Teaching Digital-Minded Students

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UNIVERSITY OF DELAWARE | CENTER FOR ECONOMIC EDUCATION & ENTREPRENEURSHIP

Impact 2016

professional development

143
Sessions held

2,090
Teachers taught

153,626
Students reached

events

2016 ECONOMIC FORECAST

356
Attendees

TEACH CHILDREN TO SAVE DAY

6,450
Students participated

programs

ELEMENTARY SCHOOL

- Bank At School
- Economics for Kids
- Mini-Society
- Never Too Young: Personal Finance After-School Program
- Parent/family nights
- Personal Finance Academy
- Professional development for in-service teachers

SECONDARY SCHOOL

- EntrePrep Summer Institute
- Keys to Financial Success
- Professional development and topical seminars for in-service teachers

HIGHER ED

- First Year Seminars
- Master of Arts in Economics and Entrepreneurship for Educators
- Undergraduate courses for pre-service teachers

student competitions

2,321
Students participated

- InvestWrite Essay Contest
- Meaningful Economics Competition (ME*)
- National Economics Challenge
- Personal Finance Challenge
- Personal Finance Essay Contest
- The Stock Market Game
- Teach Children to Save Day Poster Contest

praise

93% Rated quality of workshops good to excellent

94% Reported workshops improved their content knowledge

94% Agreed workshops provided methods and tools to teach lessons effectively

awards

- **Bonnie Meszaros**
  James B. O'Neill Multiplier Award
  National Association of Economic Educators
- **Susan Sherry**
  Slocomb Professional Excellence Award
  Alfred Lerner College of Business & Economics
- **Barbara Emery**
  Bessie B. Moore Service Award
  National Association of Economic Educators and Council for Economic Education
- **Scott Bacon**
  Community Uplift Award, Early College High School at Delaware State University

thanks for partnering!

- Adopt-A-Family
- Alfred Lerner College of Business & Economics
- American Spirit Federal Credit Union
- Artisans' Bank
- Bank of America
- Barclays Bank Delaware
- Brown Brothers Harriman Trust
- Bryn Mawr Trust Company
- CNB Bank
- Citi
- Capital One
- Council for Economic Education
- County Bank Delaware
- DEXSTA Federal Credit Union
- Delaware Bank Commissioner's Office
- The Delaware Bankers Association
- Delaware Council on Economic Education
- Delaware Dept. of Education
- Delaware Financial Literacy Institute
- Delaware Geographic Alliance
- The Democracy Project at UD
- Discover
- Economic Ventures
- Federal Reserve Bank of Philadelphia
- Federal Reserve Bank of St. Louis
- Foundation for Teaching Economics
- Fulton Bank
- Guidewell Financial Solutions
- HSBC
- Horn Program in Entrepreneurship
- Investor Protection Unit of the Delaware Dept. of Justice
- JPMorgan Chase
- Louviers Federal Credit Union
- Lyons Companies
- M&T Bank
- MidCoast Community Bank
- New Castle County School Employees Federal Credit Union
- Northern Trust Company
- PNC Bank
- SIFMA
- Social Studies Coalition of Delaware
- Sussex County Council Community Development
- TD Bank
- UD Department of Economics
- UD Professional Development Center for Educators
- WSFS Bank
- Wells Fargo
- Wilmington Trust Co.

#1
Some Students Don’t Like Economics

Though I walk to the valley of death, I fear no evil #economicsfinal #gunnafailthis

He's very strict, attendance is required and there's a seating chart even though its like a class of 400. He's nice though, and can be very helpful if you need the help. His class is extrememly hard though and so are the tests. I think I would have really enjoyed the class if it would have been a different subject.

Report this rating

#2
Some Students Are Not Prepared for Class

"List **all** the resources you use for school, be as detailed as possible"

"Of the resources you just listed, which one provides the **greatest value** in your educational success? Why?

"Of the resources you just listed, which one provides the **least value** in your educational success? Why?

"List **all** the resources you use for school, be as detailed as possible"

"Of the resources you just listed, which one provides the **greatest value** in your educational success? Why?

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#3 […]

Potential SOLUTION?

