Awarding Failing Grades in a Senior Capstone Design Course

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The Issue
- Underperforming students are not uncommon on capstone design teams
- Can ride the coattails of their teammates and not do their fair share of the project work
- Can negatively impact team dynamics
- Failing an underperforming student has significant consequences including delayed graduation and potential grade appeals
- Passing grades are often awarded to students that haven’t done sufficient work to earn them

Early Identification
- Confidential peer review process executed at mid-way point of the first semester
- Early identification of underperforming students
- In time for corrective action from faculty advisor to motivate the student, address team conflicts, and remind the student that yes, "you can fail this class"

Industry Style Performance Review
- Topics
  - Quality of Work
  - Initiative
  - Teamwork
  - Timely Delivery on Commitments
  - Effective Communication
  - Customer/Sponsor focus
- Outcome
  - Expectations for remainder of the term
  - “Contract” of what is required to pass the class
  - Signed by student and faculty advisor

Outcomes
- The student that didn’t fail
  - Genesis of the current model
  - Midterm peer evaluations not yet implemented
  - Severely underperforming student
  - Advisor not fully aware until final peer evaluations
  - Decision made to pass the student since no warnings/feedback had been given
- The student that did fail
  - Identified early by mid-term peer evaluation
  - Intervention by faculty advisor
    - Did not yet include formal performance review
    - Student’s participation did not significantly change
    - Failing grade was awarded, appealed, and upheld
    - Process showed need for more formal documentation of student expectations
  - Led to the Industry Style Performance Review
- The student that withdrew
  - Identified early by mid-term peer evaluation
  - Intervention by faculty advisor
    - Including Industry Style Performance Review
  - Student’s participation did not significantly change
  - Student withdrew from the class

California State University Chico
- 13th largest of the 23 institutions within the California State University system
- 17,789 total students fall 2017
- Predominantly undergraduate with masters programs in some areas