A Primitive Milieu: Assessing Diversity Within College Architectural Programs

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INTRODUCTION

The status of inclusion in the architectural profession and particularity the schools of architecture are approaching extinction for African Americans and other minorities. The ethnicity of the architectural profession in this country is as follows: one percent African American, zero percent Native American/Alaskan, two percent Hispanic, three percent Asian Americans, twenty-five percent were undeclared, and sixty-nine percent were Caucasians (Natke, 2002). The percentage of African American architects in the profession has remained stagnant for the last twenty years. purports.

The architectural profession has finally realized that their future clients, staff and members will primarily come from minority groups that are now underrepresented in their ranks. Architects continue to be haunted by the speech, the late Whitney M. Young Jr., gave at the 1968 AIA National Convention in Portland Ore., when he called the vocation to assume the responsibility of embracing diversity within it's ranks. The current state of architecture practices discrimination, marginalization, isolation and stereotyping minorities, resulting in distrust and limited employment; interior design for women, computer-aided drafting for Asian Americans and government work for African Americans.

Significant minority participation in the architectural profession remains a social issue today. Currently of the 1,400 African American architects in America, approximately one-half graduated from seven historically black colleges or universities. Leaving the remaining 700 African American archi-

tects to graduate from the remaining 105 accredited architectural programs (Natke, 2002). Why do so many White schools of architecture, graduate so few African Americans?

This paper explores architectural diversity issues at the college level. Do schools of architecture practice racial and gender discrimination? How satisfied are students with the context of their architectural education? Once in college are minorities treated differently than the general population? And what can be done to increase minority enrollment in colleges of architecture?

The Demographics of Architectural Education

Every the National Architectural Accrediting Board (NAAB) publishes its statistical report of national student enrollment. Normally the report includes information on: preprofessional undergraduate programs, accredited B.Arch programs, accredited M. Arch programs, and national faculty data. Table One is a compilation of NAAB preprofessional undergraduate program information from 1996 to 2003. The data shows student enrollment to be generally increasing, with the academic year of 2002/03 to have the highest recorded enrollment to date.

The seven academic school years that Table One represents had a 28% full-time student population increase from year 1996/97 to 2002/03. The 2002/03 academic year had a national architectural undergraduate female enrollment of 40%; African American enrollment of 7%; Asian/Pacific Isle enrollment of 7%; and Hispanic enrollment of 15.5%.

NAAB STATISTICS REPORT 1996/97 - 2002/03

NATIONAL STUDENT	PREPRO	REPROFESSIONAL UNDERGRADUATE PROGRAMS							
ENROLLMENT	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03		
Full-time student totals	12,130	11,789	12,062	13,391	13,610	12,824	15,498		
Part-time student totals	1,602	1,524	1,386	1,782	1,856	1,651	1,688		
Students working part-time	2,620	1,805	2,444	2,451	2,566	778	672		
Women student totals	4,317	4,419	4,495	5,314	5,836	5,094	6,233		
African-American student totals	660	682	641	789	830	842	1,135		
Asian/Pacific Isle student totals	1,112	1,065	1,042	1,106	1,079	855	1,069		
Hispanic student totals	991	955	929	1,368	1,337	1,514	2,413		
Graduates of programs	2,324	2,199	2,397	2,716	2,791	2,191	2,509		
Women Graduates	746	807	774	1,044	1,127	761	921		
African-American Graduates	83	81	85	96	91	74	116		
Asian/Pacific Isle Graduates	225	233	226	244	272	301	166		
Hispanic Graduates	157	162	157	229	215	205	230		

December 2001- September 2003

TABLE 2

NAAB STATISTICS REPORT 1996/97 - 2002/03

NATIONAL STUDENT	ACCREDITED B.Arch PROGRAMS							
ENROLLMENT	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	
Full-time student totals	16,025	16,423	15,312	14,792	16,211	13,476	14,081	
Part-time student totals	1,178	1,377	1,606	1,568	2,196	1,667	1,412	
Students working part-time	1,702	1,981	2,073	1,878	1,885	1,456	1,106	
Women student totals	5,046	5,413	5,201	5,789	6,302	5,212	5,596	
African-American student totals	1,122	1,165	1,243	1,342	1,156	923	1,069	
Asian/Pacific Isle student totals	1,591	1,497	1,425	1,552	1,670	1,187	1,156	
Hispanic student totals	1,340	1,249	1,184	1,400	2,090	1,797	1,426	
Graduates of programs	3,028	2,710	2,617	2,825	2,773	2,253	2,483	
Women Graduates	849	762	754	749	910	779	793	
African-American Graduates	131	111	131	137	153	129	116	
Asian/Pacific Isle Graduates	307	294	239	276	276	240	243	
Hispanic Graduates	223	222	198	212	206	147	186	

