CAIR Best Paper - Immigrant Generation, Cultural Capital, Ethnicity, and Gender: Undergraduate Diversity at the Public Research University

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AIR ANNUAL FORUM 2009

A Different Approach to Examining Diversity

- Usual approach: Race/Ethnicity; Gender; "First-Generation" and/or Low Income
- This study: Immigrant Generation, Parental Education Level and Gender Together
- Race/Ethnicity, Family Income and Other Factors Mapped Against These Dimensions
- Data: Berkeley UCUES 2007

Constructing the Typology

- Immigrant Generation Index
- Parental Education Index
- Gender
- The 3 X 4 X 2 Matrix

IMMIGRANT GENERATIONS

Gen 1.0	Not Born-Recent Immigrant	801	7.4%
Gen 1.5	Not Born-USA by Age 13	1694	15.7%
Gen 2.0	Both Parents Not Born	3499	32.4%
Gen 2.5	One Parent Not Born	1038	9.6%
Gen 3.0	All Grandparents Not Born	213	2.0%
Gen 3.5	Two Grandparents Not Born	962	8.9%
Gen 4.0	Grandparents Born in US	2578	23.9%

PARENTAL EDUCATION

Gen A1	No College Experience	1964	18.2%
Gen A2	One or Both Parents Some College	1106	10.3%
Gen B1	One Parent College Degree	1489	13.8%
Gen B2	Both Parents College Degrees	1967	18.2%
Gen C	One Parent Graduate Degree	2704	25.1%
Gen D	Both Parents Graduate Degrees	1555	14.4%

Immigrant Generation

_	First	Second	Third+	_
No College	857	1329	884	3070
College	633	1179	1644	3456
One Grad	609	1202	893	2704
Both Grad	396	827	332	1555
TOTAL	2495	4537	3753	10785

RESPONDENTS WHO ARE FEMALE (%)

	Immigrant Generation				
	First Second Third+				
No College	63	65	60		
College	59	60	58		
One Grad	56	58	57		
Both Grad	51	55	55		

EDUCATION LEVEL BY IMMIGRATION (%)

	Immigrant Generation				
	First Second Third+				
No College	35	29	22		
College	25	26	44		
One Grad	24	26	24		
Both Grad	16	18	9		
TOTAL	100	100	100		

ENTERED AS TRANSFER STUDENT (%)

	Immigrant Generation			
WOMEN	First	Second	Third+	
No College	32	14	41	
College	27	13	18	
One Grad	19	9	13	
Both Grad MEN	15	5	10	
No College	36	23	48	
College	28	15	23	
One Grad	19	9	17	
Both Grad	10	5	11	

ENGLISH AS FIRST LANGUAGE (%)

	Immigrant Generation			
WOMEN	First	Second	Third+	
No College	4	38	96	
College	4	68	99	
One Grad	9	67	99	
Both Grad MEN	8	68	99	
No College	5	45	96	
College	7	75	98	
One Grad	12	72	98	
Both Grad	11	68	99	

AVERAGE HIGH SCHOOL GPA (WEIGHTED)

	Immigrant Generation			
WOMEN	First	Second	Third+	
No College	4.19	4.17	4.11	
College	4.27	4.27	4.23	
One Grad	4.30	4.31	4.25	
Both Grad MEN	4.38	4.35	4.27	
No College	4.18	4.17	4.15	
College	4.28	4.27	4.22	
One Grad	4.27	4.30	4.25	
Both Grad	4.36	4.34	4.23	

AVERAGE SAT VERBAL SCORE

	Immigrant Generation			
WOMEN	First	Second	Third+	
No College	531	576	614	
College	612	639	655	
One Grad	653	671	675	
Both Grad MEN	680	690	685	
No College	558	598	601	
College	627	650	652	
One Grad	661	682	660	
Both Grad	678	698	673	

AVERAGE SAT MATH SCORE

	Immigrant Generation		
WOMEN	First	Second	Third+
No College	620	605	601
College	686	662	652
One Grad	698	698	606
Both Grad MEN	717	716	673
No College	665	659	652
College	716	701	693
One Grad	736	726	705
Both Grad	741	746	717

