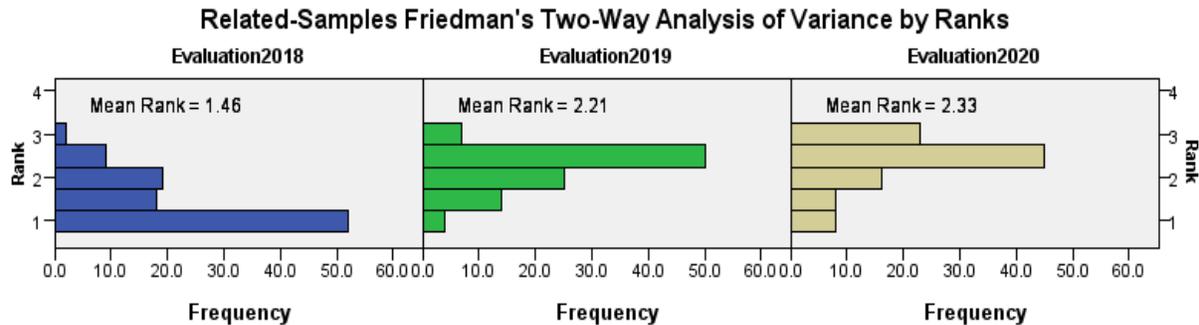


Qatar University's CED Graduates Currently Working in K-12 schools

This document summarizes results reported for the evaluation of 100 Qatar University's CED graduates of 2017-2020, who are currently working in K-12 schools.

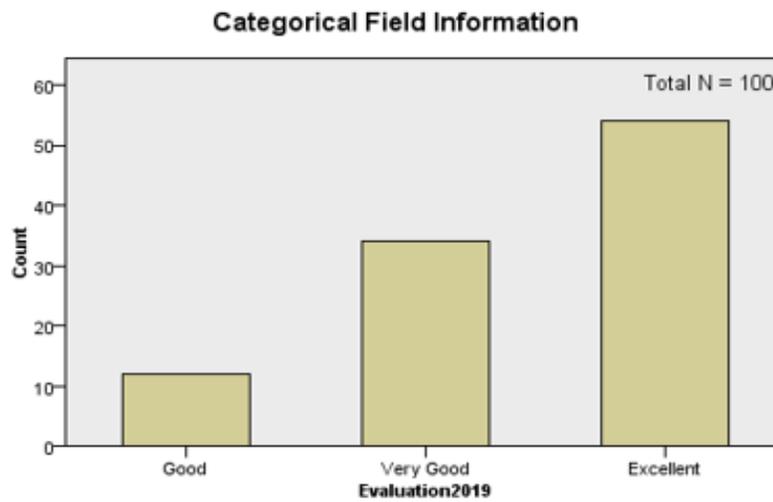
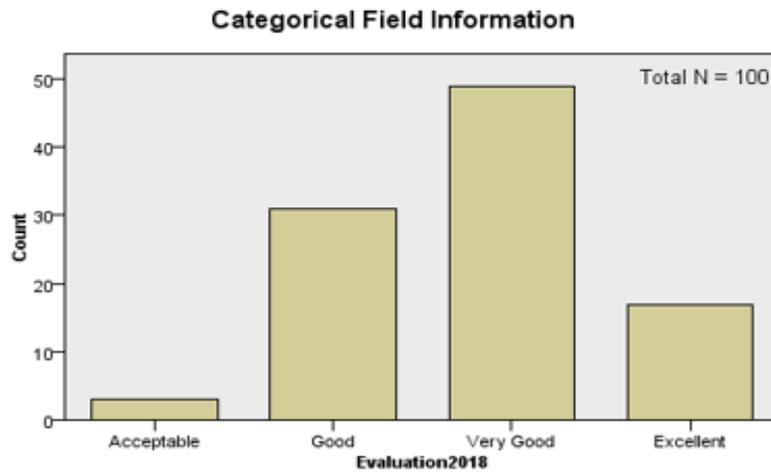
- As the following figures demonstrate, the evaluation of the performance of CED graduates (henceforth teachers) in the years 2018, 2019 and 2020 points to an increase in the performance ratings of teachers from 2018 (Mean rank=1.45) through 2019 (Mean rank= 2.21) to 2020 (Mean rank= 2.33).

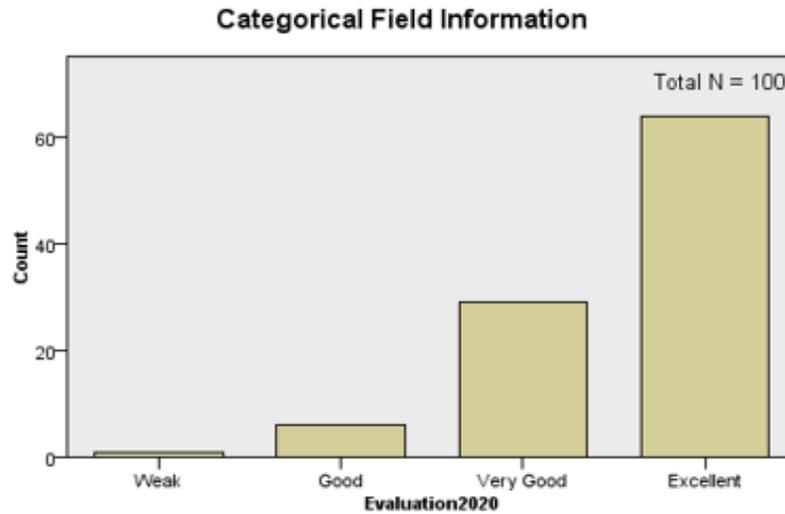


Total N	100
Test Statistic	68.689
Degrees of Freedom	2
Asymptotic Sig. (2-sided test)	.000

The results above present the performance of graduates of 2017-18 (G1), 2018-19 (G2) and 2019-20 (G3). The results show that the performance of the graduates of 2020 was highest. Moreover, the results point to an improvement in graduates' performance over the past three years (2018, 2019 and 2020), as can be seen by the increase in the mean rank value). In other words, graduates of 2020 performed better than graduates of 2019 who in turn performed better than graduates of 2018.

