



Please have your laptops open  
and login to the WiFi

WiFi: LeMeridien-Meeting  
Password: 2020LMNO



# Adaptive Study with InQuizitive

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Courtney Brandt, Lucy Malakar, Janise Turso



Three female flight attendants in dark blue blazers and white collared shirts are standing outdoors. The woman on the left is looking slightly to her left. The woman in the middle is looking forward. The woman on the right is smiling and looking towards the camera. A semi-transparent white banner is at the bottom of the image.

Courtney

Lucy

Janise

Get ready for a tour of InQuizitive



## Stops on the tour

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1. Why InQuizitive?

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2. The student view

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3. The professor view



# Motivation

- Adaptive learning
- Feeds students questions from areas they are struggling with



cbrandt@wnorton.com

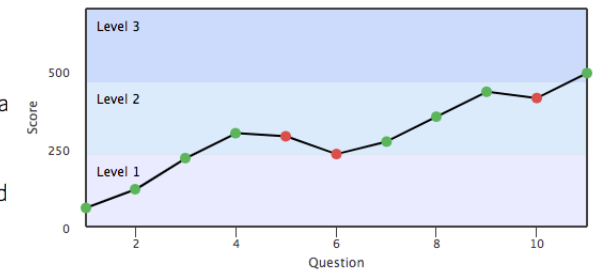
## Chapter 3: The Market at Work: Supply and Demand

### Activity Report

Grades Accepted Until: **October 30, 2021 11:59 PM Eastern Time**  
(what does this mean?)

You've answered the minimum number of questions required, and have achieved a grade of **70%**. But keep answering questions to get that grade higher—**your grade cannot go down** as a result of answering more questions. Get your score up to **700 points** to earn a grade of 100%.

Your current score is **493 points**. You've made it to **Level 3**. You need **207 points** more to make it to the Target Score.



Click any point on the graph to review the question

#### Learning Objectives

#### Performance

3.1. What are the fundamentals of markets?



Page(s) 74-76

3.2. What determines demand?



Page(s) 75-85

3.3. What determines supply?



Page(s) 87-95

3.4. How do supply and demand interact to create equilibrium?



Page(s) 95-101

Appendix: Changes in Both Demand and Supply



Page(s) 108-112

# Content

- Book-specific questions with ebook link
- Answer-specific feedback on every question



INQUIZITIVE

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## Chapter 3: The Market at Work: Supply and Demand

Page(s) 80-81

3.2. What determines demand?

Question Confidence  
I think I know it

You can gain or lose up to 60 points on this question.

Activity Score

0

Current Grade

0%

You must answer at least 9 questions to receive a grade.

Question Help/Challenge

Drag the items to classify each event as movement along the demand curve or a demand curve shift. The good is fertilizer for flowering plants.

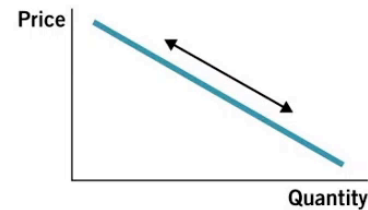
Roses become cheaper. +

Chicken manure, a substitute for fertilizer, becomes more expensive. +

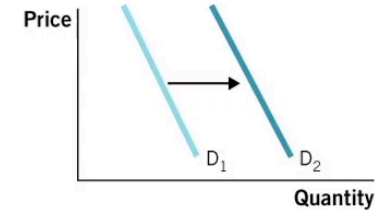
The fertilizer becomes more expensive. +

The fertilizer becomes cheaper. +

Movement Along Demand Curve



Factors That Shift Demand



Show All Droppable Areas

Open Image In New Window

# Instructor Support

- Robust instructor gradebook
- See where your students are struggling
- Refine your lesson plans accordingly



INQUIZITIVE

cbrandt@wnnorton.com

## Chapter 3: The Market at Work: Supply and Demand

### Class Activity Report

Students

Learning Objectives / Questions

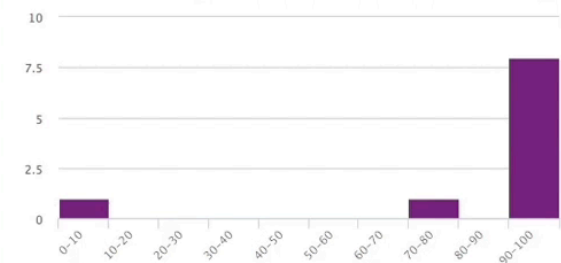
Show results for: 167097 (PRINECO3 Demo [DO NOT DELETE])

Export Report Data

Overall means for 10 students who have started the activity:

- Mean Questions Answered: 13.7
- Mean Score: 626.9
- Mean Submitted Grade: 85.6%
- Mean Time Spent: 6:58

Histogram of Submitted Grades



Grades Accepted Until: **October 30, 2021 11:59 PM Eastern Time**  
(what does this mean?)