RACE/ETHNICITY AND FAMILY INCOME

IMMIGRANT

NOT IMMIGRANT

	L	Chicano			
Ε	Ο				
D	W	Vietnamese	African American		
U					
С		Latino			
Α		Filipino			
Τ		Korean	Japanese		
I		Chinese	White		
Ο	Н				
Ν	ı				
	G				
	Н	South Asian			

RACE, IMMIGRATION & EDUCATION: WHITE AND CHINESE STUDENTS (%)

	Immigrant Generation			
WHITE	First	Second	Third+	
No College	2	2	14	
College	2	5	34	
One Grad	3	6	18	
Both Grad	3	4	7	
CHINESE				
No College	14	15	1	
College	8	11	3	
One Grad	9	17	2	
Both Grad	6	14	0	

RACE, IMMIGRATION & EDUCATION: CHICANO AND AFRO AMER STUDENTS (%)

	Immigrant Generation			
CHICANO	First	Second	Third+	
No College	16	44	13	
College	2	7	9	
One Grad	1	3	3	
Both Grad	0	1	1	
AFRICAN A	MERICA	N		
No College	5	7	42	
College	3	6	19	
One Grad	2	6	5	
Both Grad	1	3	1	

RACE, IMMIGRATION & EDUCATION: S. ASIAN AND VIETNAMESE STUDENTS (%)

	Immigrant Generation			
S. ASIAN	First	Second	Third+	
No College	4	4	Ο	
College	8	10	1	
One Grad	14	28	Ο	
Both Grad	6	24	Ο	
VIETNAMES	SE			
No College	25	34	Ο	
College	9	15	Ο	
One Grad	2	9	Ο	
Both Grad	1	5	0	

FINANCIAL RESOURCES II: PARENTAL INCOME \$100,000+ (%)

	Immigrant Generation			
WOMEN	First	Second	Third+	
No College	3	8	18	
College	18	35	54	
One Grad	33	55	71	
Both Grad	54	72	79	
MEN				
No College	2	8	23	
College	19	40	56	
One Grad	47	60	72	
Both Grad	63	74	85	

FINANCIAL RESOURCES I: PELL GRANT RECIPIENTS (%)

	Immigrant Generation		
WOMEN	First	Second	Third+
No College	64	52	40
College	35	20	11
One Grad	21	13	7
Both Grad	11	5	4
MEN			
No College	61	51	31
College	36	19	12
One Grad	18	13	7
Both Grad	13	7	1

ACADEMIC MEASURES

ACADEMIC PROBATION AT LEAST ONCE (%)

	Immigrant Generation		
WOMEN	First	Second	Third+
No College	12	12	11
College	8	9	5
One Grad	9	4	4
Both Grad MEN	4	5	4
No College	17	19	12
College	14	9	10
One Grad	16	9	9
Both Grad	9	8	7

AVERAGE UC BERKELEY GPA

	Immigrant Generation			
WOMEN	First	Second	Third+	
No College	3.18	3.20	3.28	
College	3.32	3.30	3.44	
One Grad	3.38	3.41	3.48	
Both Grad MEN	3.47	3.48	3.55	
No College	3.12	3.10	3.26	
College	3.26	3.28	3.33	
One Grad	3.35	3.32	3.40	
Both Grad	3.36	3.42	3.41	

SATISFACTION WITH UC BERKELEY GPA (%)

	Immigrant Generation		
WOMEN	First	Second	Third+
No College	42	44	64
College	47	49	71
One Grad	50	53	71
Both Grad MEN	57	50	75
No College	43	44	60
College	42	48	65
One Grad	45	49	63
Both Grad	59	53	64

SATISFACTION WITH UC BERKELEY GPA: ACTUAL GPA 3.40-3.59 (%)

	Immigrant Generation			
WOMEN	First	Second	Third+	
No College	43	62	78	
College	48	62	78	
One Grad	55	55	82	
Both Grad MEN	52	44	74	
No College	49	68	76	
College	44	62	81	
One Grad	56	58	75	
Both Grad	58	48	76	

WOULD RE-ENROLL: ACTUAL GPA 3.40-3.59 (%)