2. The following bar charts describe the evaluation of teachers in 2018, 2019 and 2020, respectively.

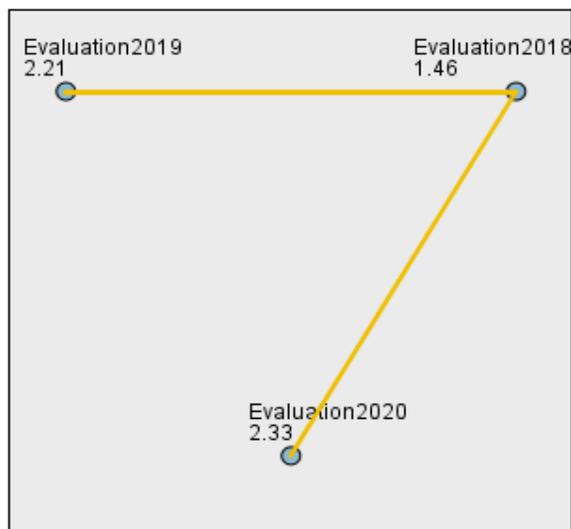




The above three bar graphs provide an explanation of the raw data and each displays the number and type of evaluations regarding teachers' performance. The evaluation types used are: 1= Weak, 2= Acceptable, 3= Good, 4= Very good, and 5= Excellent

3. The below Pairwise comparison shows important differences in teachers' performance evaluations when we compare (a) 2018 with 2019 and (b) 2018 with 2020, with a p-value of less than 0.05. By contrast, no significant difference was observed for teachers' evaluations between 2019 and 2020.

Pairwise Comparisons



Each node shows the sample average rank.

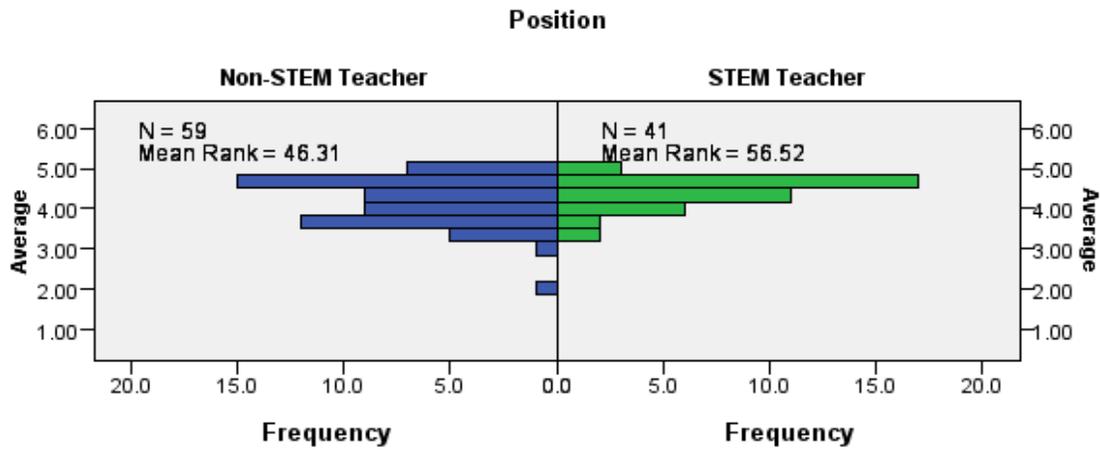
Sample1-Sample2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig.
Evaluation2018-Evaluation2019	-.755	.141	-5.339	.000	.000
Evaluation2018-Evaluation2020	-.880	.141	-6.223	.000	.000
Evaluation2019-Evaluation2020	-.125	.141	-.884	.377	1.000

Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same. Asymptotic significances (2-sided tests) are displayed. The significance level is .05. Significance values have been adjusted by the Bonferroni correction for multiple tests.

The results displayed above demonstrate that when comparing evaluations of teachers' performance across the three different years, it is evident that there is no difference in the performance for the years 2019 and 2020. However, comparison of 2018 and 2019 reveals there is a clear difference in the evaluations of teachers' performance. In addition, a trend of difference was observed in the performance of teachers for 2018 and 2020.

4. Comparing Teachers teaching STEM against Teachers teaching non-STEM

Independent-Samples Mann-Whitney U Test



Total N	100
Mann-Whitney U	1,456.500
Wilcoxon W	2,317.500
Test Statistic	1,456.500
Standard Error	139.212
Standardized Test Statistic	1.774
Asymptotic Sig. (2-sided test)	.076

The results didn't reveal any significant differences in the 3-year evaluations between teachers who teach Science, Technology, Engineering and Mathematics (STEM) subjects and those who teach non-STEM subjects. Based on these results, it appears that STEM subjects teachers tend to receive slightly better performance evaluation ratings (Mean Rank = 56.52) in comparison to teachers who teach non-STEM subject (Mean Rank=46.31). However, when using Mann-Whitney U test these differences were not statistically significant since the p-value was greater than 0.05.(U=1389.5m p-value = 0.046).