# Notes on CS70 Discussion Solutions CrowdSourcing Model

## Leah Dickstein

## April 28, 2014

**Current working model:**

$$grade = \frac{-time}{efficiency} + knowledge * time + reward * Pr[reward]$$
$$= -at + bt + AP[A], 0 < a < 1 b > 1$$

## Contents

# 1 Experiment 3

Parameters that we could tweak:

- Time deadline

- Requirement to LaTeX (have a dropbox)

- Low self esteem / perception of being a weak player

- Number of people rewarded

## 1.1 Time deadline

1. Require solutions to be due the day of (e.g. Tuesday or Thursday)

2. Turn in solutions right before the midterm

3. Decrease score as time goes on (incentivizes turning things in early, but allows for turning things in late)

## 1.2 Number of people rewarded

Tell students "You get rewarded if you're good enough"
Arbitrary number of students awarded each week based on reader rubric of what is "good enough"

## 1.3 LaTeX

Have a dropbox to turn in binder paper versions?

## 1.4 Low Self Esteem

Ego booster problems (WarmUp every time), gradient of extra credit (e.g. 1 point for easy problem, 2 points for hard problem)

### 1.4.1 Bins

Having a bin for every grade group (e.g. rank 1-50, 51-100, etc.) and picking top two from each bin (so lower bins are still incentivized to try!

Need to maintain privacy of grades: people selected, don't post which bin they're in

## 1.5 Discussion Parties

Have a Discussion Party Tuesday afternoon before homework is assigned