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Fairness, Equity, and Values in Grades and Grading ANDREW HECKLER, Ohio State Univ - Columbus — Course grades are concrete outcomes with real-world consequences for students. To what extent are grades, as currently awarded, consistent and fair? To what extent do they both signal and cause inequity? Do grades award what we value? Higher Educational Institutions hold large amounts of data that can help us to gain more insight into answers for these questions and perhaps lead us to more desired outcomes. I will discuss three data analytics projects we conducted on introductory physics classes. First, I will discuss important distinctions between what is measured by exam and non-exam grade components and show that not only are there problematic demographic disparities, but that we can choose to decrease these disparities by making changes – some of which are simple—in grading practices. Next, I will demonstrate the extent to which grading is inconsistent between sections, instructors, and semesters by considering measures of prior preparation, such as ACT scores and prior course grade. Finally, I will examine how these inconsistencies extend to the demographic factors of gender and race. Areas of concern are found for all factors and provoke deep questions about traditional testing and whether we are awarding what we value.

> Andrew Heckler Ohio State Univ - Columbus

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