Search:

Student Email	Student Name	Last Submission Date	Questions Answered	Time Spent (min:sec)	Score	Grade	
reginageorge@mailinator.com	George, Regina	12/04/19 07:19 PM	21	14:37	730	100%	<a href="#">Details</a>
sterlingbrown@mailinator.com	Brown, Sterling	11/18/19 05:01 PM	4	1:01	240	0%	<a href="#">Details</a>
samcook@mailinator.com	Cook, Sam	11/18/19 05:00 PM	11	2:17	640	91%	<a href="#">Details</a>
carlbaker@mailinator.com	Baker, Carl	11/18/19 04:57 PM	13	2:54	557	80%	<a href="#">Details</a>
dianarogers@mailinator.com	Rogers, Diana	11/18/19 04:53 PM	10	9:36	670	96%	<a href="#">Details</a>
petersimon@mailinator.com	Simon, Peter	11/18/19 04:39 PM	12	6:13	665	95%	<a href="#">Details</a>
ericsanchez@mailinator.com	Sanchez, Eric	11/18/19 04:31 PM	13	6:42	677	97%	<a href="#">Details</a>

Back to Instructor Options



# Research



THE RETRIEVAL EFFECT



META-COGNITION



GROWTH MINDSET

# The Retrieval Effect

- Students are more adept at recalling information when they're asked to recall it
- “Quizzing to learn”



## Chapter 3: The Market at Work: Supply and Demand

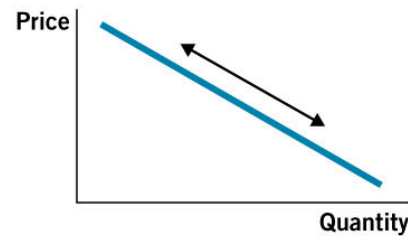
Page(s) 80-81 3.2. What determines demand?

Drag the items to classify each event as movement along the demand curve or a demand curve shift. The good is fertilizer for flowering plants.

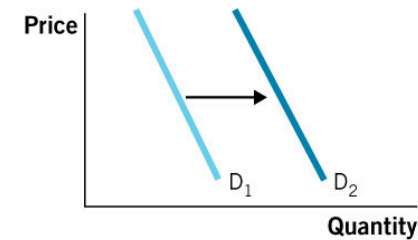
Roses become cheaper. <sup>+</sup> Chicken manure, a substitute for fertilizer, becomes more expensive. <sup>+</sup>  
The fertilizer becomes more expensive. <sup>+</sup> The fertilizer becomes cheaper. <sup>+</sup>

Drag each item above to its appropriate location in the image. Note that every item may not have a match, while some items may have more than one match.

Movement Along Demand Curve



Factors That Shift Demand



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Question Confidence  
I think I know it

You can gain or lose up to 60 points on this question.

Activity Score

0

Current Grade

0%

You must answer at least 9 questions to receive a grade.

Question Help/Challenge

# Meta-Cognition

- Students are better able to store information when they're asked to reflect on whether or not they know it.



## Chapter 3: The Market at Work: Supply and Demand

Page(s) 75-76

3.1. What are the fundamentals of markets?

Fill in the blanks to complete the statement contrasting competitive and imperfect markets.

*Drag word(s) below to fill in the blank(s) in the passage.*

Rural Internet access, with one dominant provider that faces very little competition, is a good example of  market. It functions as . By contrast, a flea market or swap meet, where  buyers and sellers get together to conduct transactions, is an example of  market. No single  exerts  control over prices.

a few <sup>+</sup>

a competitive <sup>+</sup>

significant <sup>+</sup>

buyer or seller <sup>+</sup>

many <sup>+</sup>

an imperfect <sup>+</sup>

a monopoly <sup>+</sup>

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Question Confidence

I think I know it

You can gain or lose up to 60 points on this question.