December 2001- September 2003

TABLE 3

NATIONAL STUDENT		ACCREDITED M.Arch PROGRAMS						
ENROLLMENT	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	
Full-time student totals	5,252	5,461	5,769	6,302	6,524	5,322	7,026	
Part-time student totals	533	677	689	772	796	634	701	
Students working part-time	838	969	1,021	1,340	1,089	957	584	
Women student totals	2,143	2,273	2,210	2,414	2,072	2,218	2,946	
African-American student totals	133	133	119	160	143	147	199	
Asian/Pacific Isle student totals	522	550	607	709	584	334	572	
Hispanic student totals	302	301	427	595	380	361	451	
Graduates of programs	1,645	1,799	2,002	1,998	1,750	1,611	2,159	
Women Graduates	580	747	744	643	672.5	547	803	
African-American Graduates	45	32	40	41	49	28	40	
Asian/Pacific Isle Graduates	156	164	197	252	219	173	214	
Hispanic Graduates	82	92	104	113	116	105	157	

December 2001- September 2003

These are the highest percentages of African American and Hispanic student enrollment to date.

Unfortunately, graduation rates of minority students when compared to the student body as a whole are not as joyfully. Joyfull Taking the same academic year of 2002/03: of the graduating class 36% were females, 4.6% were African Americans, 6.6% were Asian, and 9% were Hispanic. Table One shows that minorities graduate from architectural school disproportional to their population.

The percentages of student enrollment of Table Two 'Accredited B. Arch Programs' are similar to Table One with one exception. The exception is that 2002/03 is the first academic year that undergraduate student enrollment in the preprofessional programs was larger than enrollment in the accredited B. Arch programs. Again the percentages of student enrollment in Table Three 'Accredited M. Arch Programs' are similar to Tables One & Two with the difference of exceptionally lower African American attendants. Table Three shows the matriculation rate of African Americans in architectural graduate school to be approximately 3% of the student body, with a graduation rate of 1.85% of the class. The small percentage of African Americans enrolled in architectural graduate school is not surprising once one understands the environment.

THE ENVIRONMENT

The AIA Diversity Community, July 2002, published a report "Status of Diversity in the Architecture Profession". This report high lighted gender in America per census 2000, ethnicity in America per census 2002 and AIA architects by ethnicity per July 2002. The point of parity being since 51% of the population in 2000 was female, why is the female population in the American Institute of Architects (AIA) only 11%. And if African Americans constituted 12% of America's population in 2002, why do they only constitute 1% of the AIA membership?

This paper takes the statistics one step further. In the 2002/03 academic school year why do African American constitute only 7% of undergraduate architectural programs and 2% of graduate architectural programs (NAAB, 2004)? Why do the gender and ethnic populations not reflect society? Do schools of architecture practice racial and gender discrimination? Are minorities treated differently

than the general population in architectural school? And what can be done to increase minority enrollment in colleges of architecture?

According to literature, the overwhelming reason for lack of parity in the population of architecture schools is racial and gender discrimination (Dutton 1991, Buss, Corroto, Diaz, Grant, Kliment 2003, and Mitgang 1997). Racism was one of many reasons given at the 2001 summit between the American Institute of Architects (AIA) and the National Organization of Minority Architects (NOMA) why so few minorities enter schools of architecture (Williams, pp 133). Carla Corroto argues that racism is the simple and obvious answer as to why minorities continue to be marginalized in architecture (pp. 104).

"Understanding racism across architecture involves conceptualizing at the institutional level. From that perspective, racism is a combination of prejudice and power that allows the dominant race to institutionalize its control at all levels in education" (Corroto, pp 105).