	Immigrant Generation			
WOMEN	First	Second	Third+	
No College	88	93	88	
College	88	89	90	
One Grad	86	89	86	
Both Grad	94	86	100	
MEN				
No College	89	93	90	
College	81	89	91	
One Grad	68	87	88	
Both Grad	86	86	86	

RETENTION FROM SPRING 2007 TO FALL SEMESTER 2008 (%)

	Immigrant Generation			
WOMEN	First	Second	Third+	
No College	93	96	93	
College	97	95	93	
One Grad	97	97	93	
Both Grad	99	98	89	
MEN				
No College	94	93	90	
College	95	95	94	
One Grad	96	95	94	
Both Grad	95	97	90	

SIX OR FEWER HOURS SLEEP/NIGHT (%)

	Immigrant Generation			
WOMEN	First	Second	Third+	
No College	67	68	56	
College	56	60	35	
One Grad	59	59	38	
Both Grad MEN	51	52	25	
No College	62	54	60	
College	42	51	39	
One Grad	44	47	38	
Both Grad	48	50	35	

GOALS FOR COLLEGE

- Percent saying "Very Important"
- Selected results
- What goals are associated with:
 - Immigrant generation?
 - Parental education?
 - Gender?

VERY IMPORTANT COLLEGE GOALS I: POSITION TO MAKE LOT OF MONEY (%)

	Immigrant Generation		
WOMEN	First	Second	Third+
No College	43	47	36
College	61	44	23
One Grad	49	39	29
Both Grad MEN	45	47	18
No College	54	51	33
College	50	43	35
One Grad	49	40	27
Both Grad	32	41	33

VERY IMPORTANT COLLEGE GOALS II: ROMANTIC RELATIONSHIPS (%)

	Immigrant Generation		
WOMEN	First	Second	Third+
No College	16	19	24
College	27	18	25
One Grad	39	20	27
Both Grad MEN	20	28	36
No College	22	29	27
College	29	38	25
One Grad	31	28	38
Both Grad	25	25	38

VERY IMPORTANT COLLEGE GOALS III: BECOME WELL-ROUNDED (%)

	Immigrant Generation		
WOMEN	First	Second	Third+
No College	85	82	82
College	80	81	83
One Grad	85	84	83
Both Grad MEN	87	77	96
No College	69	79	69
College	68	67	69
One Grad	76	57	69
Both Grad	66	64	58

VERY IMPORTANT COLLEGE GOALS IV: DISCOVER SELF (%)

	Immigrant Generation		
WOMEN	First	Second	Third+
No College	85	93	84
College	86	88	90
One Grad	91	93	86
Both Grad MEN	93	85	93
No College	76	80	64
College	74	80	73
One Grad	82	80	73
Both Grad	78	69	71

VERY IMPORTANT COLLEGE GOALS V: CAREER SKILLS (%)

	Immigrant Generation		
WOMEN	First	Second	Third+
No College	87	90	80
College	87	88	83
One Grad	93	82	85
Both Grad MEN	90	84	71
No College	81	87	74
College	84	79	78
One Grad	89	75	66
Both Grad	81	82	83

VERY IMPORTANT COLLEGE GOALS VI: ENJOY ONESELF (%)

	Immigrant Generation		
WOMEN	First	Second	Third+
No College	62	64	47
College	68	68	68
One Grad	60	72	77
Both Grad MEN	75	60	75
No College	44	60	40
College	53	58	53
One Grad	53	71	62
Both Grad	65	55	65

VERY IMPORTANT COLLEGE GOALS VII: SOCIAL NETWORK (%)

	Immigrant Generation		
WOMEN	First	Second	Third+
No College	60	67	47
College	70	51	45
One Grad	63	46	36
Both Grad MEN	63	51	21
No College	61	64	39
College	58	53	40
One Grad	60	53	42
Both Grad	65	41	42

VERY IMPORTANT COLLEGE GOALS VIII INTERNATIONAL CONTACTS (%)

	Immigrant Generation		
WOMEN	First	Second	Third+
No College	71	58	34
College	54	47	43
One Grad	57	45	48
Both Grad MEN	55	38	29
No College	46	46	37
College	61	39	33
One Grad	62	39	23
Both Grad	55	43	33

CHOICE OF MAJOR

- Percent checking a particular reason
- Selected results
- What goals are associated with:
 - Immigrant generation?
 - Parental education?
 - Gender?

