



# Yellowdig Performance & Course Outcomes

## Overview

Bryan University is a university based in Tempe, AZ. The university has about 1,000 students with undergraduate programs focused in fitness/exercise science, paralegal studies, healthcare, business, and web development. The university features traditional, asynchronous online, and synchronous online programs. Four of the five undergraduate programs feature courses with Yellowdig. Yellowdig is worth 5-20% of the overall course grade in these programs. Two analyses were conducted to determine if Yellowdig carries a value beyond the small amount of points that it's worth.

## Methods

The same instructors and courses were used in both analyses. Each analysis featured 10 courses, 10 different instructors, four degree programs (business, paralegal studies, fitness, and healthcare) and two general education courses (math and English). A total of 215 students were included.

The analyses were mostly correlational and focused on the relationships between Yellowdig and course grades, pass rates, and assignment submission rates. Also, Yellowdig performance was categorized by quartile, with grades and pass rates assessed by each.

## Results

The overall correlation between Yellowdig grade and course grade is 0.74. The correlation between Yellowdig grade and passing (using pass/fail as a dichotomous variable) is 0.61. There was a correlation of 0.7 between Yellowdig grade and assignment submission rate. Students who pass a course have an average Yellowdig grade of 82.8%, whereas failing students have an average Yellowdig grade of 29.36%.

### Pass Rate by Quartile of Yellowdig Performance

Yellowdig Performance	Pass Rate (passing students/total students)
Highest Quartile (76-100%)	98.5% (128/130)
Second Quartile (51-75%)	73.9% (17/23)
Third Quartile (26-50%)	50% (14/28)
Lowest Quartile (0-25%)	42.4% (14/33)

## Average Course Grade by Quartile of Yellowdig Performance

Yellowdig Performance	Average Course Grade (Equivalent Letter Grade)
Highest Quartile (76-100%)	91.77% (A-)
Second Quartile (51-75%)	71.24% (C-)
Third Quartile (26-50%)	52.23% (F)
Lowest Quartile (0-25%)	50.11% (F)

The pass rate by quartile obviously has big differences in sample size number. However, despite having a much larger sample (130 students versus 22-33 students in the other quartiles), the highest quartile has the lowest amount of total failing students.

## Discussion

While none of the results can be claimed as causative, the correlations and averages by quartile indicate a few important lessons. First, the correlation between Yellowdig grade and course grade (0.74) is stronger than the correlation between live session grades (in the synchronous programs) and course grades, which was 0.62 (this data comes from a separate analysis of 24 courses and 384 students). Both carry the same or similar point values in courses. Live classes are traditionally viewed as the pinnacle of the weekly college experience, but these results show that Yellowdig may have more importance to the overall student experience.

Even though students can still earn 80-95% as a final grade in courses if they completely ignore Yellowdig, the pass rates and course grade data show that Yellowdig participation carries additional value. To have more than a 50/50 chance to pass, the data shows students should aim to earn the majority of the available points in Yellowdig. Also, the data shows that earning more than three-quarters of the available Yellowdig points essentially guarantees passing (statistically speaking).

## Author



**Sean Preuss**, Educational Specialist at Bryan University

Sean has a Bachelor's in English from Long Island University, a Master's in Exercise & Wellness from Arizona State University, and is a doctoral candidate in Education at the University of North Carolina at Greensboro. Sean has taught at Arizona State University and Grand Canyon University. Currently, he conducts internal research focused on online education engagement and education, and develops and leads faculty training initiatives.

**Contact:** [Sean.Preuss@BryanUniversity.edu](mailto:Sean.Preuss@BryanUniversity.edu)