

Higher Student Evaluations and Grades in Courses Taught by ACUE-Credentialed Faculty at University of Nevada, Reno

Findings from four cohorts of faculty that earned their credential during the 2017-2018 academic year

At University of Nevada, Reno (UNR), 30 faculty from two cohorts earned their ACUE credential during the fall 2017 semester, and 33 faculty from two cohorts earned their ACUE credential during the spring 2018 semester. To evaluate the impact on their students, section-level student course evaluations and grade data were analyzed. Data are from all courses taught by ACUE-credentialed faculty over a three-year period and a matched set of course sections taught by non-credentialed faculty during the same timeframe.

Note: Many faculty who earned their credential in fall 2017 were new to UNR and therefore did not have baseline data for 2016-2017; results are reported separately below (see methodology for more detail).

Key Findings

Student Course Evaluations

Analyses with the fall 2017 ACUE-credentialed faculty who had baseline data showed that:

- **Student course evaluations improved over time for the ACUE-credentialed faculty** ($F(2,129)=14.22$, $p<.001$), with significant improvement from 2016-2017 to 2017-2018 ($p=.016$) and an additional marginally significant improvement from 2017-2018 to 2018-2019 ($p=.087$).
 - The average course evaluation in 2016-2017 was 3.14 on a 4.0 scale, which improved to 3.35 in 2017-2018 and 3.50 in 2018-2019.
- There was not a significant change during the same period among the matched courses ($F(2,122)=0.14$, $p=.872$).
 - The average course evaluation for the matched courses was 3.29 in 2016-2017, 3.21 in 2017-2018, and 3.23 in 2018-2019.
- In addition, **by 2018-2019, the year after earning the credential, the ACUE-credentialed faculty outperformed the matched courses** ($F(1,100)=10.69$, $p=.001$).

Analyses with all of the fall 2017 ACUE-credentialed faculty found the same pattern of results, specifically:

- **Student course evaluations improved over time for the ACUE-credentialed faculty** ($F(1,180)=8.20$, $p=.005$).
 - The average course evaluation in 2017-2018 was 3.34 on a 4.0 scale, which improved to 3.50 in 2018-2019.
- There was not a significant change during the same period among the matched courses ($F(1,182)=0.29$, $p=.594$).
 - The average course evaluation for the matched courses was 3.29 in 2017-2018 and 3.32 in 2018-2019.
- In addition, **in 2018-2019, the year after earning the credential, the ACUE-credentialed faculty outperformed the matched courses** ($F(1,205)=9.13$, $p=.003$).

Analyses with all of the spring 2018 ACUE-credentialed faculty showed that:

- **Student course evaluations improved over time for the ACUE-credentialed faculty** ($F(3,214)=4.14$, $p=.007$), with significant improvement from the fall 2017 baseline semester to fall 2018 ($p=.017$) and spring 2019 ($p=.027$).
 - The average course evaluation in fall 2017 was 3.20 on a 4.0 scale, 3.35 in spring 2018, and 3.44 in both fall 2018 and spring 2019.
- There was not a significant change during the same period among the matched courses ($F(3,200)=1.18$, $p=.320$).
 - The average course evaluation for the matched courses was 3.38 in fall 2017, 3.24 in spring 2018, 3.27 in fall 2018, and 3.15 in spring 2019.
- In addition, while the ACUE-credentialed faculty had significantly lower course evaluations compared to the matched faculty at baseline ($F(1,106)=4.38$, $p=.039$), they **outperformed the matched faculty in spring 2019 after earning the credential** ($F(1,95)=6.56$, $p=.012$).

Student Grades

Analyses with the fall 2017 ACUE-credentialed faculty who had baseline data showed that:

- While there was not a significant difference between courses taught by ACUE-credentialed faculty and matched courses in 2016-2017 ($F(1,76)=1.15, p=.288$) or 2017-2018 ($F(1,81)=0.54, p=.466$), **grades in courses taught by ACUE-credentialed faculty were significantly higher than in matched courses in 2018-2019** ($F(1,98)=4.21, p=.043$).
 - Average grades among courses taught by ACUE-credentialed faculty were 2.77 on a 4.0 scale in 2016-2017, 2.93 in 2017-2018, and 2.87 in 2018-2019.
 - Average grades in the matched courses were 2.93 in 2016-2017, 3.05 in 2017-2018, and 2.61 in 2018-2019.

Analyses with all of the fall 2017 ACUE-credentialed faculty found that:

- Grades were not significantly different between courses taught by ACUE-credentialed faculty and matched courses in either 2017-2018 ($F(1,155)=0.08, p=.773$) or 2018-2019 ($F(1,198)=0.11, p=.745$).
 - Average grades among courses taught by ACUE-credentialed faculty were 3.31 on a 4.0 scale in 2017-2018 and 3.30 in 2018-2019.
 - Average grades in the matched courses were 3.34 in 2017-2018 and 3.27 in 2018-2019.

Analyses with all of the spring 2018 ACUE-credentialed faculty showed that:

- While there was not a significant difference between courses taught by ACUE-credentialed faculty and matched courses in fall 2017 ($F(1,101)=0.50, p=.823$) or spring 2018 ($F(1,96)=1.69, p=.196$), **grades in courses taught by ACUE-credentialed faculty were significantly higher than in matched courses in fall 2018** ($F(1,104)=3.97, p=.049$) **and spring 2019** ($F(1,81)=7.01, p=.010$).
 - Average grades among courses taught by ACUE-credentialed faculty were 3.32 on a 4.0 scale in fall 2017, 3.34 in spring 2018, 3.43 in fall 2018, and 3.33 in spring 2019.
 - Average grades in the matched courses were 3.35 in fall 2017, 3.19 in spring 2018, 3.26 in fall 2018, and 3.06 in spring 2019.

Methodology

The cohorts in the evaluation were composed primarily of new full-time faculty at UNR. Therefore, many of the faculty in these cohorts were not teaching at UNR during the 2016-2017 academic year. As a result, analyses were conducted using three groups and time periods:

- examining change from the 2016-2017 academic year (baseline) through the 2018-2019 academic year (post-credential) for the 14 faculty from the fall cohorts who taught in 2016-2017 and their matched courses;
- examining change from the 2017-2018 academic year (while earning the ACUE credential) to the 2018-2019 academic year (post-credential) for all 30 ACUE-credentialed faculty in the fall cohorts and their matched courses; and
- examining change from the fall 2017 semester (baseline) through the spring 2019 semester (post-credential) for all 33 ACUE-credentialed faculty in the spring cohorts and their matched courses.

Analyses with the fall 2017 ACUE-credentialed faculty who had baseline data include up to 147 ACUE course sections and 129 matched sections. Analyses with all of the fall 2017 ACUE-credentialed faculty include up to 191 ACUE course sections and 187 matched sections. Analyses with all of the spring 2018 ACUE-credentialed faculty include up to 219 ACUE course sections and up to 205 matched sections. All analyses control for faculty rank.