MAJOR I: INTELLECTUAL CURIOSITY (%)

	Immigrant Generation		
WOMEN	First	Second	Third+
No College	71	75	85
College	68	80	88
One Grad	78	77	80
Both Grad MEN	85	81	86
No College	68	74	80
College	77	84	85
One Grad	77	83	80
Both Grad	82	79	68

MAJOR II: LEADS TO HIGHER PAY (%)

	Immigrant Generation		
WOMEN	First	Second	Third+
No College	23	15	13
College	23	22	10
One Grad	26	17	10
Both Grad MEN	33	21	10
No College	31	25	18
College	40	32	28
One Grad	41	34	20
Both Grad	43	40	11

MAJOR III: HIGH PRESTIGE CAREER

	Immigrant Generation		
WOMEN	First	Second	Third+
No College	17	13	7
College	20	19	15
One Grad	18	20	13
Both Grad MEN	30	27	11
No College	24	25	18
College	30	26	25
One Grad	37	32	25
Both Grad	42	38	30

MAJOR IV: PARENTAL WISHES (%)

	Immigrant Generation		
WOMEN	First	Second	Third+
No College	6	4	3
College	9	7	3
One Grad	12	10	6
Both Grad MEN	8	14	5
No College	6	7	2
College	15	7	3
One Grad	15	13	4
Both Grad	20	17	0

MAJOR V: STUDY ABROAD OPPORTUNITY (%)

	Immigrant Generation		
WOMEN	First	Second	Third+
No College	6	10	15
College	6	14	17
One Grad	6	11	23
Both Grad MEN	6	10	23
No College	6	9	10
College	5	5	8
One Grad	8	4	7
Both Grad	6	7	11

ACTUAL MAJOR

- Percent distribution of respondents across the twelve cells of the matrix
- Selected major (upper division students)
- Is the distribution associated with:
 - Immigrant generation?
 - Parental education?
 - Gender?

ANTHROPOLOGY

	Immigrant Generation		
WOMEN	First	Second	Third+
No College	3	13	20
College	3	5	16
One Grad	0	3	10
Both Grad MEN	2	1	5
No College	2	1	4
College	0	3	2
One Grad	1	O	3
Both Grad	1	1	2

PSYCHOLOGY

	Immigrant Generation		
WOMEN	First	Second	Third+
No College	7	12	13
College	5	12	9
One Grad	3	6	6
Both Grad MEN	1	4	2
No College	2	3	3
College	1	4	2
One Grad	1	2	2
Both Grad	1	0	O

ENGLISH

	Immigrant Generation		
WOMEN	First	Second	Third+
No College	2	8	14
College	3	8	18
One Grad	2	8	5
Both Grad MEN	0	3	1
No College	0	3	8
College	0	1	8
One Grad	1	1	4
Both Grad	O	0	O

HISTORY OF ART

	Immigrant Generation		
WOMEN	First	Second	Third+
No College	2	9	11
College	2	2	24
One Grad	2	13	9
Both Grad MEN	0	7	9
No College	0	2	0
College	0	O	2
One Grad	0	O	2
Both Grad	O	0	2

APPLIED MATHEMATICS

	Immigrant Generation		
WOMEN	First	Second	
No College	23	2	4
College	4	2	9
One Grad	6	O	2
Both Grad MEN	0	4	2
No College	4	2	2
College	4	4	2
One Grad	9	O	2
Both Grad	4	2	2

MOLECULAR AND CELL BIOLOGY

	Immigrant Generation		
WOMEN	First	Second	Third+
No College	4	7	1
College	5	9	4
One Grad	6	13	2
Both Grad MEN	4	7	1
No College	3	2	1
College	2	4	2
One Grad	3	8	2
Both Grad	4	5	O