Shirl Buss also argues that at the institutional level sexism, classism and racism is structured within the architectural design studio (Buss, pp 34).

Brad Grant argues that today's architectural education is grounded in elitism, racism, ignorance, politics, economics, and cultural social forces (Grant, pp 150).

"Tradition architectural education is powerfullyprejudicial, leading to the virtual denial of African Americans', women, and others' identities in built form. This narrow focus, with its determined ignorance, channels into becoming custodians of the same status quo, obstructing any opportunity of shared experience and cultural sensitivity" (Grant, pp 151).

The literature also argues that women and minorities are treated differently than the general population. Kathryn Anthony argues that the perception is that women and minority students must outperform Caucasian male students so that the architectural faculty will take them seriously (Anthony, 2001, pp 20-21). Julie Diaz, at white female architectural student felt that minorities were trivialized, ridiculed and overlooked.

"The contradictions displayed by the architectural program were overwhelming to me. On one hand, there was much expressed concern for a more equitable and inclusive program. On the other hand, the

reality was that only one faculty person of color was on a tenure-track line. The reality was that the histories and contributions of cultures other than European were either significantly minimized or totally overlooked. The reality was that students of color were asked to bear the primary responsibility for recruiting and retaining African American and Chicano students, making it more difficult for them to stayacademically competitive. The reality was that the values and concerns of communities evolving around people of color were ignored, ridiculed, or trivialized (Julie Diaz, pp 127).

What can be done to increase minority enrollment in colleges of architecture? The literature on how to increase gender and minority participation in schools of architecture can be summed up to the following items:

- Hire more women and minority faculty;
- 2. More scholarship programs
- Better exposure and role models at the middle and high school levels;
- More active involvement and recruitment of students by African American architects;
- 5. Improved college recruitment of inner city high schools students;
- Change the design projects and architectural curriculum to be more reflective of America's problems and diverse communities;
- More summer high school architectural camps and college campus tours for students (Anthony 2001, Hrabowski, Sartor, and Mitgang).

METHOD

This paper analyzes data from a survey administered to second, third and fourth year students enrolled in the department of architecture at Southern Illinois University. The survey uses background characteristic variables, criterion variables and open-ended questions to address the research: do schools of architecture practice racial and gender discrimination; how satisfied are students with the context of their architectural education; and are minorities treated differently than the general population? This experiment and survey is generalizable to preprofessional undergraduate architectural programs. Regardless of accreditation, or graduate and undergraduate programs, in today's environment of architectural education this experiment is generalizable to all architectural programs.

The survey was pre-tested with a group of students from each year. The survey instrument was reviewed with the recommended rewording of some of the questions. The survey instrument was corrected and administered to the students in their studio class. Second year students returned 65 surveys from a total of 79 for a completion rate of 82%. Third year studio returned 25 surveys from a total of 29 for a completion rate of 86%. And four-year studio returned 32 of 46 surveys for a completion rate of 70%.

ANALYSIS OF DATA

The surveys were collected, coded and put into a SPSS statistical computer program. Frequency distributions of the survey was generated using demographics, criterion and background variables. The frequency distribution of selected variables is shown in Table _ through Table _. Chi-Square tests of significance (2-sided) were run on all variables; significant variables are identified on the frequencies tables. Also multiple linear regression analysis was run to try to draw inferences about the relationships of the variables.

Frequency distributions were broken down into four tables: demographics, year, gender, and gender/ year. Table 4 gives the demographics of the students by their year in college; sophomore, junior, and senior. Second year demographics are as follows: 56.1% of the class were males, 43.9% female; 53% of the class has part-time employment, 45.5% unemployed, and 1.5% are full time employed; the class is 92.4% white, 7.6% non-white; and 98.5% of the students attend college full time, 1.5% are part-time students.

