

IMPROVING GRADING EFFICIENCY USING GRADESCOPE

June 2021



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Georgia Gwinnett College



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Process Education Conference

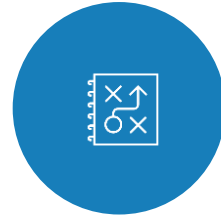


Questions



Switch Online

What issues did you face in abruptly switching to an online environment?



Issue Handling

How did you handle these issues and what did it do to your workload?



Student Feedback

How do you handle student feedback in an online environment?

Assessment & Evaluation

Pre-COVID

Grading and Feedback ...
Most important, least liked role



INSTRUCTOR USE ONLY

<100	<90	<80	<70	<60
<50	<40	<30	<20	<10
<9	<8	<7	<6	<5
<4	<3	<2	<1	<0

PART 1
1 to 50

MARKING INSTRUCTIONS

- Mark total score.
- Only one mark per line on key.
- 103 points maximum
- EXAMPLE OF SCORES

100	90	80	70	60
50	40	30	20	10
9	8	7	6	5
4	3	2	1	0

KEY

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MARKING INSTRUCTIONS

- RESUBMIT ONLY
- FILL BOX COMPLETELY
- CONVERT TO C3
- ERASE COMPLETELY TO CHANGE
- INCORRECT C2

NAME _____
SUBJECT _____
DATE _____

TEST RESULTS

PART 1
PART 2
TOTAL

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Problem

Providing MORE feedback with less student interaction



How to provide much-needed feedback in the online environment without imposing too much on faculty time?

**Limited interaction with professors =
need to provide more feedback to students**



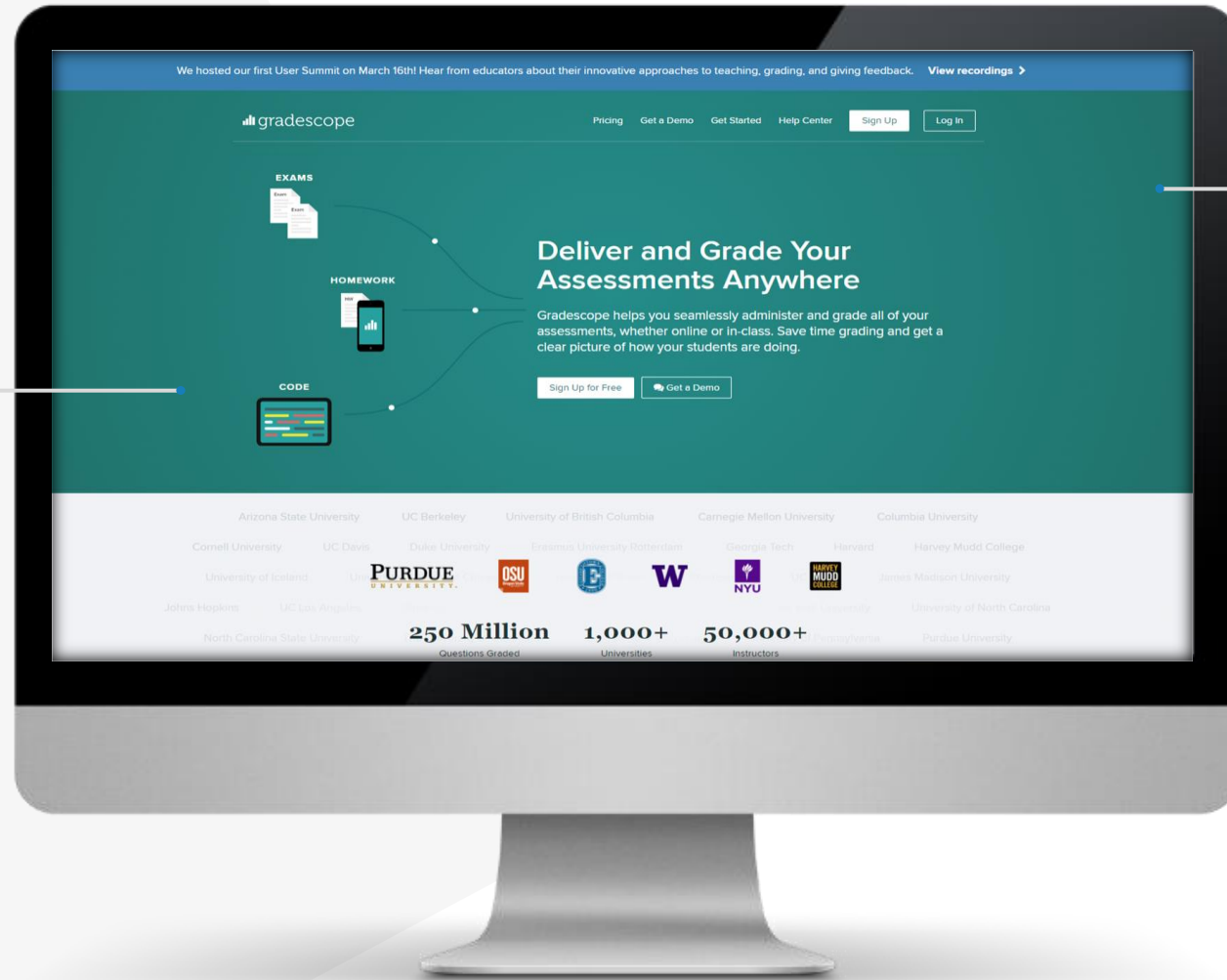
Balance between providing detailed feedback and Professor's time