Blended (Hybrid) Learning

Blended courses combine online and in-class instruction with reduced in-class seat time

(National Center for Education Statistics; Parsad, Lewis, & Tice, 2008)

Internet and Higher Education 27 (2015) 24–31

Contents lists available at ScienceDirect

Internet and Higher Education

The choice of reduced seat time in a blended course

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ARTICLE INFO

Article history:
Accepted 21 April 2015
Available online 23 April 2015

Keywords:
Blended course
Seat time
Online materials
Attendance

ABSTRACT

Two instructional features are available to students in blended courses that are not present in traditional courses. First, online content is available with the intent that it substitutes for a portion of face-to-face lectures or other in-class types of material delivery. Second, in-class seat time in a blended course is reduced as compared to a traditional version of a course. In this study, we explore student choices of reduced seat time in a blended course that does not have a punitive attendance policy, uses online lectures rather than in-class lectures, and conducts alternative, but optional, in-class activities. After taking into account the skip rate that occurs in the traditional version of the course, we find an interval estimate of 49% to 63% for the mean reduction in seat time chosen by students in the blended version of the course. Also, using empirical models of attendance, we find that student use of online materials contributes in a positive way to class attendance.

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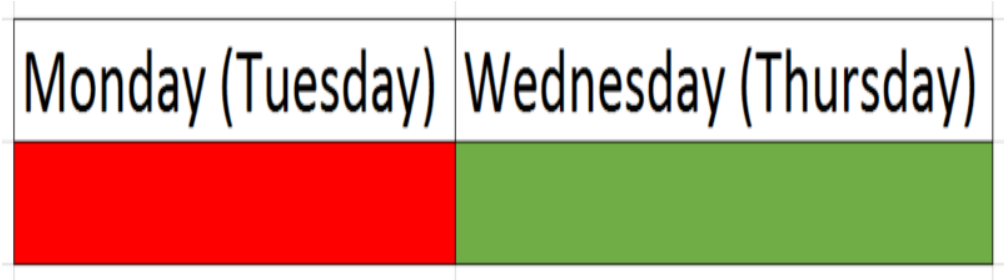
Table 1
Seat time in traditional and blended courses.

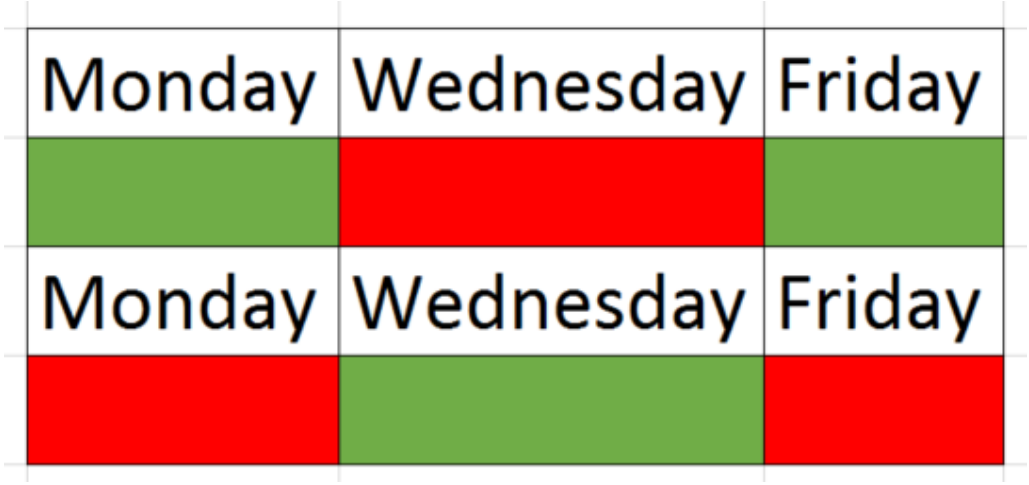
Study	Course subject	Traditional seat time	Blended seat time	Percent reduction
Ashby et al. (2011)	Mathematics	3 hours/week	1.5 hours/week	50%
Bergtrom (2011)	Cell Biology	5 hours/week	2.5 hours/week	50%
Cybinski and Selvanathan (2005)	Statistics	4 hours/week	3 hours/week	25%
Dowling et al. (2003)	Accounting	3 hours/week	1.5 hours/week	50%
Keller et al. (2009)	Accounting	2 meetings/week	1 meeting/week	50%
Klein et al. (2006)	Business	2 meetings/week	1 meeting/week	50%
Larson and Sung (2009)	MIS[a]	13 meetings/term	8 meetings/term	38%
Lin (2008)	Technology	3 meetings/week	2 meetings/week	33%
Lovett et al. (2008)	Statistics	60 meetings/term	16 meetings/term	73%
McFarlin (2008)	Physiology	3 hours/week	1.5 hours/week	50%
McKenzie et al. (2013)	Psychology	3 hours/week	2 hours/week	33%
Melton et al. (2009)	Health	2 meetings/week	1 meeting/week	50%
Moore and Gilmartin (2010)	Geography	2 hours/week	1 hour/week	50%
Napier et al. (2011)	Computing	3 meetings/week	2 meetings/week	33%
Pereira et al. (2007)	Anatomy	45 hours/term	33 hours /term	27%
Riffell and Sibley (2005)	Biology	2.5 hours/week	50 minutes/week	67%
Scida and Saury (2006)	Spanish	5 hours/week	3 hours/week	40%
Senn (2008)	Technology	15 meetings/term	5 meetings/term	67%
Utts et al. (2003)	Statistics	200 minutes/week	80 minutes/week	60%
Ward (2004)	Statistics	2.5 hours/week	1.25 hours/week	50%