Third year demographics from Table 4 are as follows: 64%b of the class were males, 36% females; 56% of the students were unemployed, 40% employed part-time, and 4% worked full time; white students account for 88% of the class, non-white students equal 12%; the majority of the students 96% attend college full time, 4% part-time. Fourth year demographics show: 65.6% of the class were males, 34.4% were female; 53.1% of the students worked part-time, 37.5% were unemployed, and 9.4% worked full-time; 90.6% of the class are white, 9.4% are non-white; and 100% of the seniors attend college full-time. Basically the demographics show that the majority of the student

TABLE 4
DEMOGRAPHICS

		2 ND Y			EAR		YEAR N=
		Count	%	Count	%	Count	%
	Male	37	56.1%	16	64%	21	65.6%
GENDER	Female	29	43.9%	9	36%	11	34.4%
	White	61	92.4%	22	88.0%	29	90.6%
RACE	Non White	5	7.6%	3	12.0%	3	9.4%
	Full-Time	1	1.5%	1	4.0%	3	9.4%
EMPLOY -MENT	Part Time	35	53.0%	10	40.0%	17	53.1%
STATUS	Unemployed	30	45.5%	14	56.0%	12	37.5%
	Full Time	65	98.5%	24	96.0%	32	100.0%
COLLEGE	Part Time	1	1.5%	1	4.0%	0	.0%

body are male, work part-time, white and attend college full-time.

Table 5 tabulates the frequencies of the variables from the survey by year, i.e. all of the students for each year are tabulated per variable. A majority of 2^{nd} , 3^{rd} and 4^{th} year students: took architectural drawing courses in high school, do not believe that the department of architecture discriminates racially (it

should be noted that 12% of the juniors and 6.3% of the seniors though that the department does racially discriminates); has not had a mentor; were not recruited to the architecture program; did not attend a summer college 'introductory architectural program' while in high school; are satisfied with the content of their architectural education; do not believe that that 'persons of color' are treated differently than the general architectural population; the

TABLE 5
FREQUENCIES BY YEAR

			YEAR N=		3^{RD} YEAR 4^{TH} YE. $N=$ $N=$		
		Count	0/0	Count	%	Count	%
Q U	Yes	37	56.1%	17	68.0%	21	65.6%
E S#2		29	43.9%	8	32.0%	11	34.4%
Q U	Yes	1	1.5%	3	12%	2	6.3%
E S #3	No	58	87.9%	18	72%	28	87.5%
	Do Not Know	7	10.6%	4	16%	2	6.3%
Q U	Yes	14	21.2%	8	32%	3	9.4%
E S 4	No	52	78.8%	17	68%	29	90.6%
Q U	Yes	31	47%	15	60%	15	46.9%
E S #5	No	31	47%	9	36%	17	53.1%
	Do Not Know	4	6.1%	1	4%	0	0%
Q	Yes	1	1.5%	5	20%	1	3.1%
Ŭ E	No	64	97.0%	20	80%	29	90.6%
S #6	Do Not Know	1	1.5%	0	0%	2	6.3%
Q U	Yes	1	1.5%	1	4%	1	3.1%
E S 7	No	65	98.5%	24	96.0%	31	96.9%
Q	Yes	50	75.8%	16	64.0%	27	84.4%
U E	No	9	13.6%	5	20.0%	3	9.4%
S 8	Do Not Know	7	10.6%	4	16.0%	2	6.3%

TABLE 5 Cont...

FREQUENCIES BY YEAR

			EAR		EAR	4 TH Y. N=	
		Count	%	Count	0/0	Count	%
Q U	Yes	11	16.7%	11	44.0%	22	68.8%
E S	No	48	72.7%	11	44.0%	9	28.1%
#9	Do Not Know	7	10.6%	3	12.0%	1	3.1%
Q U	Yes	3	4.5%	3	12.0%	7	21.9%
E S1	No	48	72.7%	15	60.0%	19	59.4%
0	Do Not Know	15	22.7%	7	28.0%	6	18.8%
Q U	Yes	20	30.3%	11	44.0%	8	25.0%
E S	No	42	63.6%	14	56.0%	24	75.0%
11	Do Not Know	4	6.1%	0	0%	0	0%
Q U	Yes	36	55.4%	13	56.5%	19	59.4%
E S	No	12	18.5%	4	17.4%	5	15.6%
12	Do Not Know	17	26.2%	6	26.1%	8	25.0%

*P<0.05 **P<0.01 ***P<0.001

availability of financial aid was not a important influence in choosing to attend this department of architecture; agreed that financial assistance, in the department of architecture, should be based on 'need' instead of merit. When the students were asked if their high school education properly prepared them for the architecture courses: 2nd year's answer was split with 47% each answering 'yes'

and 'no'; the majority of the junior class answered 'yes', while the majority of the senior class answering 'no'. When the students were asked if women were treated differently than the general architectural population: the majority of the 2nd year students answered 'no', 3rd year was undecided and split their response with 44% answering both 'yes' and 'no', and the seniors answered 'yes'.

