## **Student Perceptions of Learning with**



Mary Kassis, Melanie Hildebrandt, David Boldt – University of West Georgia Kim Holder - University of Tennessee at Chattanooga



Easily develop your own interactive online content.

Integrate into an LMS and available outside of an LMS.

Traditional lectures are still the primary method.

Research supports active learning, but may be costly.

SoftChalk might be a useful tool for engaging learning activities.

# **Use for Continuous Improvement in Assessment**

Examples: 1) PPF exercise combined with St. Louis Fed videos; 2) monetary policy exercise combined with a Federal Reserve video and 3) an exchange rates exercise combined with a video.

Advantages: consistency across all sections, not tied to specific textbook, and faculty can simply include links to exercise in the LMS or syllabus.

# Selected Research on Using SoftChalk

Tooley, T.R., Ahmed, M., Helland, L., Dykowski, S., Barremkala, M., 2018

Conclusion: SoftChalk modules were a positive experience for first-year medical students and were helpful with dissection preparation.

Senthilkumar, R.D., 2019

Conclusion: The author reported a higher performance level for engineering students utilizing pre-class SoftChalk activities compared to a control group.

Zheng, M., and Ferreira L. (2021)

Conclusion: A 91% positive rating for the use of the interactive approach. One student commented "I love SoftChalk. The best way to learn oral pathology." The positive outcome in this course led to the adoption of SoftChalk in other courses.

# Selected Research on Using SoftChalk

Wynants, S.A., 2022.

Conclusion: SoftChalk was used to create weekly online interactive exercises in child development courses. Student ratings of the lessons were positive (based on survey results).

McClellan, S., 2016

Conclusion: The author utilized SoftChalk to create modules to enhance student learning and critical thinking skills in the area of information literacy. Student feedback was overwhelmingly positive. One student noted that "it didn't feel like doing homework."

In-progress paper by presenters on using SoftChalk in Economics. 2025?

# **Lesson Example: Fiscal Policy Tools**

Students should be able to:

Distinguish between automatic stabilizers and discretionary fiscal policy.

Define the 3 tools of fiscal policy - government purchases, taxes, and transfer payments.

Explain what it means for the economy to be in a recessionary gap and an expansionary gap.

Describe the appropriate fiscal policy responses when an economy is experiencing a recessionary gap vs. an expansionary gap.



tinyurl.com/FiscalTools

# Fiscal Policy Tools Tutorial

Start Lesson

In this lesson, you will explore the three tools of fiscal policy and learn how each tool should be used to help move the economy back to full employment in the event of a recessionary or an expansionary gap.

## Contents



Automatic Stabilizers and Discretionary Fiscal Policy

The Tools of Discretionary Fiscal Policy

Fiscal Policy in a Recessionary Gap

Fiscal Policy in an Expansionary Gap

Fiscal Policy Practice Activities

## Author:

< 1 of 5 > Score; 0 of 22

#### Automatic Stabilizers and Discretionary Fiscal Policy

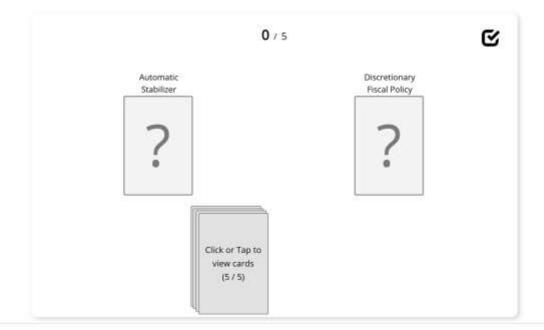
In this lesson, we will explore the tools of fiscal policy. Fiscal policy refers to the use of government spending, taxes, transfer payments, and borrowing to impact aggregate economic activity. Fiscal policy can be divided into two categories:

- Automatic stabilizers are items that are built into the federal budget that will adjust automatically to stabilize disposable income over the course of the business cycle. An automatic stabilizer will help to increase aggregate demand during a recession and will help to dampen aggregate demand during expansions. An example of an automatic stabilizer is unemployment insurance. When an economy goes into a recession and people get laid off, more people will automatically become eligible for unemployment insurance. The unemployment payments to these individuals will help to reduce the drop in disposable income relative to what it would have been if there had not been any unemployment insurance. In periods of economic expansion, this process will work in reverse as more people get jobs and fewer people receive unemployment insurance.
- 2. Discretionary Fiscal Policy is an intentional change in government purchases, taxation and transfer payments in an effort to achieve macroeconomic goals such as lowering the unemployment rate or increasing aggregate output. An example of discretionary fiscal policy would be the stimulus checks mailed to households during the pandemic recession, which were intended to boost aggregate demand.

