

Tutorial 20-21 and 21-22

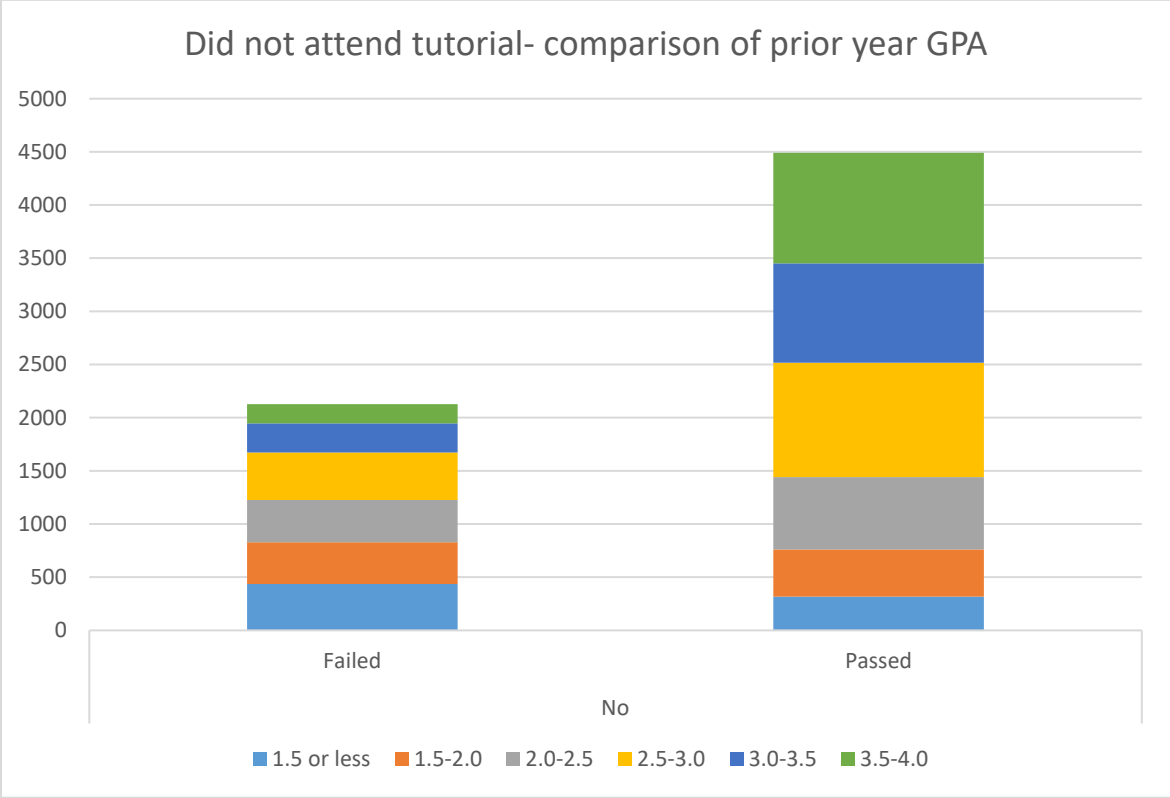
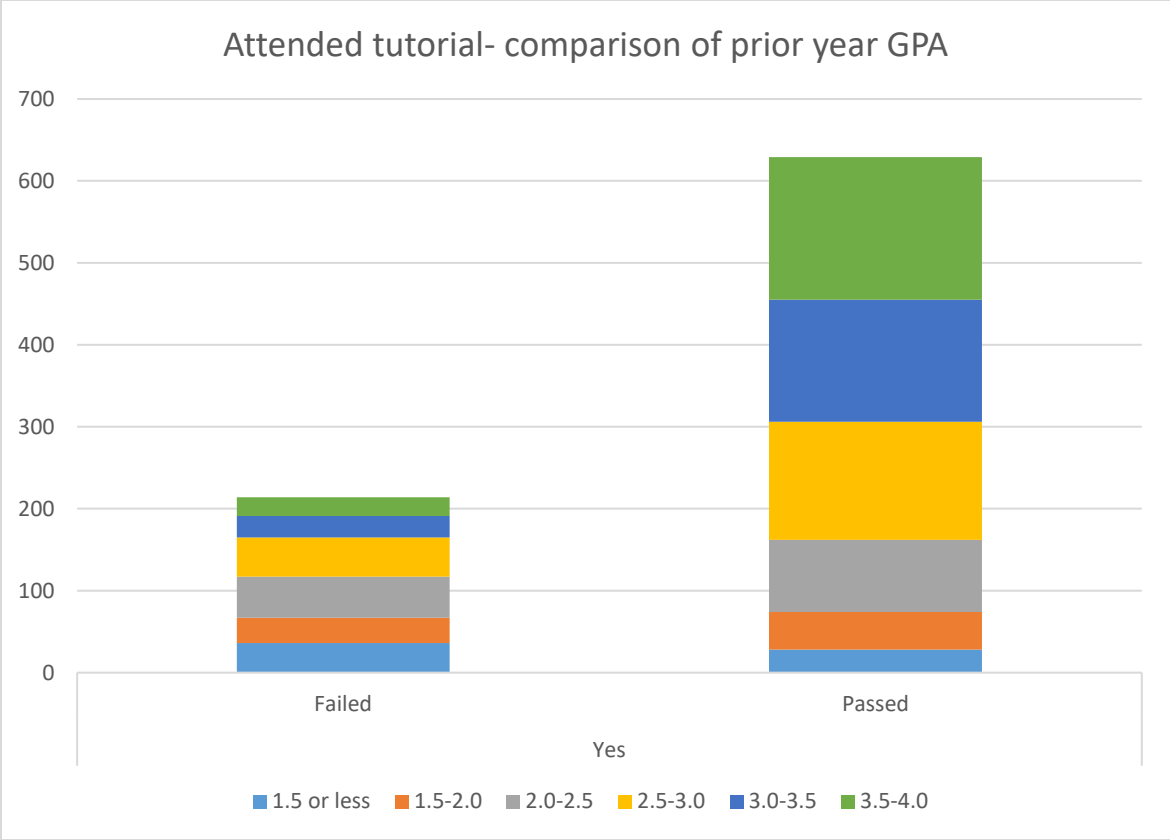
A One-way ANCOVA was conducted to determine a statistically significant difference between grades of students who attended tutorial compared to students in the same sections, controlling for one previous year's GPA. Summer 2020-Spring 2022 tutorial students were compared to all other students in the 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, Success Rates by Ethnicity					
	2021-2022				
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	77.70%		62.50%		15.20%
	2020-2021				
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	82.58%	178	74.82%	1251	7.76%
Black or African American	70.69%	116	59.46%	629	11.23%
Hispanic/Latino	73.26%	965	62.84%	7276	10.42%
Native Hawaiian or Other Pacific Islander			66.67%	51	
Two or More Races	80.65%	31	62.16%	185	18.49%
Unknown/Non-Respondent	92.31%	13	74.00%	50	18.31%
White	78.83%	326	71.37%	2627	7.46%
Overall Total	75.70%		65.80%		9.90%
	2018-2019				
Ethnicity	Yes		No		Difference
American Indian or Alaska Native			39.02%	41	
Asian	77.11%	201	72.40%	1815	4.71%
Black or African American	63.01%	146	57.99%	795	5.02%
Hispanic/Latino	71.87%	1006	62.40%	9815	9.47%
Native Hawaiian or Other Pacific Islander	#####	10	71.67%	60	28.33%
Two or More Races	83.33%	24	71.18%	229	12.15%
Unknown/Non-Respondent	90.00%	10	73.97%	73	16.03%
White	74.86%	366	69.94%	3676	4.92%
Overall Total	72.80%		65.10%		7.70%