TABLE 6
FREQUENCIES BY GENDER

			ALE =	FEMALE N	[=
		Count	%	Count	%
	Yes	55	74.3%	20	40.8%
QUES #2	No	19	25.7%	29	59.2%
	Yes	4	5.4%	2	4.1%
QUES #3	No	64	86.5%	40	81.6%
	Do Not Know	6	8.1%	7	14.3%
QUES #4	Yes	18	24.3%	7	14.3%
	No	56	75.7%	42	85.7%
	Yes	39	52.7%	22	44.9%
QUES #5	No	33	44.6%	24	49.0%
	Do Not Know	2	2.7%	3	6.1%
	Yes	5	6.8%	2	4.1%
QUES #6	No	68	91.9%	45	91.8%
QCES#0	Do Not Know	1	1.4%	2	4.1%
	Yes	3	4.1%	0	0%
QUES #7	No	71	95.9%	49	100%
	Yes	58	78.4%	35	71.4%
QUES #8	No	10	13.5%	7	14.3%
	Do Not Know	6	8.1%	7	14.3%
*P<0.05		**P<0.01	1	***P<	0.001

TABLE 6 Cont...

FREQUENCIES BY GENDER

QUES #9 No 37 50.0% 31 63.3% Do Not Know 6 8.1% 5 10.2% Yes 10 13.5% 3 6.1% No 54 73.0% 28 57.1% Do Not Know 10 13.5% 18 36.7% Yes 20 27.0% 19 38.8% No 51 68.0% 20 50.2%			N	IALE	FEN	MALE
QUES #9 No 31 41.9% 13 26.5% No 37 50.0% 31 63.3% Do Not Know 6 8.1% 5 10.2% Ves 10 13.5% 3 6.1% Do Not Know 10 13.5% 18 36.7% Yes 20 27.0% 19 38.8% No 51 68.0% 20 50.2%			Count	%	Count	%
QUES #9 37 30.0% 31 63.3% Do Not Know 6 8.1% 5 10.2% Yes 10 13.5% 3 6.1% No 54 73.0% 28 57.1% Do Not Know 10 13.5% 18 36.7% Yes 20 27.0% 19 38.8% No 51 68.0% 20 50.2%		Yes	31	41.9%	13	26.5%
Know 6 8.1% 3 10.29 Yes 10 13.5% 3 6.1% No 54 73.0% 28 57.1% Do Not Know 10 13.5% 18 36.7% Yes 20 27.0% 19 38.8% No 51 68.0% 20 50.2%	QUES #9	No	37	50.0%	31	63.3%
No 54 73.0% 28 57.1% Do Not Know 10 13.5% 18 36.7% Yes 20 27.0% 19 38.8% No 51 68.0% 20 50.2%	QUES #7		6	8.1%	5	10.2%
QUES #10 54 73.0% 28 57.19 Do Not Know 10 13.5% 18 36.79 Yes 20 27.0% 19 38.89 No 51 68.0% 20 50.20	QUES #10	Yes	10	13.5%	3	6.1%
Know 10 13.5% 18 36.7% Yes 20 27.0% 19 38.8% No 51 68.0% 20 50.2%		No	54	73.0%	28	57.1%
No 51 68.09/ 20 50.20			10	13.5%	18	36.7%
		Yes	20	27.0%	19	38.8%
QUES#11 51 55.57% 25 55.27	QUES #11	No	51	68.9%	29	59.2%
Do Not Know 3 4.1% 1 2.0%			3	4.1%	1	2.0%
	QUES #12			63.0%	22	46.8%
QUES #12			12	16.4%	9	19.1%
Do Not 15 20.5% 16 34.09			15	20.5%		34.0%