CHEMICAL BIOLOGY

	Immigrant Generation		
WOMEN	First	Second	Third+
No College	5	2	1
College	7	5	3
One Grad	3	9	2
Both Grad MEN	4	8	Ο
No College	6	1	1
College	5	7	8
One Grad	4	7	2
Both Grad	4	4	1

BIOENGINEEERING

	Immigrant Generation		
WOMEN	First	Second	Third+
No College	4	1	1
College	4	1	4
One Grad	6	10	О
Both Grad MEN	3	8	Ο
No College	6	2	1
College	3	6	4
One Grad	8	13	О
Both Grad	4	9	1

ECONOMICS

	Immigrant Generation		
WOMEN	First	Second	Third+
No College	13	6	2
College	5	4	1
One Grad	5	4	1
Both Grad MEN	3	4	O
No College	5	6	3
College	7	6	7
One Grad	2	5	3
Both Grad	10	14	5

ELECTRICAL ENGINEERING

	Immigrant Generation		
WOMEN	First	Second	Third+
No College	1	1	О
College	1	1	1
One Grad	1	2	O
Both Grad MEN	1	3	Ο
No College	5	6	2
College	7	8	8
One Grad	9	15	5
Both Grad	8	11	1

PHYSICS

	Immigrant Generation		
WOMEN	First	Second	Third+
No College	2	2	О
College	5	O	5
One Grad	0	O	5
Both Grad MEN	0	2	2
No College	2	5	7
College	5	7	14
One Grad	7	5	12
Both Grad	O	7	7

FILM

	Immigrant Generation		
WOMEN	First	Second	Third+
No College	3	O	17
College	0	3	3
One Grad	0	O	13
Both Grad MEN	0	O	3
No College	0	O	23
College	3	3	13
One Grad	0	3	10
Both Grad	0	0	O

DEGREE ASPIRATIONS

- Highest degree choice indicated
- Selected results
- Is degree choice associated with:
 - Immigrant generation?
 - Parental education?
 - Gender?

DEGREE ASPIRATIONS I: MD (%)

	Immigrant Generation		
WOMEN	First	Second	Third+
No College	11	14	7
College	16	18	6
One Grad	17	18	7
Both Grad MEN	26	20	11
No College	13	11	5
College	12	13	4
One Grad	15	16	9
Both Grad	18	19	12

DEGREE ASPIRATIONS II: MBA (%)

	Immigrant Generation		
WOMEN	First	Second	Third+
No College	18	11	7
College	19	13	7
One Grad	13	11	5
Both Grad MEN	14	13	5
No College	15	15	9
College	20	15	13
One Grad	18	16	9
Both Grad	13	15	8

DEGREE ASPIRATIONS III: PHD (%)

	Immigrant Generation		
WOMEN	First	Second	Third+
No College	22	21	24
College	17	19	25
One Grad	28	22	25
Both Grad MEN	25	25	32
No College	29	26	28
College	31	21	26
One Grad	23	24	30
Both Grad	40	29	29

DEGREE ASPIRATIONS IV: BA or MA (%)

	Immigrant Generation		
WOMEN	First	Second	Third+
No College	27	29	35
College	26	25	34
One Grad	23	21	29
Both Grad MEN	13	18	20
No College	31	27	32
College	21	27	32
One Grad	21	25	22
Both Grad	14	20	18

CAREER ASPIRATIONS

- Choice among 10 broad areas
- Selected results
- Is career choice associated with:
 - Immigrant generation?
 - Parental education?
 - Gender?

CAREER ASPIRATIONS I: MEDICINE (%)

	Immigrant Generation		
WOMEN	First	Second	Third+
No College	23	24	14
College	25	29	11
One Grad	26	30	12
Both Grad MEN	33	30	17
No College	19	18	5
College	15	19	5
One Grad	19	20	10
Both Grad	27	23	18

CAREER ASPIRATIONS II: ENGINEERING (%)

	Immigrant Generation		
WOMEN	First	Second	Third+
No College	6	4	2
College	6	2	4
One Grad	6	4	3
Both Grad MEN	5	7	1
No College	23	19	9
College	26	22	13
One Grad	25	23	9
Both Grad	34	23	8