Solution

Efficient Use of Technology (www.gradescope.com)



An online rubric-based grading tool



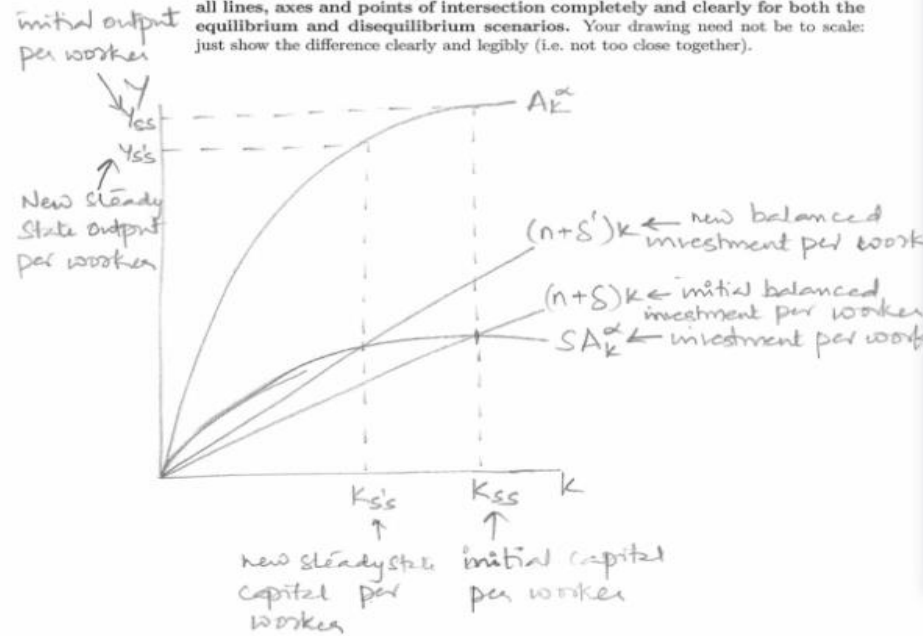
Implementing the 7 principles of good practice in undergraduate education using Gradescope

Graded Student Work from Gradescope

5. "Planned obsolescence or built-in obsolescence in industrial design is a policy of planning or designing a product with an artificially limited useful life, so it will become obsolete, that is, unfashionable or no longer functional after a certain period of time." Consider the implications from the perspective of the Solow model of a shock that reduces the useful life of all products across an economy and, thus, increases the depreciation rate. Specifically,

- (a) (5 pts) Draw the diagram for the pre-shock equilibrium state.
 (b) (3 pts) On the diagram for Question 5a above, draw the curve(s) corresponding to the depreciation-rate shock.

