

Analysis of Nevada Connections Academy 2016 Cohort for Credit Deficiency

The State Public Charter School Authority requested that Matthew Wicks augment his credit deficiency analysis of the 2016 graduation cohort for Nevada Connections Academy (NCA) utilizing the methods consistent with the Nevada Department of Education (NDE) when publishing credit deficiency levels on state report cards. This document provides context for this additional analysis as well as the results of the analysis.

Nevada Department of Education

On Tuesday, June 12, Matthew Wicks had a call with Tom MaDiarmid and Russ Keglovits of the Nevada Department of Education to discuss the specific business rules used in the NCD credit deficiency calculation. The call established the following information:

1. NAC 389.659 which in turn is based on NRS 385.080 establishes the credit levels required for different grade levels, specifically at least 5 credits for 10th grade status, 11 credits for 11th grade status, and 17 credits for 12th grade status. If a student has earned less than this level of credits in the associated cohort grade level, the student is considered credit deficient.
2. The population of students counted is all students enrolled of October 1 of a given year. Each LEA is required to submit data regarding the credit deficiency status of enrolled students to NDE and NDE does not further validate the data.
3. Matthew Wicks asked how 9th grade students could be considered credit deficient in their 9th grade year. Russ and Tom were not able to answer this question but indicated they would follow-up with an answer. As of the afternoon of June 16, Matthew Wicks had not received a response. This issue raises a question on how schools classified students into grade levels (see grade level classification below for more information).
4. It was my understanding that Russ and Tom agreed to provide Steve Werlein, Head of School for NCA with a copy of the data submitted by NCA for the most recent report card in order to help clarify any issues related to the calculation process. Russ had suggested that this process would be quicker than going through the process of making a formal data request. Russ sent Steve an email that indicated that I had requested the report but did not send Steve a copy of the data. I am continuing to work with Steve to understand which report the school submitted that will contain this information.

While there was still some unanswered questions (items #3 and #4), Matthew Wicks proceeded with the analysis of the NCA 2016 graduation cohort based on the information received.

Grade Level Classification

There are two main ways students can be classified into grade levels. The first method is referred to a Cohort Year. In this method, a student is classified in 9th grade for the first year of high school, 10th grade for the second year of high school, 11th grade for the third year of high school, and 12th grade for the fourth year of high school. This is the method that has been used for all of the analysis work previously submitted as it is the most appropriate method when looking at 4-year adjusted cohort graduation rate.

The second method is based on credits earned as defined in the NAC identified in #1. In this method, a student is classified in 9th grade if less than 5 credits have been earned, 10th grade if at least 5 credits,

but less than 11 credits have been earned, 11th grade if at least 11 credits, but less than 17 credits have been earned, and 12th grade if 17 or more credits have been earned. In practice there is some leeway in applying these rules. For example a student that has earned 4.5 credits may still be classified as in 10th grade.

Both methods are valid methods of grade classification based on the type of analysis being done. However, it is important to know which method is used in order to accurately interpret the results of any analysis. It is especially important to know when comparing data because the data may not be comparable if different grade classification methods were used. If schools did not use a consistent method for grade classification when reporting their credit deficiency information to NDE, then the results between schools are not comparable.

Since this analysis is related to the 2016 graduation cohort, the cohort year method of classifying the student grade level was used for this analysis. However, when NCA submits data to NDE each year for the annual credit deficiency calculation, it uses the credit based method for classifying student grade level.

Results of the Analysis

Per the NDE methodology, Matthew Wicks calculated the credit deficiency level of the students that were part of the 2016 graduate cohort or were transfer out students from the 2016 cohort that were enrolled on each of 10/1/2012, 10/1/2013, 10/1/2014, and 10/1/2015, the four years when students that were part of the 2016 cohort could be enrolled at NCA. The determination of what made a student credit deficient was based on the definitions in NAC 389.659.

While the same methodology of the NDE credit deficiency calculation was used, there is an important difference in this analysis. In the standard, NDE credit deficiency calculation, the school submits a report of all students enrolled on October 1 of that year. As a result, students are spread across multiple graduation cohorts. This analysis, only looked at the single graduation cohort of 2016 but looked at 4 different snapshots over the 4 year period of this cohort. Thus a student that was enrolled at NCA for all 4 years would be part of each snapshot. Of course, since each year is its own snapshot a student that is part of more than one year's report could be credit deficient one year, but on-track the following year.

Here are the specific results of the 2016 cohort analysis:

- Grade 9 (from 10/1/2012): 0% - 0 out of 164 students credit deficient
- Grade 10 (from 10/1/2013): 42.0% - 105 out of 250 students credit deficient
- Grade 11 (from 10/1/2014): 52.5% - 213 out of 406 students credit deficient
- Grade 12 (from 10/1/2015): 50.7% - 180 out of 355 students credit deficient
- Overall credit deficiency (sum of all 4 years): 42.4% - 498 out of 1,175 students credit deficient

Matthew Wicks performed a second analysis, this time just including graduates and non-graduates that were enrolled on October 1 of the 4 years. The transfer-out students were removed since they are not part of the final graduation rate calculation. The results of this analysis are as follows:

- Grade 9 (from 10/1/2012): 0% - 0 out of 50 students credit deficient
- Grade 10 (from 10/1/2013): 36.7% - 40 out of 109 students credit deficient

- Grade 11 (from 10/1/2014): 49.6% - 114 out of 230 students credit deficient
- Grade 12 (from 10/1/2015): 48.0% - 135 out of 281 students credit deficient
- Overall credit deficiency (sum of all 4 years): 43.1% - 289 out of 670 students credit deficient

It should be noted that in a highly mobile school there are a number of students that enroll each year after October 1 that are not included in that year's calculation, but would be calculated in the following year's calculation assuming the student is still enrolled. In the first analysis there 40 students in grade 9 that enrolled after October 1, 36 in grade 10, 57 in grade 11, and 77 in grade 12. In the second analysis when transfer-out students were eliminated, the number of students that enrolled after October 1 were: 11 in grade 9, 13 in grade 10, 31 in grade 11, and 60 in grade 12. It was significantly more likely that a student that enrolled after October 1 ended up being a non-graduate.