Activity Score

497

Current Grade

71%

✓ Your grade has been submitted

Question Help/Challenge




# Growth Mindset

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Great effort! >  
You're so smart!

## INQUIZITIVE

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### Chapter 3: The Market at Work: Supply and Demand

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#### Nice Work!

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You've answered the minimum number of questions (9) required to complete the activity.

Your grade, calculated as your current score divided by the Target score, is currently  
 $433 / 700 = 62\%$ , and has been recorded for your instructor to see.

**But don't stop now!!** You can raise your grade as far as you want—all the way up to 100%—by answering more questions and accumulating 700 points. **Your grade will not be reduced if your score goes down:** your grade can only go up from here!

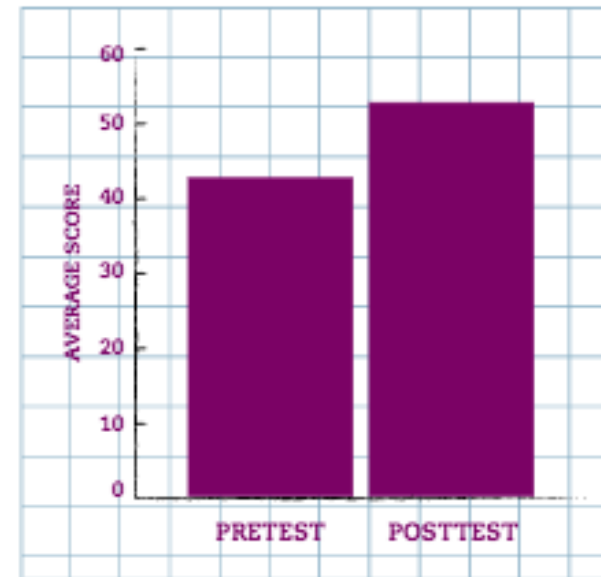
# Efficacy Study

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- 6 instructors and 611 students enrolled in principles of economics
- “InQuizitive effect:” students performed 10% better when they were assigned InQuizitive

## Results

Average scores on the pre and posttests are displayed below. The average InQuizitive Effect was **10%** (95% confidence intervals: 7%, 13%,  $p$ -value  $<.001$ ). Of the students who got a perfect pretest score, no one got more than one question wrong in the posttest.





Your Turn!