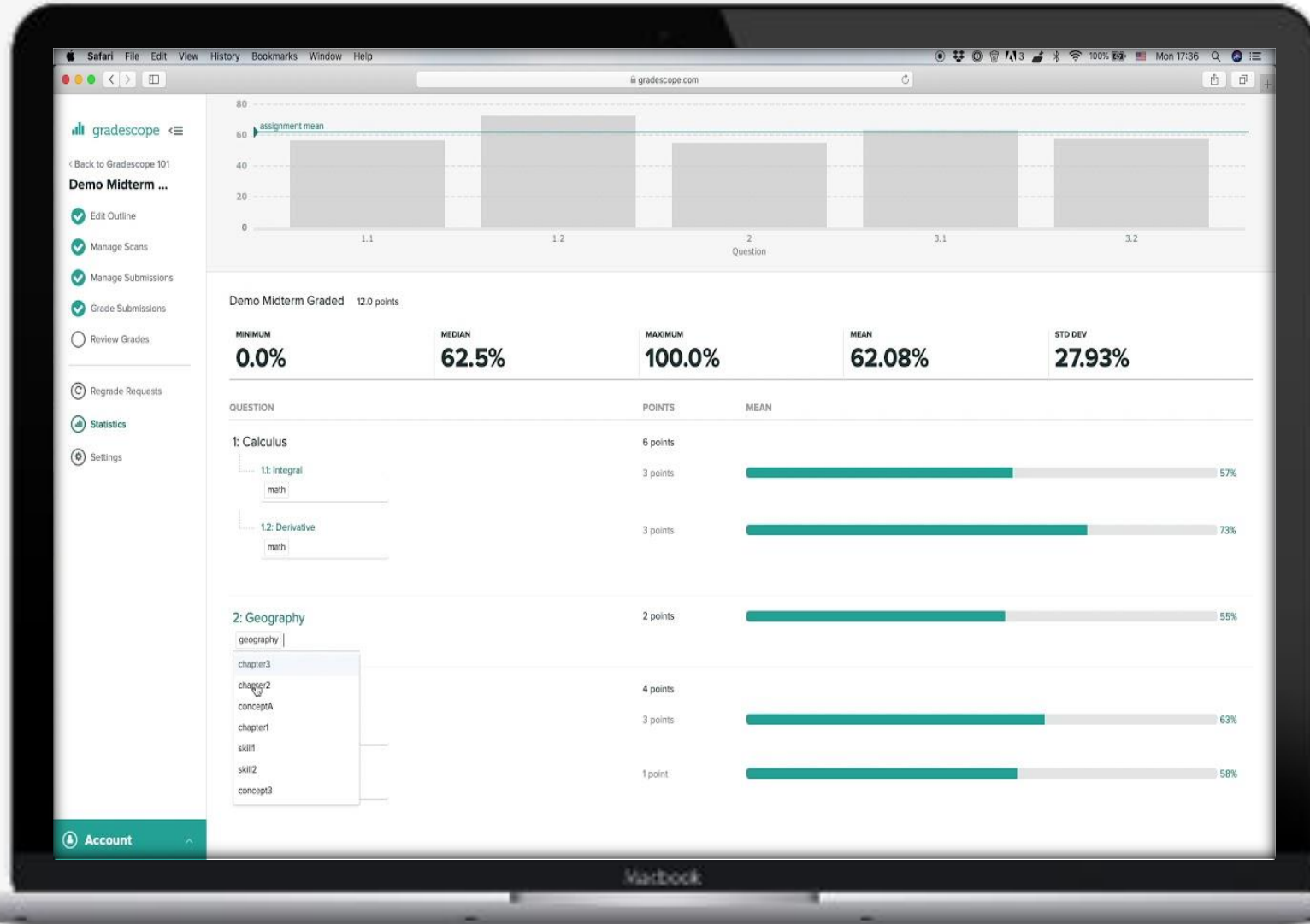
Indicate the (1) initial capital per worker, (2) output per worker, (3) investment per worker, (4) balanced investment per worker, and (5) steady states. Draw and label all lines, axes and points of intersection completely and clearly for both the equilibrium and disequilibrium scenarios. Your drawing need not be to scale: just show the difference clearly and legibly (i.e. not too close together).