Table 6 tabulates the frequencies of gender; the entire student body of 2nd, 3rd, and 4th year are grouped together and separated by male and female. The majority of males and females: do not believe that the department of architecture discriminates racially, did not have a mentor, were not recruited to the architecture program, did not

attend a summer college 'introductory architectural program' while in high school, are satisfied with the content of their architectural education, do not believe that women are treated differently than the general architectural student population, do not believe that 'persons of color' are treated differently than the general architectural student

TABLE 7
FREQUENCIES BY GENDER/YEAR

QUES #2: Arch Drafting In High School

	2nd Voor	Count	27	10
GENDER			YES	NO
		% within year	73.0%	27.0%
	3 rd Year	Count	14	2
		% within year	87.5%	12.5%
	2nd Voor	Count	10	19
	4 th Year	Count	14	7
		% within year	66.7%	33.3%
		% within year	34.5%	65.5%

QUES #3: Discriminates Racially

3

33.3%

7

63.6%

6

66.7%

4

36.4%

Count

% within year

Count

% within year

3rd Year

4th Year

GENDER			YES	NO	DO NOT KNOW
	2 nd Year	Count	1	33	3
MALE	2 Year	% within year	2.7%	89.2%	8.1%
	3 rd Year	Count	1	13	2
	3 Year	% within year	6.3%	81.3%	12.5%
	4 th Year	Count	2	18	1
		% within year	9.5%	85.7%	4.8%
FEMALE	2 nd Year	Count	0	25	4
		% within year	.0%	86.2%	13.8%
	3 rd Year	Count	2	5	2
		% within year	22.2%	55.6%	22.2%
	4 th Year	Count	0	10	1
		% within year	.0%	90.9%	9.1%

*P<0.05 **P<0.01 ***P<0.001

QUES #4: Have A Mentor								
GENDER			YES	NO				
	2 nd Year	Count	11	26				
MALE	2" Year	% within year	29.7%	70.3%				
	3 rd Year	Count	4	12				
		% within year	25.0%	75.0%				
	4 th Year	Count	3	18				
		% within year	14.3%	85.7%				
	2 nd Year	Count	3	26				
	2 Year	% within year	10.3%	89.7%				
FEMALE	3 rd Year	Count	4	5				
	5 Year	% within year	44.4%	55.6%				
	4 th Year	Count	0	11				
		% within year	.05	100.0%				

	QUES #	5: High School P	repares Yo	u For Colle	ge Arch
GENDER			YES	NO	DO NOT KNOW
2 nd Year		Count	21	15	1
MALE 3	2 Year	% within year	56.8%	40.5%	2.7%
	3 rd Year	Count	10	5	1
	3 Year	% within year	62.5%	31.3%	6.3%
	4 th Year	Count	8	13	0
	4 rear	% within year	38.1%	61.9%	.0%
	2 nd Year	Count	10	16	3
	2 I cai	% within year	34.5%	55.2%	10.3%
FEMALE 3 rd Yea	ard Waan	Count	5	4	0
	3 i ear	% within year	55.6%	44.4%	.0%
	4 th Year	Count	7	4	0
		% within year	63.6%	36.4%	.0%
*P<	<0.05	**P<0.0	1	***P	< 0.001

QUES #6: Recruited To Arch Program							
GENDER	GENDER YES NO DO NOT KNOW						
and v		Count	1	35	1		
	2 nd Year	% within year	2.7%	94.6%	2.7%		
	3 rd Year	Count	3	13	0		
MALE		% within year	18.8%	81.3%	.0%		
	4 th Year	Count	1	20	0		
		% within year	4.8%	95.2%	.0%		
	2 nd Year	Count	0	29	0		
		% within year	.0%	100.0%	.0%		
	3 rd Year	Count	2	7	0		
FEMALE		% within year	22.2%	77.8%	.0%		
	4 th Year	Count	0	9	2		
		% within year	.0%	81.8%	18.2%		

	QUES #7:	Attend Summer Colleg	e Intro. Arch P	rogram
GENDER			YES	NO
	2 nd Year	Count	1	36
	2 Year	% within year	2.7%	97.3%
	3 rd Year	Count	1	15
MALE		% within year	6.3%	93.8%
	4 th Year	Count	1	20
		% within year	4.8%	95.2%
	2 nd Year	Count		29
		% within year		100.0%
FEMALE	3 rd Year	Count		9
FEMALE		% within year		100.0%
	4 th Year	Count		11
		% within year		100.0%