# Principles of Economics

SECOND EDITION

Mateer and Coppock



**InQuizitive**  
Formative Adaptive Quizzing

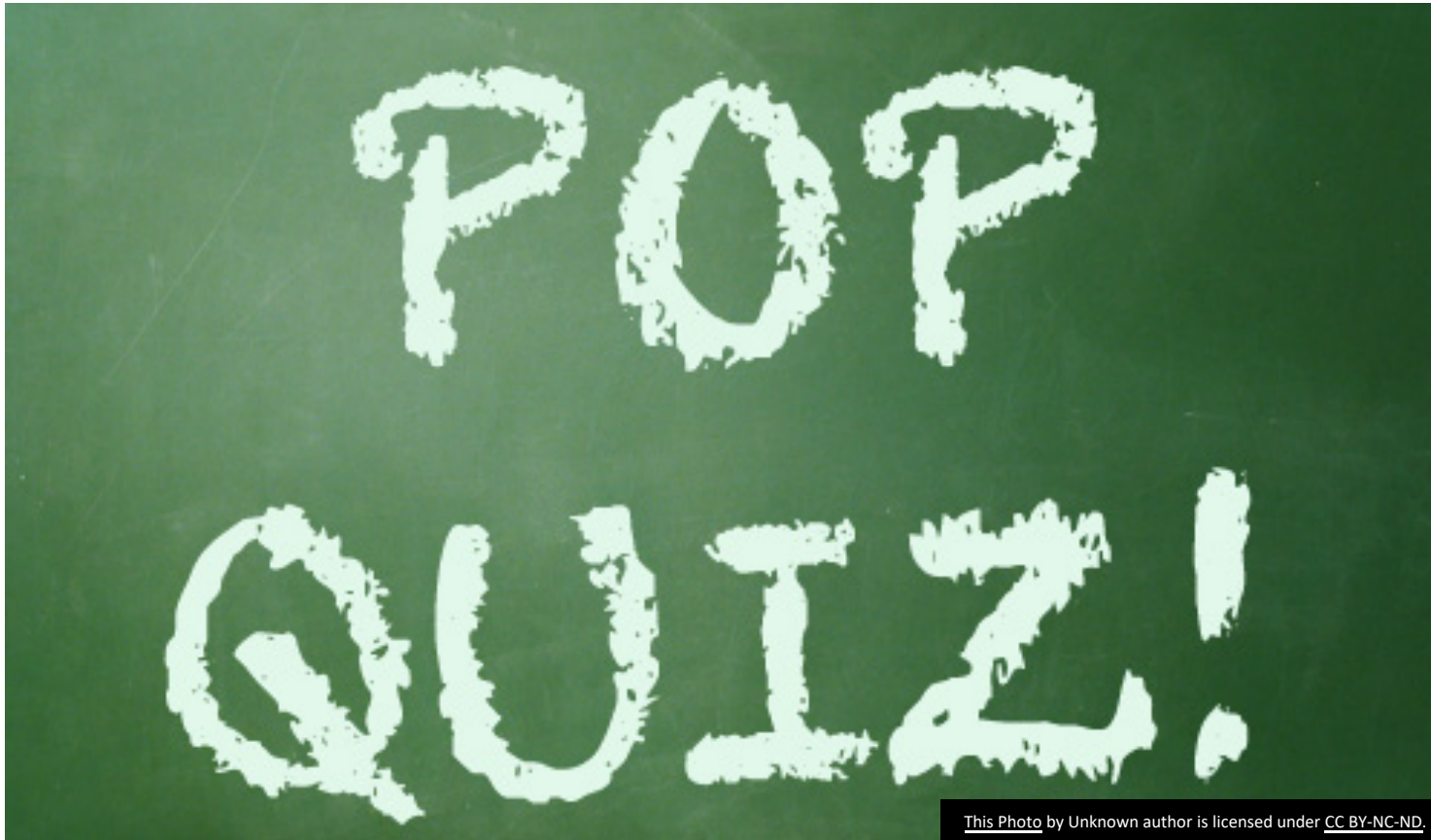
SELECT A STUDENT SET ▾

Export This Data

Stude

Create Custom InQuizitive A

ASSIGNMENT TITLE	GRADES ACCEPTED UNTIL	SUBMITTED GRADES	AVG. TIME SPENT (MM:SS)	AVG. GRADE
How to Use InQuizitive	—	—	—	—
Chapter 1: Five Foundations of Economics	—	—	—	—
Chapter 2: Model Building and Gains from Trade	—	—	—	—
Chapter 3: The Market at Work: Supply and Demand	—	—	—	—
Chapter 4: Elasticity	—	—	—	—



This Photo by Unknown author is licensed under [CC BY-NC-ND](#).

1. What happens if you get several correct in a row?
2. What happens if you get several wrong?
3. What if you don't like the music?
4. Do you need to save your work or submit before leaving?

# What do students say? (n=80)



I liked using Inquizitive more because it wasn't timed and primarily focused on learning...



...Inquizitive made learning an experience...



They are **very hard to cheat** from which good... I guess:). I found Inquizitive more useful because correlated more with what we learned in class.



Access codes are pretty affordable and is a good bang for your buck



# Professor View

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# My students

- ALL types of students
  - 16 year old, HS students
  - 60+ year old retirees
- Many Pell eligible
- First-generation college students (me!)
- NONE are econ majors
- Go on to pursue 4 year degrees



*Lorain County  
Community College*





211254 (3 Micro 1 pm) ▼

Student Grades

Export This Data

More Activity Settings

Create Custom InQuizitive Assignment

Grades Accepted Until date for  
**Chapter 3: The Market at Work: Supply and Demand**

Enter a date

January 2020						
Su	Mo	Tu	We	Th	Fr	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

Cancel

Set Grades Accepted Until

ASSIGNMENT TITLE	AVG. TIME SPENT (MM:SS)	AVG. GRADE
Chapter 2: Model Building and Gains from Trade	—	—
How to Use InQuizitive	—	—
Chapter 1: Five Foundations of Economics	—	—
Chapter 3: The Market at Work: Supply and Demand	01/27/20 11:59 PM	—
Chapter 4: Elasticity	01/29/20 11:59 PM	—
Chapter 5: Market Outcomes and Tax Incidence	[set]	—
Chapter 6: Price Controls	[set]	—
Chapter 7: Market Inefficiencies: Externalities and Public Goods	[set]	—