[a] MIS – Management Information Systems.

Mean Reduction in Seat Time

49% - 63%





Decision Sciences Journal of Innovative Education
Volume 1 Number 2
Fall 2003
Printed in the U.S.A.

Student Hits in an Internet-Supported Course: How Can Instructors Use Them and What Do They Mean?

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ABSTRACT

The world of education is changing as Web-based technology and courseware are increasingly used for delivery of course material. In this environment, instructors may need new measures for determining student involvement, and ultimately student performance. This study examines whether hits to a Web site have any value for predicting student performance in a traditional course supported by Web activities. Total Hits at the end of the semester was used as one measure. Hit Consistency, determined by assigning a 0 when no hits occurred between class meetings and by assigning a 1 when one or more hits occurred between class meetings, was another. Hit Consistency was significantly correlated with course average ($r = .37$, $p < .001$) for 108 students in two course sections. Hit Consistency started to show a significant relationship with course average by the third week (or class). Total Hits was not found to significantly correlate with course average ($r = .08$, $p > .05$) at the end of the semester or during any week. These results suggest that students who consistently access a Web site will perform better than those who do not. When Hit Consistency and Total Hits were entered as independent variables into a stepwise regression with course average as the dependent variable, the model was enhanced by the addition of Total Hits after Hit Consistency was entered ($R = .43$, $p < .001$). Hierarchical regression analysis in which cumulative grade point average was entered as the first controlling variable suggested that online access may go beyond the predictive value of achievement alone for predicting course performance with Hit Consistency appearing to be the dominant causal variable.

Subject Areas: Academic Achievement, Courseware, Distance Education, Hierarchical Regression, Hit Consistency, Student Involvement, Student Performance, Total Hits, and Web-Based Technology.

INTRODUCTION

Throughout the 1990s and into the new millennium, thousands of college teachers have taken advantage of a new generation of software designed to create Web sites for courses. In fact, the report of the Web-Based Education Commission (2000) to the president and the Congress of the United States indicated that nearly 40% of all college classes used Internet resources as part of the syllabus in 1999, compared with 15% in 1996. Similarly, two-fifths (42.7%) of college courses now use Web resources as a course component, up from 10.9% in 1995, 33.1% in 1998, and 38.9% in 1999 (Web-Based Education Commission, 2000). Much of this growth is due to

Decision Sciences Journal of Innovative Education
Volume 11 Number 1
January 2013
Printed in the U.S.A.

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Journal compilation ©2013, Decision Sciences Institute

EMPIRICAL RESEARCH

Access Patterns of Online Materials in a Blended Course

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ABSTRACT

Patterns in student accesses of online materials and their effects upon student performance in a blended course are examined. Our blended course is an introductory business and economic statistics course where lectures are only available online while the traditional class period is used for complementary learning activities. Timing, volumes, intensity, and consistency of the student accesses of the online lectures are considered. Using bivariate and multivariate analyses, measures of timing and consistency are shown to be related to student performance but volumes and intensity of accesses are not.

Subject Areas: Blended Courses, Business Statistics, Online Accesses, Student Performance.