TOTAL POINTS
7.0 / 8.0 pts

- | | | |
|---|-------|--|
| 1 | -0.0 | Correct |
| 2 | -0.5 | initial balanced investment incorrect |
| 3 | -0.5 | initial actual investment incorrect |
| 4 | -0.25 | final balanced investment incorrect |
| 5 | -0.25 | final actual investment incorrect |
| 6 | -0.5 | final output or capital per worker incorrect |
| 7 | -1.0 | |

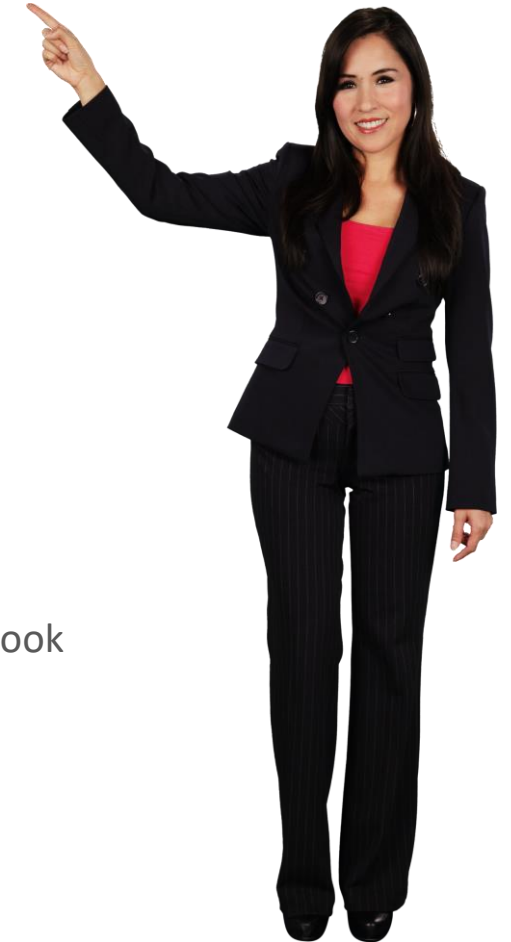
Gradescope Analytics



Instructor Benefits of Gradescope

- Timely feedback
- Time saving/Speed (↓ > 30%)
- Flexibility
- Just In Time Teaching
- Allows for group submission

- Regrade requests done automatically
- Handwritten work submissions allowed
- Multiple graders grading simultaneously
- Analytics
- LMS integration – easy transfer to gradebook



Student Response to use of Technology

71% of students never used Gradescope before this course

01

“I like that it encourages me to show my work and not just give a random answer. The handwritten assignments made it feel like we were submitting a worksheet at a regular class on campus.”

03

“Group submission was very easy. Feedback on Gradescope is better than D2L.”

05



Rating of Gradescope

- Quick Feedback: 86% strongly agree; 14% agree
- Easy to use: 57% strongly agree; 29% agree
- Would Recommend: 71% strongly agree; 14% agree
- Satisfied: 71% strongly agree; 29% agree

02

“At first I thought it was like the Dropbox from D2L but Gradescope had more features to it like requesting for a regrade on there instead of emailing the professor the assignment. It was really easy to navigate through.”

04

I loved Gradescope overall, it was a nice way to submit our homework and show our work since it involved math formulas that are hard to express on word documents.

06

References

Amos, J. R., Angra, S., Castleberry, C., & Stadie, O. (2021, March). Using Gradescope to Facilitate Tag-Enhanced Student Feedback. In Proceedings of the 52nd ACM Technical Symposium on Computer Science Education (pp. 1354-1354).

Atwood, S. A., & Singh, A. (2018, June). Improved Pedagogy Enabled by Assessment Using Gradescope. In American Society for Engineering Education Annual Conference and Exposition, Salt Lake City UT (pp. 24-27).

Bingham, K., & Hare, B. (2018). Enhancing feedback and engagement with third party software. Journal of Computing Sciences in Colleges, 33(5), 133-134.

Chickering, A. W., & Gamson, Z. F. (1987). Seven principles for good practice in undergraduate education. AAHE bulletin, 3, 7.

Singh, A., Karayev, S., Gutowski, K., & Abbeel, P. (2017, April). Gradescope: a fast, flexible, and fair system for scalable assessment of handwritten work. In Proceedings of the fourth (2017) acm conference on learning@ scale (pp. 81-88).

DISCLOSURE: Received no funding from Gradescope for this presentation

Got _____ Questions



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If the author had to do this work over again, what one change would they like to make.



If the author is continuing this work, what other public outlet would they like to use to present their work.



Fixed Cost:

Build the course using Gradescope including all exams, assignments, etc. The time investment would be done upfront and not have to be invested mid-semester