## Chapter 3: The Market at Work: Supply and Demand

**Settings** for Student Set **211254 (3 Micro 1 pm)**

**Grades Accepted Until:**

**Minimum Activity Duration:**

Default

- Minimum questions: 17
- Target Score: 1300
- **Average time to complete: 40.6 minutes**

(Assuming average student takes 75 seconds and earns 40 points per question)

**Learning Objectives to Include:**

- ☒ 3.1. What are the fundamentals of markets? (7 questions)

3.2. What are the functions of the market? (12 questions)

Save Settings

User: **lmalakar@lorainccc.edu**

**Instructor Activity Introduction**

Class Activity Report

Review Activity Questions

Activity Settings

Manage Student Sets

**Student Activity Introduction**

Student Activity Report

Take a Break

InQuizitive Quickstart Video

**Sound Effects**

✓ On

Off

**Background Music**

✓ Off when answering questions

Always on

Always off

? Help

✉ Change Your Email

🔒 Change Your Password

✕ Sign Out





**InQuizitive**  
Formative Adaptive Quizzing

26295 (11 am Micro) ▼



Student Grades

Export This Data

Create Custom InQuizitive Assignment

ASSIGNMENT TITLE	GRADES ACCEPTED UNTIL	SUBMITTED GRADES	AVG. TIME SPENT (MM:SS)	AVG. GRADE	
How To Use InQuizitive	01/30/17 11:59 PM	32	11:10	99%	<a href="#">Reports</a>
Chapter 1: The Five Foundations of Economics	01/30/17 11:59 PM	35	30:23	97%	<a href="#">Reports</a>
Chapter 3: The Market at Work: Supply and Demand	02/06/17 11:59 PM	35	38:54	96%	<a href="#">Reports</a>
Chapter 4: Elasticity	02/15/17 11:59 PM	35	48:10	86%	<a href="#">Reports</a>
Chapter 16: Consumer Choice	02/20/17 11:59 PM	35	43:13	86%	<a href="#">Reports</a>
Chapter 8: Business Costs and Production	03/06/17 11:59 PM	35	34:46	90%	<a href="#">Reports</a>
Chapter 9: Firms in a Competitive Market	03/20/17 11:59 PM	35	42:06	87%	<a href="#">Reports</a>
Chapter 13: Oligopoly and Strategic Behavior	04/03/17 11:59 PM	35	37:38	88%	<a href="#">Reports</a>

## Chapter 3: The Market at Work: Supply and Demand

### Class Activity Report

Students

Learning Objectives / Questions

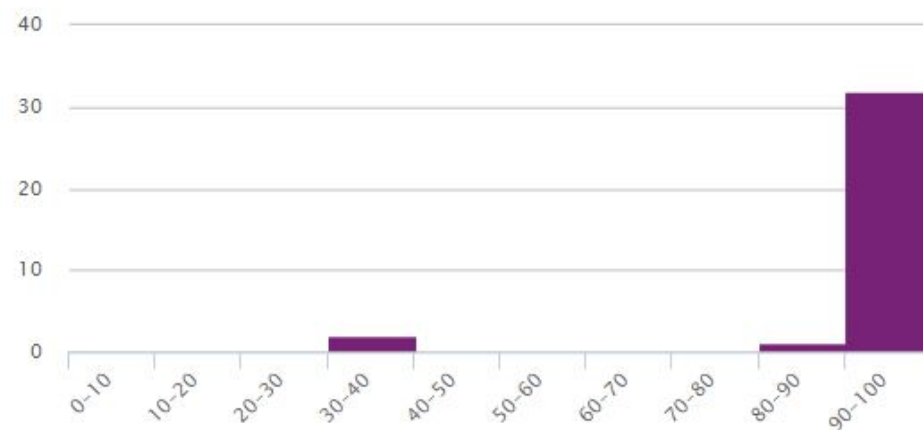
Show results for: 26295 (11 am Micro) ▾

Export Report Data

Overall means for **35 students** who have started the activity:

- Mean **Questions Answered**: **41.8**
- Mean **Score**: **1312.1**
- Mean **Submitted Grade**: **95.8%**
- Mean **Time Spent**: **38:54**

