Predicting student success

Michael Ernst
UW CSE 190b
Time on task

- Engagement with digital textbooks predicts final course grades:
  Predictive Analytics For Student Success: Developing Data-Driven Predictive Models of Student Success, University of Maryland University College, January 6, 2015

- Students who used the lecture capture system every week did better than students who didn't use it every week.

Time alone is not the best predictor
Delayed gratification: Marshmallow experiment

Child offered one marshmallow now, or 2 marshmallows in 15 minutes
Children who waited for the second marshmallow have, in later life:

- higher SAT scores

- higher educational attainment

- lower body mass index

- etc., etc.
Grit = perseverance, passion for long-term goals

grit is "sticking with things over the very long term until you master them"

- Grit accounted for 4% of variation in success outcomes; grit not correlated with IQ
  

- Perseverance, self-confidence, and integration toward goals are more important than IQ
  