CAREER ASPIRATIONS III: BUSINESS (%)

	Immigrant Generation		
WOMEN	First	Second	Third+
No College	21	14	7
College	23	14	9
One Grad	21	12	7
Both Grad MEN	17	16	6
No College	21	17	13
College	25	16	15
One Grad	19	19	14
Both Grad	14	14	13

CAREER ASPIRATIONS IV: EDUCATION, HELPING, ARTISTIC (%)

	Immigrant Generation		
WOMEN	First	Second	Third+
No College	21	23	32
College	18	18	29
One Grad	17	17	25
Both Grad MEN	11	14	31
No College	14	15	27
College	11	10	18
One Grad	10	8	17
Both Grad	5	8	10

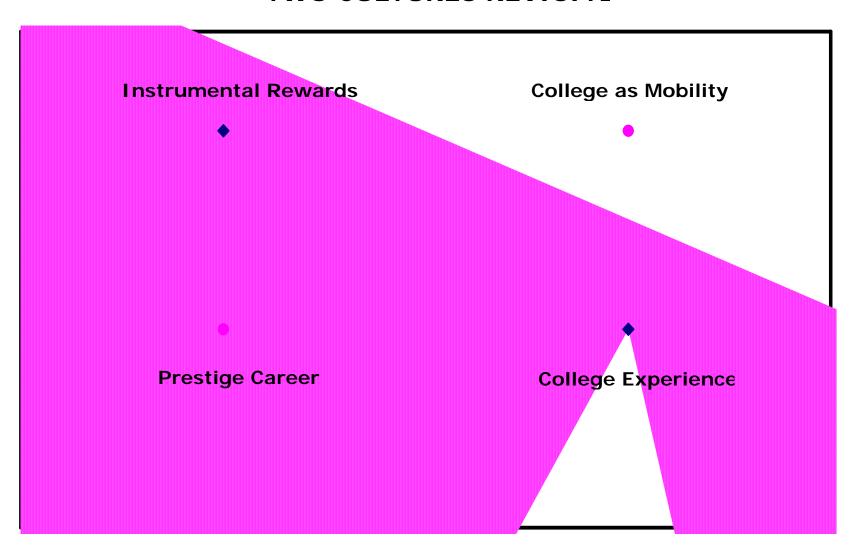
CAREER ASPIRATIONS V: "OTHER" AND "NO IDEA" (%)

	Immigrant Generation		
WOMEN	First	Second	Third+
No College	13	19	28
College	13	22	30
One Grad	12	19	30
Both Grad MEN	18	17	24
No College	9	14	22
College	9	15	22
One Grad	9	13	20
Both Grad	10	12	22

"Two Cultures" Revisited

- Brint et. al (2008) develop scales that measure two cultures of engagement:
 - Humanities/Social Science (academic interaction, interest in ideas)
 - Natural Sciences/Engineering (improving quantitative skills through collaborative study with aim of labor market rewards)
 - Men score higher than women on both scales
- By looking at immigrant generation, the full range of parental education and a broader array of items, our results add to this formulation

TWO CULTURES REVISITE



ACADEMIC CAPITAL

- [Lower Left]
- HIGH CAPITAL
- High Ed Immigrant
- High Prestige Majors
- Higher GPA Hard Major
- Succeeding beyondCal

- [Upper Right]
- LOW CAPITAL
- Non-Immigrant
- Lower Prestige Majors
- Lower GPA Easy Major
- Succeeding at Cal

SOCIAL CAPITAL

- [Lower Right]
- HIGH CAPITAL
- High Ed, Not Imm
- "Interesting" Majors
- Higher GPA Easy Major
- Cal as Personal Development

- [Upper Left]
- LOW CAPITAL
- 1st Generation Imm
- "Practical" Majors
- Lower GPA Hard Major
- Cal as Mobility

NEXT (BIG) STEPS

- Current study is a snapshot or composite of all enrolled undergraduates (regardless of year in school)
- What is needed is a developmental or longitudinal analysis to examine recruitment/selection versus socialization effects (an obvious example: career aspirations in medicine)

For this presentation and information on UCUES:

http://ucues.berkeley.edu/main/