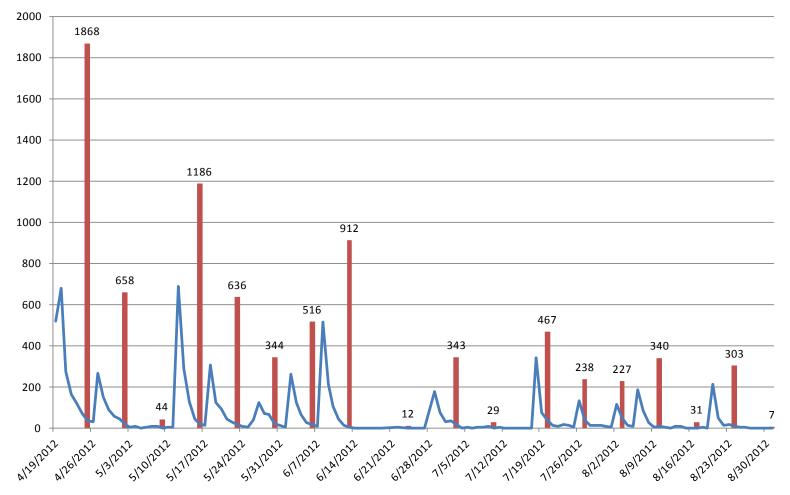
60 Hour UCUES-a-Thon Final Exam Weekend

Apple iPad Special Drawing

## UCUES-UCSD 2012 Publicity

- UCSD-UCUES Web Site
- Posters-Bookmarks
- Table Tents
- Door Hangers
- Shuttle Buses
- Student Centers Marquee
- Video Screens
- Reclaim UCSD ?

#### UCSD: UCUES: Number of Responses by Date



## Summary: Contributing Factors

- 1. Using the consent form, passphrase feature, and major dropdown list do not discourage student participation.
- 2. The first email invitation is most important, majority of the responses were gained by the first 9 invitations.
- 3. Email intervals of less than a week are suggested for earlier invitations. Intervals of more than 2 weeks are not recommended.
- 4. Tuesday is the best day of the week for sending invitations, and Friday is least optimal for invitations.
- 5. A reasonable time length of a survey is less than 30 minutes.
- 6. Survey administrator's interaction with student through service account has a positive influence on their response rate, especially when they seek help with technical problems.

## Summary: Marketing Strategies

### Invitations:

- Frequently mixing up the content of the email reminders with respect to subject lines, signatories, and the body of the message
- Relying on Departments and Colleges for helping to get the word out
- Email invitation from people students know (including student leadership)
- Reminders in class and from Student Affairs staff **Incentives**:
  - Offer a mix of short- and long-range incentives throughout the survey administration period
  - Publicizing winners, their comments and photos

### **Data Sharing:**

• Share data back to students so they know it is important