Tutorial 20-21 and 21-22

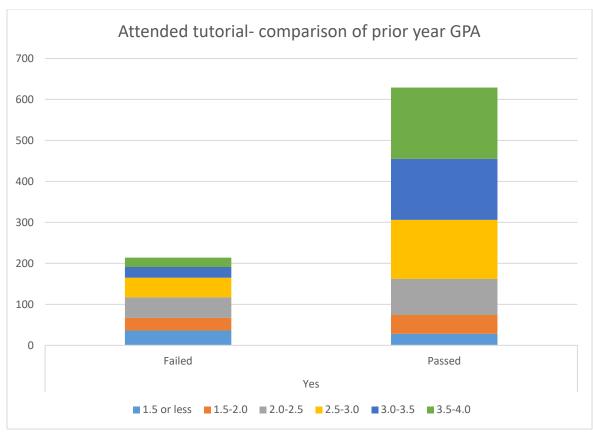
A One-way ANCOVA was conducted to determine a statistically significant difference between grades of students who attended tutorial compared to students in the same sections, controlling for one previous year's GPA. Summer 2020-Spring 2022 tutorial students were compared to all other students in the same sections. Their prior year GPA was calculated and students without prior enrollments were excluded from the analysis.

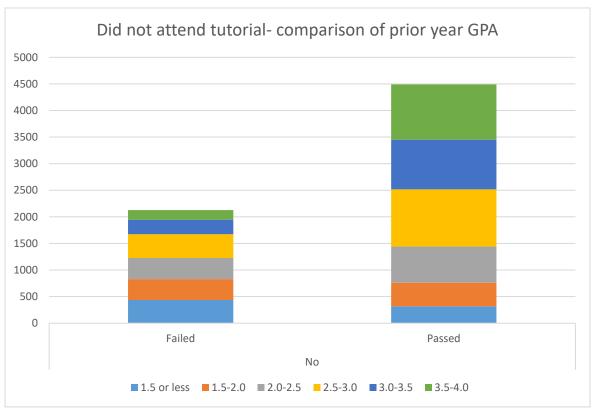
Grades were converted to a GPA type scale to perform the ANCOVA (A/P=4, B=3, C=2, D=1, F/FW/NP/DR/W/EW=0)

There was a significant effect of tutorial on grades after controlling for one previous year's GPA, F=30.926, p<.01. The effect size was small to medium (d=0.304).

Tutorial	Prior GPA	Success in Course
No	1.5 or less	35.6%
	1.5-2.0	45.7%
	2.0-2.5	52.2%
	2.5-3.0	62.4%
	3.0-3.5	73.5%
	3.5-4.0	83.1%
	Overall	66.4%
Yes	1.5 or less	58.1%
	1.5-2.0	68.5%
	2.0-2.5	69.2%
	2.5-3.0	78.5%
	3.0-3.5	79.3%
	3.5-4.0	88.8%
	Overall	79.3%