INTRODUCTION

The blended format of instruction has grown rapidly in popularity within higher education. A report from the National Center for Education Statistics defines blended courses as combining online and in-class instruction with reduced in-class seat time (Parsad, Lewis, & Tice, 2008). According to the report, 35% of the estimated 4,160 2- and 4-year post-secondary institutions in the nation offered blended courses at either the undergraduate or post-graduate level. Among institutions with more than 10,000 students, 64% of them offered blended courses. The spread of the blended format is not surprising given its many attractive characteristics. For example, Garrison and Kanuka (2004) and Klein, Noe, and Wang (2006) describe the format as having transformative potential by providing learners with a greater sense of independence, responsibility, and control, and by enhancing their levels of critical and reflective thinking. Despite the many positive attractions of the blended format, the transition to it is not necessarily smooth. Garrison and Kanuka (2004) outline some of the challenges that accompany the development

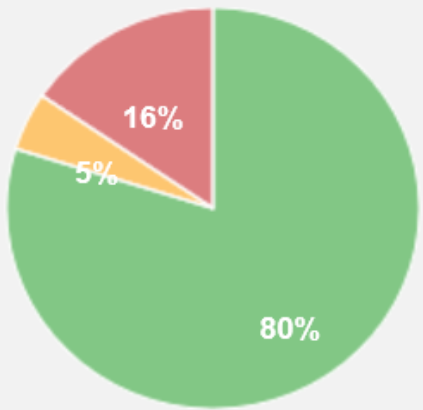
†Corresponding author.

breakdown by risk

total students

277

at risk	43
keep watch	13
safe	221



how online engagement works

Connect looks for patterns of online student activity to determine the engagement level of the student, including such events as the frequency of logins and assignment submission. Other factors that may affect prediction include special events or manual grading.

how to improve student performance

The more you use Connect in your course, the more opportunities Connect has to measure online engagement. By the second or third week of the term, Connect should have enough data to track students that have low online engagement. Click the "send message to student" button to convey your concern to the affected student(s).

Internet and Higher Education 32 (2017) 29–38

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Internet and Higher Education

Comparing student performance in blended and traditional courses: Does prior academic achievement matter?

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ARTICLE INFO

Article history:
Received 23 December 2015
Received in revised form 8 August 2016
Accepted 8 August 2016
Available online 09 August 2016

Keywords:
Blended course
Traditional course
Achievement
Zones
Performance differences

ABSTRACT

The performance of students in blended and traditional versions of a collegiate course is compared within the context of students' prior academic achievement. The blended version of the course used flipped and flexible instructional modes, in which only online lectures were available, class periods were used for complementary learning activities, and there was no punitive attendance policy. Significant differences in student performance between the blended and traditional versions were found within two of three zones of grade point averages. At low grade point averages, performance was higher in the traditional version of the course. At high grade point averages, performance was higher in the blended version. No significant difference was detected in the middle zone of grade point averages. Predictive models of student performance were also prepared for the two versions of the course. Partial effects from measures of prior academic achievement upon performance in the blended version were significantly different from partial effects provided by the same measures in the traditional version of the course.

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Table 1
Comparisons of student performance in blended and traditional courses.

Study	Course type with significantly higher performance	Course subject	Performance measure	Basis of comparison	Controls or covariates
Albert and Beatty (2014)	Blended (in two of three exams)	Management	Exam scores	Means	None
Alonso et al. (2011)	Blended	Computing	Course grade	Means	None
Al-Qahtani and Higgins (2013)	Blended	Culture	Post-test score	Means	None
Baepler et al. (2014)	Blended (in one of two sections)	Chemistry	Exam score	Means; indicator variable in regression	ACT, GPA, age, gender, science major, ethnicity
Dowling, Godfrey, and Gyles (2003)	Blended	Accounting	Course grade	Indicator variable in regression	Age, gender, full time student, grade in prerequisites
Lewis and Harrison (2012)	Blended	Social Science	Course point total	Means	None
McFarlin (2008)	Blended	Physiology	Course point total	Means	None
Melton, Graf, and Chopak-Foss (2009)	Blended	Health	Course grade	Means	None
Pereira et al. (2007)	Blended	Anatomy	Exam scores	Means	None
Riffell and Sibley (2005)	Blended	Biology	Post-test score	Indicator variables in regression	Pre-test score, gender, attendance, class standing, online experience, commuter student
Ashby, Sadera, and McNary (2011)	Neither	Mathematics	Course average	Means	Age, gender
Bergtrom (2011)	Neither	Cell Biology	Exam average	Means	None
Cybinski and Selvanathan (2005)	Neither	Statistics	Final exam	Means	None
Delialioglu and Yildirim (2008)	Neither	Computing	Post-test score	Means (in ANCOVA)[b]	GPA, pre-test score
Keller, Jassell, Webber, and Johnson (2009)	Neither	Accounting	Course grade	Indicator variable in regression	Grade in prerequisite course, gender, transfer student, SAT
Larson and Sung (2009)	Neither	MIS[a]	Course grade	Means	None
Reasons, Valadares, and Slavkin (2005)	Neither	Ed. Psych. and Health Care	Course grade	Means	None
Utts et al. (2003)	Neither	Statistics	Pre-test, post-test, final exam	Means (in ANCOVA)[b]	GPA, class standing
Ward (2004)	Neither	Statistics	Course grade	Means	None
McDonough et al. (2014)	Traditional	Psychology	Exam average	Means	None
Senn (2008)	Traditional	Technology	Course grade	Means	None