QUES #8: Satisfied With Arch Education						
GENDER YES NO DO NOT KNOW						
	2 nd Year	Count	28	5	4	
	2 Year	% within year	75.7%	13.5%	10.8%	
	3 rd Year	Count	11	4	1	
MALE		% within year	68.8%	25.0%	6.3%	
	4 th Year	Count	19	1	1	
		% within year	90.5%	4.8%	4.8%	
	2 nd Year	Count	22	4	3	
		% within year	75.9%	13.8%	10.3%	
FEMALE	3 rd Year	Count	5	1	3	
FEMALE		% within year	55.6%	11.1%	33.3%	
	4 th Year	Count	8	2	1	
		% within year	72.7%	18.2%	9.1%	

QUES #9: Are Women Treated Differently						
GENDER			YES	NO	DO NOT KNOW	
	2 nd Year	Count	9	25	3	
	2 Year	% within year	24.3%	67.6%	8.1%	
	3 rd Year	Count	4	9	3	
MALE		% within year	25.0%	56.3%	18.8%	
	4 th Year	Count	18	3	0	
		% within year	85.7%	14.3%	.0%	
	2 nd Year	Count	2	23	4	
		% within year	6.9%	79.3%	13.8%	
FEMALE	3 rd Year	Count	7	2	0	
		% within year	77.8%	22.2%	.0%	
Ī	4 th Year	Count	4	6	1	
		% within year	36.4%	54.5%	9.1%	

*P<0.05 **P<0.01 ***P<0.001

QUES #10: Are Persons Of Color Treated Differently						
GENDER			YES	NO	DO NOT KNOW	
	2 nd Year	Count	3	30	4	
	2 Year	% within year	8.1%	81.1%	10.8%	
	3 rd Year	Count	1	12	3	
MALE		% within year	6.3%	75.0%	18.8%	
	4 th Year	Count	6	12	3	
		% within year	28.6%	57.1%	14.3%	
FEMALE	2 nd Year	Count	0	18	11	
		% within year	.0%	62.1%	37.9%	
	3 rd Year	Count	2	3	4	
		% within year	22.2%	33.3%	44.4%	
	4 th Year	Count	1	7	3	
		% within year	9.1%	63.6%	27.3%	

QUES #11: Is Financial Aid A Important Influence

	2 nd Voor	Count	10	24	3
GENDER			YES	NO	DO NOT KNOW
		% within year	27.0%	64.9%	8.1%
	3 rd Year	Count	6	10	0
	3 Year	% within year	37.5%	62.5%	.0%
	4 th Year	Count	4	17	0
	4 1 Cal	% within year	19.0%	81.0%	.0%
	2 nd Year	Count	10	18	1
		% within year	34.5%	62.1%	3.4%
FEMALE	3 rd Year	Count	5	4	0
		% within year	55.6%	44.4%	.0%
	4 th Year	Count	4	7	0
		% within year	36.4%	63.6%	.0%

QUES #12: Should Financial Assistance Be Based On "Need" Instead Of Merit							
GENDER	GENDER YES NO DO NOT KNOW						
	2 nd Year	Count	22	7	7		
	2 Year	% within year	61.1%	19.4%	19.4%		
	3 rd Year	Count	11	2	3		
MALE		% within year	68.8%	12.5%	18.8%		
	4 th Year	Count	13	3	5		
		% within year	61.9%	14.3%	23.8%		
	2 nd Year	Count	14	5	10		
		% within year	48.3%	17.2%	34.5%		
	3 rd Year	Count	2	2	3		
FEMALE		% within year	28.6%	28.6%	42.9%		
	4 th Year	Count	6	2	3		
		% within year	54.5%	18.2%	27.3%		

*P<0.05

population, the availability was not a important influence in choosing to attend the department of architecture, and believe that financial assistance should be based on 'need' instead of merit.

There was a difference among gender in Table 6 for the following questions: the majority of males took drafting courses in high school, the majority of females did not; and the majority of males felt that their high school did prepare them for beginning architectural courses, while the majority of females did not feel prepared.