^{*}Includes same enrollments as ANOVCA calculation





Tutorial Services, S	uccess	Rate	es by Etl	hnicity	
			2021-202		
Ethnicity	Yes		No		Difference
American Indian or Alaska Native					
Asian	82.80%	93	72.81%	938	9.99%
Black or African American	60.00%	40	58.14%	344	1.86%
Hispanic/Latino	74.88%	419	58.15%	3996	16.73%
Native Hawaiian or Other Pacific Islander			56.25%	32	
Two or More Races	73.08%	27	59.81%	209	13.27%
Unknown/Non-Respondent			74.51%	51	
White	87.41%	135	69.57%	1299	17.84%
Overall Total			62.50%		15.20%
			2020-202	21	
Ethnicity	Yes		No		Difference
American Indian or Alaska Native			45.45%	11	
Asian	88.57%	71	77.94%	855	10.63%
Black or African American	70.45%	49	58.54%	344	11.91%
Hispanic/Latino	80.28%	372	62.37%	4045	17.91%
Native Hawaiian or Other Pacific Islander			33.33%	26	
Two or More Races	85.71%	15	68.00%	182	17.71%
Unknown/Non-Respondent			70.37%	86	
White	81.94%	162	70.83%	1362	11.11%
Overall Total	81.20%		65.90%		15.30%
	2019-2020				
Ethnicity	Yes		No		Difference
American Indian or Alaska Native			64.00%	25	
Asian					
Asiail	82.58%	178	74.82%	1251	7.76%
Black or African American	82.58% 70.69%	178 116	74.82% 59.46%		
					7.76% 11.23% 10.42%
Black or African American	70.69%	116	59.46%	629	11.23% 10.42%
Black or African American Hispanic/Latino	70.69%	116	59.46% 62.84%	629 7276	11.23% 10.42%
Black or African American Hispanic/Latino Native Hawaiian or Other Pacific Islander	70.69% 73.26%	116 965 31 13	59.46% 62.84% 66.67%	629 7276 51	11.23% 10.42% 18.49%
Black or African American Hispanic/Latino Native Hawaiian or Other Pacific Islander Two or More Races	70.69% 73.26% 80.65%	116 965 31	59.46% 62.84% 66.67% 62.16%	629 7276 51 185	11.23% 10.42% 18.49% 18.31%
Black or African American Hispanic/Latino Native Hawaiian or Other Pacific Islander Two or More Races Unknown/Non-Respondent	70.69% 73.26% 80.65% 92.31% 78.83%	116 965 31 13	59.46% 62.84% 66.67% 62.16% 74.00%	629 7276 51 185 50	11.23% 10.42%
Black or African American Hispanic/Latino Native Hawaiian or Other Pacific Islander Two or More Races Unknown/Non-Respondent White	70.69% 73.26% 80.65% 92.31% 78.83%	116 965 31 13	59.46% 62.84% 66.67% 62.16% 74.00% 71.37%	629 7276 51 185 50 2627	11.23% 10.42% 18.49% 18.31% 7.46%
Black or African American Hispanic/Latino Native Hawaiian or Other Pacific Islander Two or More Races Unknown/Non-Respondent White	70.69% 73.26% 80.65% 92.31% 78.83%	116 965 31 13 326	59.46% 62.84% 66.67% 62.16% 74.00% 71.37% 65.80%	629 7276 51 185 50 2627	11.23% 10.42% 18.49% 18.31% 7.46%
Black or African American Hispanic/Latino Native Hawaiian or Other Pacific Islander Two or More Races Unknown/Non-Respondent White Overall Total	70.69% 73.26% 80.65% 92.31% 78.83% 75.70%	116 965 31 13 326	59.46% 62.84% 66.67% 62.16% 74.00% 71.37% 65.80%	629 7276 51 185 50 2627	11.23% 10.42% 18.49% 18.31% 7.46% 9.90%
Black or African American Hispanic/Latino Native Hawaiian or Other Pacific Islander Two or More Races Unknown/Non-Respondent White Overall Total Ethnicity	70.69% 73.26% 80.65% 92.31% 78.83% 75.70%	116 965 31 13 326	59.46% 62.84% 66.67% 62.16% 74.00% 71.37% 65.80%	629 7276 51 185 50 2627	11.23% 10.42% 18.49% 18.31% 7.46% 9.90%
Black or African American Hispanic/Latino Native Hawaiian or Other Pacific Islander Two or More Races Unknown/Non-Respondent White Overall Total Ethnicity American Indian or Alaska Native	70.69% 73.26% 80.65% 92.31% 78.83% 75.70%	116 965 31 13 326	59.46% 62.84% 66.67% 62.16% 74.00% 71.37% 65.80% 2018-201	629 7276 51 185 50 2627	11.23% 10.42% 18.49% 18.31% 7.46% 9.90% Difference
Black or African American Hispanic/Latino Native Hawaiian or Other Pacific Islander Two or More Races Unknown/Non-Respondent White Overall Total Ethnicity American Indian or Alaska Native Asian	70.69% 73.26% 80.65% 92.31% 78.83% 75.70%	116 965 31 13 326 es	59.46% 62.84% 66.67% 62.16% 74.00% 71.37% 65.80% 2018-201 No. 39.02% 72.40%	629 7276 51 185 50 2627 19 0 41 1815	11.23% 10.42% 18.49% 18.31% 7.46% 9.90% Difference 4.71% 5.02%
Black or African American Hispanic/Latino Native Hawaiian or Other Pacific Islander Two or More Races Unknown/Non-Respondent White Overall Total Ethnicity American Indian or Alaska Native Asian Black or African American	70.69% 73.26% 80.65% 92.31% 78.83% 75.70% Ye 77.11% 63.01%	116 965 31 13 326 es 201 146	59.46% 62.84% 66.67% 62.16% 74.00% 71.37% 65.80% 2018-201 No. 39.02% 72.40% 57.99%	629 7276 51 185 50 2627 19 0 41 1815 795	11.23% 10.42% 18.49% 18.31% 7.46% 9.90% Difference 4.71% 5.02% 9.47%
Black or African American Hispanic/Latino Native Hawaiian or Other Pacific Islander Two or More Races Unknown/Non-Respondent White Overall Total Ethnicity American Indian or Alaska Native Asian Black or African American Hispanic/Latino	70.69% 73.26% 80.65% 92.31% 78.83% 75.70% 77.11% 63.01% 71.87%	116 965 31 13 326 es 201 146 1006	59.46% 62.84% 66.67% 62.16% 74.00% 71.37% 65.80% 2018-201 No 39.02% 72.40% 57.99% 62.40%	629 7276 51 185 50 2627 19 0 41 1815 795 9815	11.23% 10.42% 18.49% 18.31% 7.46% 9.90% Difference 4.71% 5.02% 9.47% 28.33%
Black or African American Hispanic/Latino Native Hawaiian or Other Pacific Islander Two or More Races Unknown/Non-Respondent White Overall Total Ethnicity American Indian or Alaska Native Asian Black or African American Hispanic/Latino Native Hawaiian or Other Pacific Islander	70.69% 73.26% 80.65% 92.31% 78.83% 75.70% Ye 77.11% 63.01% 71.87% #######	116 965 31 13 326 es 201 146 1006	59.46% 62.84% 66.67% 62.16% 74.00% 71.37% 65.80% 2018-201 No. 39.02% 72.40% 57.99% 62.40% 71.67%	629 7276 51 185 50 2627 19 0 41 1815 795 9815 60	11.23% 10.42% 18.49% 18.31% 7.46% 9.90% Difference 4.71% 5.02% 9.47% 28.33% 12.15%
Black or African American Hispanic/Latino Native Hawaiian or Other Pacific Islander Two or More Races Unknown/Non-Respondent White Overall Total Ethnicity American Indian or Alaska Native Asian Black or African American Hispanic/Latino Native Hawaiian or Other Pacific Islander Two or More Races	70.69% 73.26% 80.65% 92.31% 78.83% 75.70% 77.11% 63.01% 71.87% ###### 83.33%	116 965 31 13 326 201 146 1006 10 24	59.46% 62.84% 66.67% 62.16% 74.00% 71.37% 65.80% 2018-201 No. 39.02% 72.40% 57.99% 62.40% 71.67% 71.18%	629 7276 51 185 50 2627 19 0 41 1815 795 9815 60 229	11.23% 10.42% 18.49% 18.31% 7.46% 9.90%