[a] MIS – management information systems.
[b] ANCOVA – analysis of covariance.

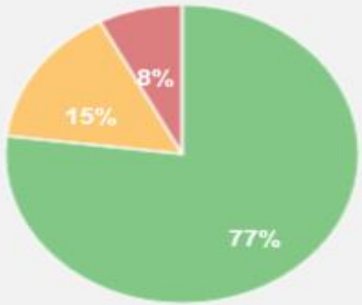
Table 2
Student characteristics, means.

Characteristic	Blended[a]	Traditional[a]	Difference	*t*-statistic	*p*-value
Age	20.01	20.02	−0.01	−0.07	0.94
Total credit hours	39.86	40.22	−0.36	−0.28	0.78
Semester credit hours	13.57	13.74	−0.17	−0.90	0.37
Transfer credit hours	19.41	21.84	−2.43	−1.36	0.17
Grade point average	3.28	3.28	0.00	0.00	1.00
Math quiz score (of 16)	11.78	11.54	0.24	1.08	0.28
Calculus grade[b]	9.10	8.93	0.17	0.80	0.43
ACT math score	25.38	25.33	0.05	0.15	0.88
ACT composite score	25.27	24.95	0.32	1.00	0.32
Course points (of 160)	118.86	117.81	1.05	0.63	0.53
Attendance percent	46.2	87.9	−41.7	−22.55[c]	≈0.00

[a] Sample sizes: blended 347; traditional 257.
[b] To calculate means, letter grades were converted to numeric values: F = 1; D− = 2; D = 3; D+ = 4;...;A+ = 13.
[c] Significance level - 0.01.

total students
13

at risk	1
keep watch	2
safe	10



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The more you use Connect in your course, the more opportunities Connect has to measure online engagement. By the second or third week of the term, Connect should have enough data to track students that have low online engagement. Click the "send message to student" button to convey your concern to the affected student(s).

	online engagement indicator	remediate
nantha	1.1	send message to student
sabelle	6.7	send message to student
ew	6.3	send message to student
h	10.0	
ole	7.9	
mily	8.4	
ah	7.9	
elson	7.8	
an	8.9	
Elyse	7.7	
Ashley	8.9	
ngran	8.4	
e	9.0	

f 13 next ▶

What Can We Do?

- Offering a “peer-learning” program
  - Broadbent and Poon (2015) – Lit. Review
  - Matching with previous students (mentors)