Now let's practice identifying whether a policy action is classified as an automatic stabilizer or discretionary fiscal policy. Remember that the key difference between these two types of fiscal policy is that an automatic stabilizer does not require a specific action by Congress and will kick in automatically in response to changes in the economy, while discretionary fiscal policy is an intentional change in government purchases, taxes, and/or transfer payments in response to changes in the economy.

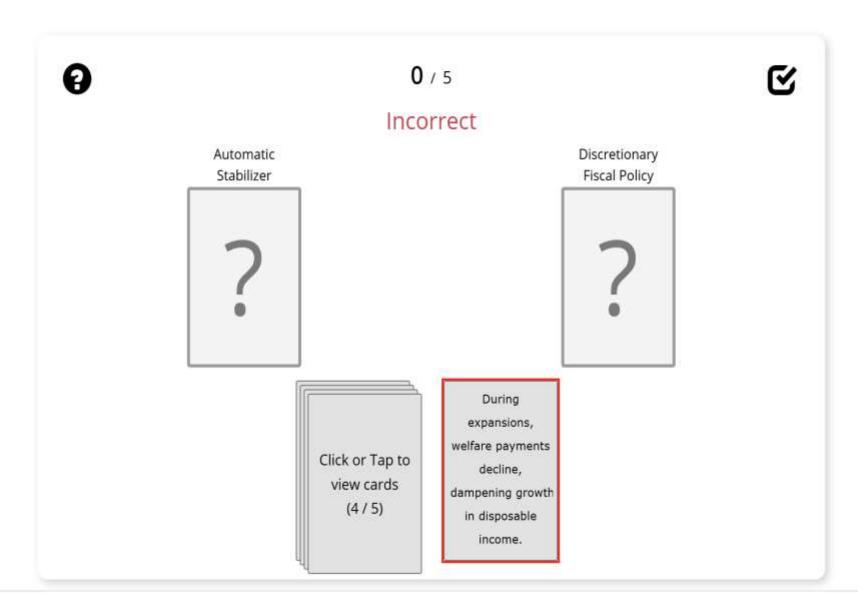
#### Discretionary Policy versus Automatic Stabilizers

Determine whether each policy would be categorized as an automatic stabilizer or as discretionary fiscal policy. Drag and drop the card to the appropriate policy.



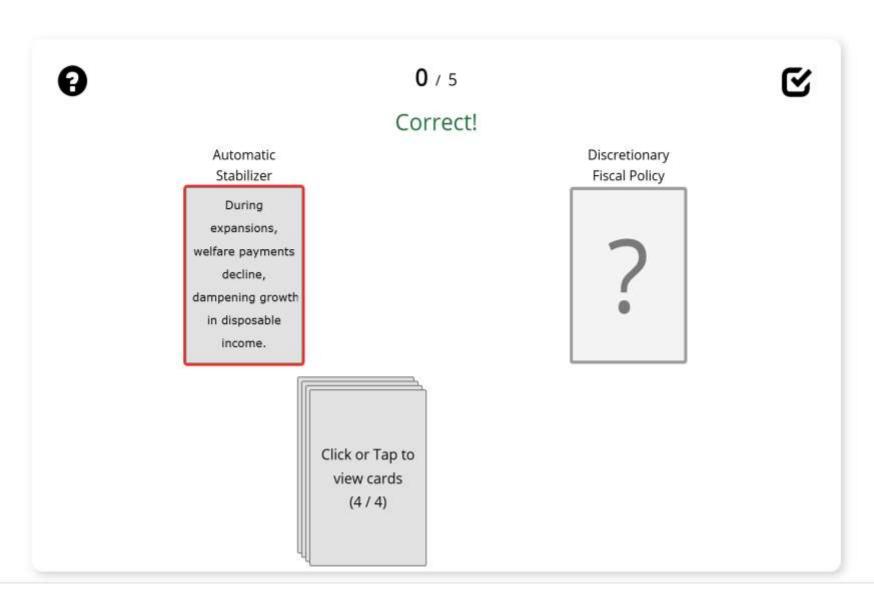
## Discretionary Policy versus Automatic Stabilizers

Determine whether each policy would be categorized as an automatic stabilizer or as discretionary fiscal policy. Drag and drop the card to the appropriate policy.