Histogram of Submitted Grades



Back to Instructor Options



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Student Email	Student Name	Last Submission Date	Questions Answered	Time Spent (min:sec)	Score	Grade	
k.boardwine1@lorainccc.edu	Boardwine, Kenneth	04/05/17 10:14 PM	37	25:32	1500	0% (100%+)*	<a href="#">Details</a>
n.villegas3@mail.lorainccc.edu	Villegas, Natalie	04/05/17 12:01 PM	69	55:15	1595	0% (100%+)*	<a href="#">Details</a>
rpawul@lorainccc.edu	Pawul, Ryan	04/04/17 05:20 PM	36	23:27	1585	100%*	<a href="#">Details</a>
a.khadair1@mail.lorainccc.edu	khadair, ameen	04/04/17 12:00 AM	23	59:31	600	43%*	<a href="#">Details</a>
apierce22197@yahoo.com	Pierce, Alyssa	04/03/17 11:29 PM	45	26:55	1575	100%*	<a href="#">Details</a>
a.dari1@mail.lorainccc.edu	Dari, Alham	04/03/17 10:41 PM	52	40:14	1540	100%*	<a href="#">Details</a>
c.kerr6@mail.lorainccc.edu	Kerr, Chad	04/03/17 10:14 PM	36	33:44	1500	100%*	<a href="#">Details</a>
m.garcia37@mail.lorainccc.edu	Garcia, Martha	04/03/17 10:00 PM	34	56:09	1540	100%*	<a href="#">Details</a>
n.thithulai1@mail.lorainccc.edu	LAI, NGAN	04/03/17 09:58 PM	93	48:11	1530	100%*	<a href="#">Details</a>
j.gruber1@mail.lorainccc.edu	Gruber, Jacob	04/03/17 09:47 PM	31	-25:0-22	1505	100%*	<a href="#">Details</a>

## Chapter 13: Oligopoly and Strategic Behavior

### Class Activity Report

Students

Learning Objectives / Questions

Show results for: 26294 (9:30 Micro) ▾

Export Report Data

 Results for **Villegas, Natalie** ([n.villegas3@mail.lorainccc.edu](mailto:n.villegas3@mail.lorainccc.edu)):

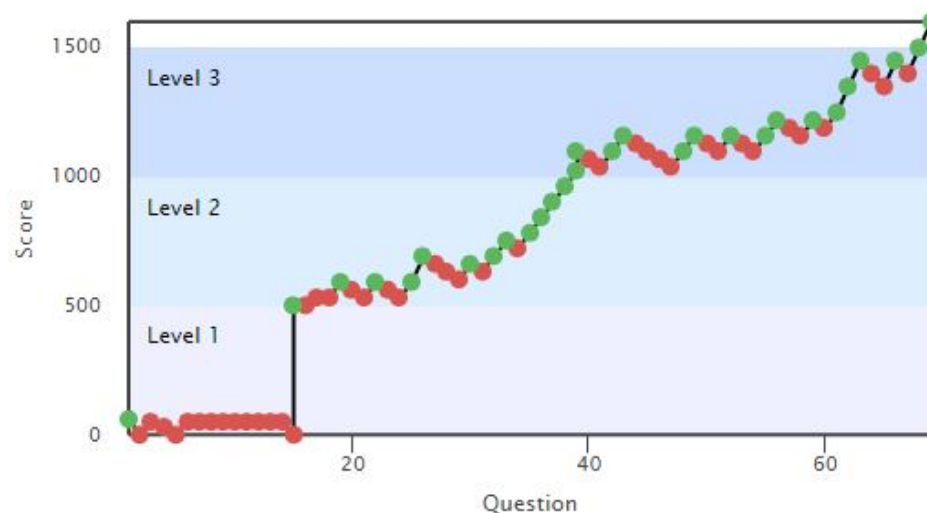
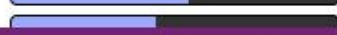
- Last Submission Date: **04/05/17 12:01 PM**
- Date Completed: **04/05/17 12:01 PM**
- Questions Answered: **69**
- Current Level/Score: **Level 3+ / 1595**
- Submitted Grade: **0%**
- Current Grade: **100%†**
- Time Spent: **55:15**

Override Grade

#### Learning Objective

13.1. What is oligopoly?

#### Performance\*



Back to Instructor Options

## Why I like it

Improves student learning

Empowers students, makes them feel successful

Improves course grades

Easy to set up, intuitive, integrates fully with Canvas

Cost less!! about the same as a couple of movie tickets



**MB > MC**

## Why?

- Sound pedagogy

## Students

- Makes learning fun

## Professor

- Improves grades

+ COSTS LESS