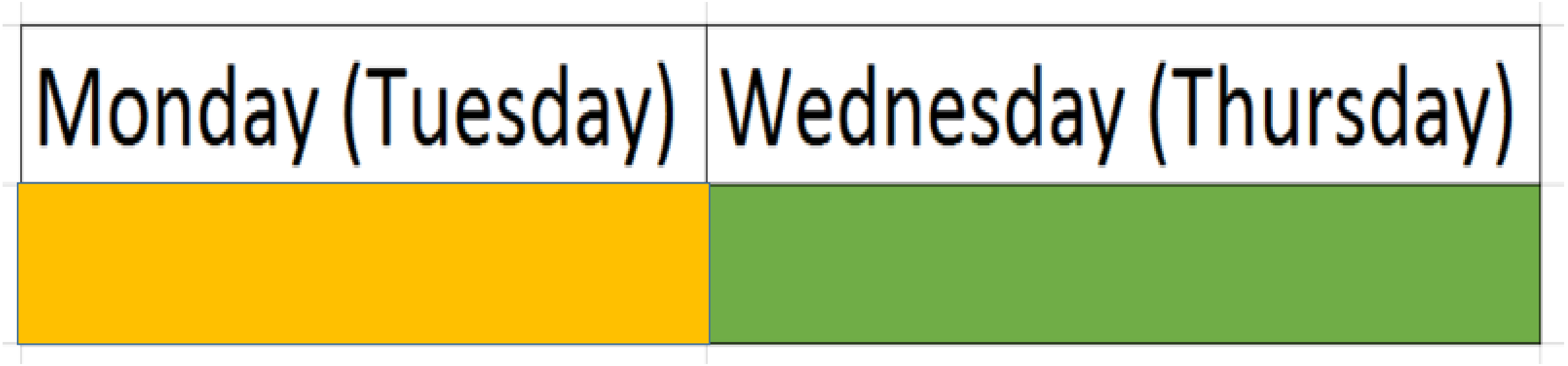
    Physical or virtual environments

- Encouraging students to read and post messages (Zacharis, 2015)
  - Increase student engagement
  - Allows for peer mentoring
  - Creates a sense of community (Bower, 2015)

- Offering low/no stakes online assignments
  - Safe environment to increase student engagement (Zacharis, 2015)

Prior Online and Blended Experience: Does it Affect Outcomes in a Blended Course

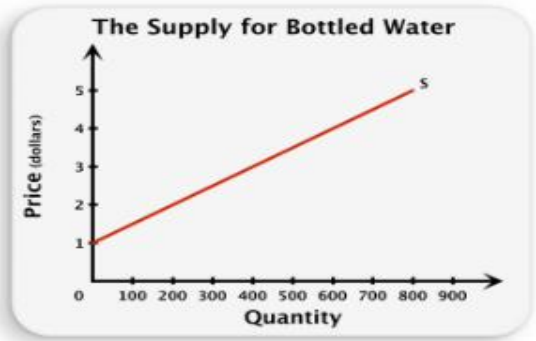
Carlos J. Asarta, Ph.D., University of Delaware
James R. Schmidt, Ph.D., University of Nebraska-Lincoln


Monday (Tuesday)
Wednesday (Thursday)

Title	Shared	Info	Start-due	Show/hide
<- - - - - - - - - - Drop an assignment here to remove from a group - - - - - - - - - ->				
▶ Introductory Videos				
▶ Module 1 Fundamentals, due 09/07				
▶ Module 2 Demand & Supply, due 09/14				
▼ Module 3 Market Equilibrium and Policy, due 09/21				☐
 Market Equilibrium and Policy Videos - No Grade			8/29/2016-12/31/2016	 ☐
 Module 3 - Market Equilibrium and Policy			9/14/2016-9/21/2016	 ☐
▶ Module 4 Market Efficiency, due 09/28				

Video for Change in Supply

Show how the supply curve changes in response to nonprice determinants.



00:24 02:29

Switch to Spanish Video

Key Terms

Choose the term to see its definition.

- increase in supply
- decrease in supply
- **definition in context**

Definitions

An increase in the quantity of a good, service, or resource supplied *at every price*. Graphically, an increase in supply is represented by a rightward shift of the supply curve.

GIVE FEEDBACK

BACK TO LIBRARY

+ Explicit and Implicit Costs ✔

+ Economic and Accounting Profits ✔

+ Short-Run Relationships - Total, Marginal, and Average Product ✔

+ Short-Run Relationships - Fixed, Variable, and Total Costs ✔

+ Short-Run Relationships - Average Costs ✔

+ Short-Run Relationships - Marginal Costs ✔

+ Marginal, Average Total, and Average Variable Cost ✔

+ Long-Run Relationships - Long-Run Cost Curve ✔

+ Long-Run Relationships - Economies of Scale, Constant Returns to Scale, and Diseconomies of Scale ✔

The videos for production & the module were very helpful for learning production. They taught me everything I needed to know about production in about 1 hour that my high school Micro teacher took weeks to teach. It simplified the main topics and was very easy to understand.

The One-Minute Paper: Some Empirical Findings

John F. Chizmar and Anthony L. Ostrosky

A major finding of the Harvard Assessment Seminars is that "modest, relatively simple and low-tech innovations can improve students' learning and active participation in class" (Light 1990, 6). One such innovation is the so-called one-minute paper (Cross and Angelo 1988; Bateman and Roberts 1992a, 1992b; Wilson 1986).

The one-minute paper has become rather ubiquitous in higher education. According to Cross and Angelo (1993, 148), "No other Classroom Assessment Technique[1] has been used more often or by more college teachers than the [One] Minute Paper." When asked by college teachers to identify the single pedagogical innovation that would most improve their teaching, Light (1990, 35) always responds with the one-minute paper, an idea that "swamped all others."