The frequencies in Table 7 are tabulated by gender by year. The majority of all groups for all years: do not believe that architecture discriminates, did not have a mentor, were not recruited to the architecture program, did not go to an 'introductory architecture program' while in high school, and are satisfied with the content of their architectural education.

Differences for Table 7 include the following: the majority of females in 2nd and 3rd year studio did not take architectural drafting in high school; the majority of 4th year males and 2nd year females do not believe that their high school properly prepare

them for their beginning architectural courses; the majority of 4th year males and 3rd year females believe that women are treated differently than the general architectural student population. The majority of 3rd year females 'do not know' whether 'persons of color' are treated differently than the general architectural population. The availability of financial aid was an important influence for the majority 3rd year females in choosing to attend the department of architecture. And the majority of 3rd year females 'do not know' whether financial assistance, in the department of architecture, should be based on 'need' instead of merit.

Table 8 is frequencies of persons of color. Only eleven students or 9% of the population completing surveys identified themselves as 'persons of color'. The lower number of surveys makes it difficult to achieve significance and to get a good understanding of what is going on. Table 8 'Frequencies of Persons of Color' is a sub-set of all of the pervious tables but the results of this experiment helps to complete the picture.

The majority of 'persons of color' by year agree with the majority of their fellow students by year, on the following questions: mentorship, high school preparation for college architecture courses, recruitment, introductory architecture programs for high school students, and satisfaction with content of architecture education. 'Persons of Color' differ from the majority, Table 5, in the following areas: the majority did not take architectural drafting courses in high school; the majority of 2nd year students do not know if the department of architecture discriminates racially, however one third of both the third and fourth year students believe there is racial discrimination. The majority of 3rd and 4th year 'persons of color' believe that women are treated differently than the general architectural student body; the majority of 2nd year do not know. The majority of 4th year 'persons of color' believe that they are treated differently than the general architectural student population; 2nd and 3rd year do not know. And the majority of 3rd and 4th year 'persons of color' agreed that the availability of financial aid was an important influence in choosing to attend the department of architecture; 2nd year students were undecided.

The last three questions of the survey were openended questions giving the students the opportunity to express themselves in their own words. Question 13 asks the students 'what can be done to increase minority enrollment in the department of architecture. The majority of the responses centered on increasing minority faculty, more recruitment from minority schools, greater exposure of the architecture program to minorities in high schools, and diversity core classes. One student expressed his feeling quite clearly,

"I don't know the faculty already bends over backwards for them. I personally believe that the ability to speak fluent English should be a requirement. Women & persons of color are treated better than white males. One professor is known to give women with large breasts higher grades. Another spends more time with non-English speaking students."

Question 14 asked the students why did they attend a 'preprofessional undergraduate architectural program' instead of a B.Arch program. The general response was that the students did not know that their program was not a B.Arch or that the program was close to their home.

Question 15 asked why do students leave the architectural program. The general response was that the discipline, workload and stress is more than most students can handle.

CONCLUSION

Research shows that today's schools of architecture are in a state of flux. Approximately 40% of the student populations of preprofessional, B.Arch and M.Arch architectural degree programs are females. Many of the student survey questions tuned out to be gender significant. African American populations in architecture school vary from 4% in undergraduate to 1% in graduate school.

The majority of students from the survey did not think that schools of architecture practiced racial and gender discrimination; and were satisfied with the context of their architectural education. A sizable percentage of the student's surveyed population believed that women and 'persons of color' were treated differently than the general architectural student population.

Literature runs counter to the student survey and argues that racial discrimination, economics, ignorance, social forces are alive and well in schools of architecture. As low as the population percentages are for minorities, they have improved. Both the literature and students from the survey argue the increase of gender and minority participation in schools of architecture is by:

- Hire more women and Minority faculty;
- More scholarship programs
- More active involvement and recruitment of students by African American Architects at the middle and high school levels;
- More summer middle and high school architectural camp and college tour programs.

Racial and gender issues still exist in schools of architecture. The population of African Americans in the 'American Institute for Architects" has not been higher than 1% for the last twenty years. Improvement will continue with more scholarships, gender and minority involved recruitment at the middle and high school levels, and more middle and high school architectural programs.

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