In this article, we describe the one-minute paper and report on a pilot implementation of this technique to manage instruction in the micro portion of the introductory economics course at a large public university. We conclude with a discussion of issues and questions revealed by the pilot implementation that may affect the efficacy of the one-minute paper.

THE ONE-MINUTE PAPER—WHAT IS IT?

The one-minute paper is a "modest, relatively simple and low-tech" innovation designed to obtain regular feedback from students. In the final minute or two of class, the teacher asks students to respond to the following two questions:

John F. Chizmar *and* ***Anthony L. Ostrosky*** *are professors of economics at Illinois State University, Normal, Ill.* *The authors wish to thank Lon Carlson, Mark S. Walbert, Peter Kennedy, and two anonymous referees for particularly helpful criticisms of earlier drafts of this article.*

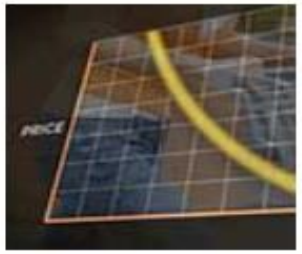
3 Questions

1. What did you learn today?

2. What is still unclear?

3. Questions, concerns, issues, problems, & other feedback

Demand – The Economic Lowdown Video Series, Episode 2



In the second episode of the Economic Lowdown Video Series, economic education specialist Scott Wolla explains the concept of demand. Viewers will learn how a change in the price of a good affects the quantity of the good consumers will buy and how changes in market conditions affect the demand for a good.

To provide students with online questions following this video, register your class through the Instructor Management Panel.

More about the Video Q & A for Teachers and Students.

Contact Us:

economiceducation@stls.frb.org

Contact our Economic Education Specialists

Permitted Use:

Read about using Econ Lowdown resources

Video Overview:

Watch this video to get a concise summary of Econ Lowdown's benefits: **The Lowdown**

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- Page One Economics Classroom Edition: email | view
- Web Content Updates: email
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Awards:

St. Louis Fed Receives 2015 Excellence in Financial Literacy Education Award

Overview By Assignment

View individual student progress for each assignment.
Send .csv by email

Performance Summary

Identify at risk and on track students by monitoring their current progress and tracking time spent in their assignments.
Send .csv by email

Student Progress by Topic

View individual student details and completion level breakdown for each topic.
Send .csv by email

Section Averages by Topic

View information on how your class performed on each of the assigned topics.
Send .csv by email

Metacognitive Skills

View statistics on how knowledgeable your students are about their own comprehension and learning.
Send .csv by email

Student Progress by Unit

View individual student progress for each unit.
Send .csv by email

Most Challenging Learning Objectives

EVERYDAY MONEY

Tonight's World Series Final Is the Most Expensive Game 7 in Sports History

Brad Tuttle @bradrtuttle | Nov. 2, 2016

History is being made in more ways than one.

Elsa—Getty Images

We knew going in that this year's World Series would be historic. The series features the Chicago Cubs and the Cleveland Indians, two championship-deprived franchises that haven't won Major League Baseball titles since 1908 and 1948, respectively.

Based on how long fans have waited for their teams to win it all, we also had a pretty good idea that World Series ticket prices would be insane. And sure enough, they've been insane on a historic level. Ticket prices on the secondary market for the games in Cubs-crazed Chicago have been listed at an average of over $6,000 in the lead up to the series.

The New York Times

AT&T Agrees to Buy Time Warner for $85.4 Billion

By MICHAEL J. de la MERCED OCT. 22, 2016

The headquarters of Time Warner in New York. Today's Time Warner is the byproduct of many rounds of spinoffs and acquisitions. Adrees Latif/Reuters

Venezuelans Give Up on Counting Piles of Cash and Start Weighing Them

by Fabiola Zerpa Andrew Rosati
andrewrosati

October 31, 2016 — 5:00 AM EDT

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THE JOURNAL OF ECONOMIC EDUCATION, *46*(4), 420–429, 2015
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ISSN: 0022-0485 / 2152-4068 online
DOI: 10.1080/00220485.2015.1071222

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ECONOMIC INSTRUCTION

Visualizing Data and the Online FRED Database

Diego Méndez-Carbajo

The author discusses a pedagogical strategy based on data visualization and analysis in the teaching of intermediate macroeconomics and financial economics. In these short projects, students collect and manipulate economic data from the online Federal Reserve Economic Database (FRED) in order to illustrate theoretical relationships discussed in class. All the data collection and manipulation tasks are conducted through the FRED Web site. The author argues that as students locate and effectively use the quantitative information that they need to evaluate abstract concepts, they are in effect developing the connection between theories and empirical evidence that underpins the discipline of economics.

Keywords *data analysis, data manipulation, financial economics, intermediate macroeconomics*

JEL codes *A22, C82, G12, G14, G15*

Teaching Introductory Economics with FRED
Elasticity

Activity Title
Price Elasticity of Demand

Summary
This activity plots two series of economic data related to the concept of price elasticity of demand and downloads the data to compute the price elasticity of demand according to both the simple formula and the midpoint formula.

This activity plots an index of personal quantity expenditure on fuel in the U.S. and compares its evolution to that of gasoline prices.

This activity is suitable for addressing each of the following questions:

1. How are fuel expenditures related to changes in gasoline prices?

2. How has the price elasticity of demand for fuel changed after the 2008-2009 recession?

Difficulty
Moderate to High

Name:_____ Course:_____ Section:_____

MARKET EQUILIBRIUM & POLICY
IN-CLASS WORKSHEET 3

This question examines the market for smartphones. You will use the quantity demanded and the quantity supplied at different prices to identify the equilibrium price and to examine what happens when the market price does not equal the market price.

Below, you are provided with the quantity of smartphones demanded and supplied. This data is obtained from points on the demand and supply curves in the market for smartphones.

Price (per smartphone)	Quantity of Smartphones Demanded	Quantity of Smartphones Supplied
$150	1,100	200
200	1,000	400
250	900	600
300	800	800
350	700	1,000

Task 1: When the price of a smartphone is $200, what is the quantity of smartphones demanded, and what is the quantity supplied? Should you expect the price of smartphones to rise or fall?

Task 2: When the price of a smartphone is $350, what is the quantity of smartphones demanded, and what is the quantity supplied? Should you expect the price of smartphones to rise or fall?

Task 3: What is the equilibrium price of a smartphone? At this price, what is the quantity of smartphones demanded, and what is the quantity supplied?

Name:_____ Course:_____ Section:_____

MARKET EQUILIBRIUM & POLICY
IN-CLASS WORKSHEET 2

This question examines the market for bananas. You will use the formulas for a demand and supply curve to identify the quantity of bananas demanded and the quantity of bananas supplied at different prices.

Below, you have the formulas for the demand curve and the supply curve for pounds of bananas. If you plug any price into the formula for the demand function, you get the quantity demanded at that price. If you plug any price into the supply function, you get the quantity supplied at that price.

The Demand Function for bananas:

$$Q = 25 - 2P$$

The Supply Function for bananas:

$$Q = 3P$$

Task 1: Use the table below to find the quantity demanded and the quantity supplied of pounds of bananas at each price.

Price (per pound of bananas)	**Quantity of Bananas Demanded** (pounds)	**Quantity of Bananas Supplied** (pounds)
$ 2	21	
4		12
6		
8	9	
10		

Task 2: At a price of $4, is there a shortage or surplus of bananas? How many pounds?

Task 3: At a price of $8, is there a shortage or surplus of bananas? How many pounds?

Lesson Plans
Economics for Leaders
Economic History for Leaders
Economic Demise of the Soviet Union
Economics of Disasters
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Right Start in Teaching Economics

Lesson Plans

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The Foundation for Teaching Economics is pleased to make available to teachers the content outlines, classroom activities, and teacher materials (demonstration videos and lecture presentations) for *all* of our residential, one-day, and online curricula. Each curriculum topic link on the left connects you to an overview and table of contents. From there, you may:

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Trading Game

VALUE	INITIAL	COMPARE	A/B/C/D	AB/CD	ABCD
5	II	?	III	IIIIII	IIIIIIIII
4	III	?	IIIII	IIIIIII	IIIIIII
3	IIIII	?	IIIIIII	IIIIII	III
2	IIIIIIII	?	IIIII	IIII	II
1	IIIIIIIII	?	IIIII	III	I
TOTAL	Sum				

THE CONCLUSION

1. Some students don’t like econ or don’t come prepared to class
2. Chalk and talk
3. Digital-minded students
4. Blended Learning – Potential Solution
    - Flip-flex
    - 50% reduction seat time
    - Consistency + Timing (48-hour rule) are critical
    - Prior online experience not necessary
5. What to do in class?
    - Mini lecture
    - Current events
    - FRED applications
    - Worksheets
    - Activities/Experiments
    - Discussions

Thank You

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