## Discretionary Policy versus Automatic Stabilizers

Determine whether each policy would be categorized as an automatic stabilizer or as discretionary fiscal policy. Drag and drop the card to the appropriate policy.



#### The Tools of Fiscal Policy



Although automatic stabilizers play an important role in fiscal policy, we will focus our fiscal policy discussion on discretionary fiscal policy since it is discretionary policy that policymakers enact in response to a recession or to inflationary concerns in an overheated economy.

There are 3 tools of fiscal policy:



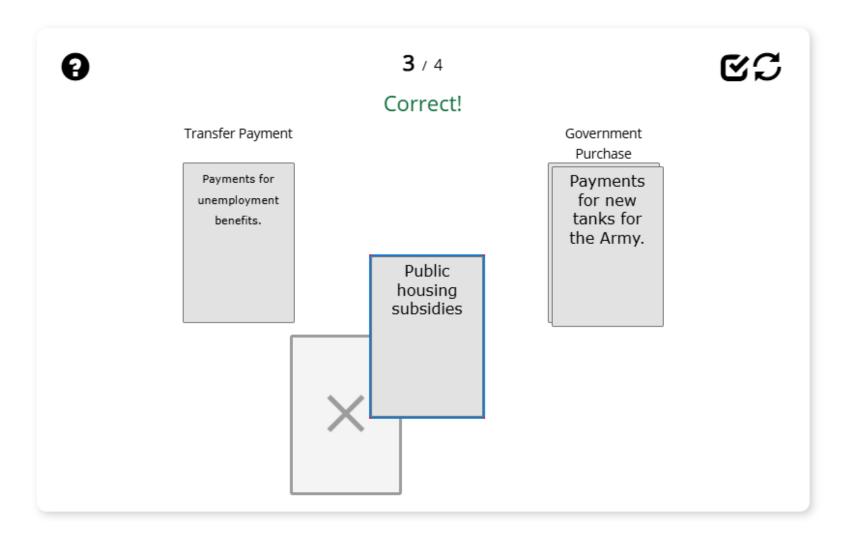




It is important to clearly distinguish between government purchases and transfer payments. Government purchases are expenditures by the government to purchase goods and services, while transfer payments are direct payments to households that are not made in exchange for any good or service. Transfer payments can be cash payments like a Social Security check or in-kind payments such as food stamps.

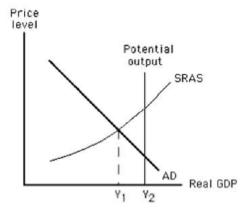
Use the sorting activity below to practice identifying examples of government purchases and transfer payments.

## **Sorting Activity**



#### Fiscal Policy in a Recessionary Gap

Now let's explore how each of the three tools of fiscal policy would be used to help get the economy out of a recession. Let's assume the economy is in a recessionary gap where it is producing less than its potential level of output, as shown in the aggregate supply and demand graph below.

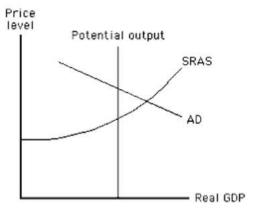


In this case, the level of aggregate demand is lower than expected, the short run equilibrium level of output is below potential output, and the unemployment rate is greater than the natural rate of unemployment. The goal of fiscal policy when the economy is in a recessionary gap would be to shift the aggregate demand curve to the right, increasing both output and the price level. To accomplish this goal, policy makers would want to use **expansionary fiscal policy:** 

- increase government purchases
- decrease taxes
- increase transfer payments

#### Fiscal Policy in an Expansionary Gap

Now let's look at how we would use the fiscal policy tools if the economy is experiencing an expansionary gap, where output is growing beyond its long run capabilities and inflation is a concern, as shown in the graph below.

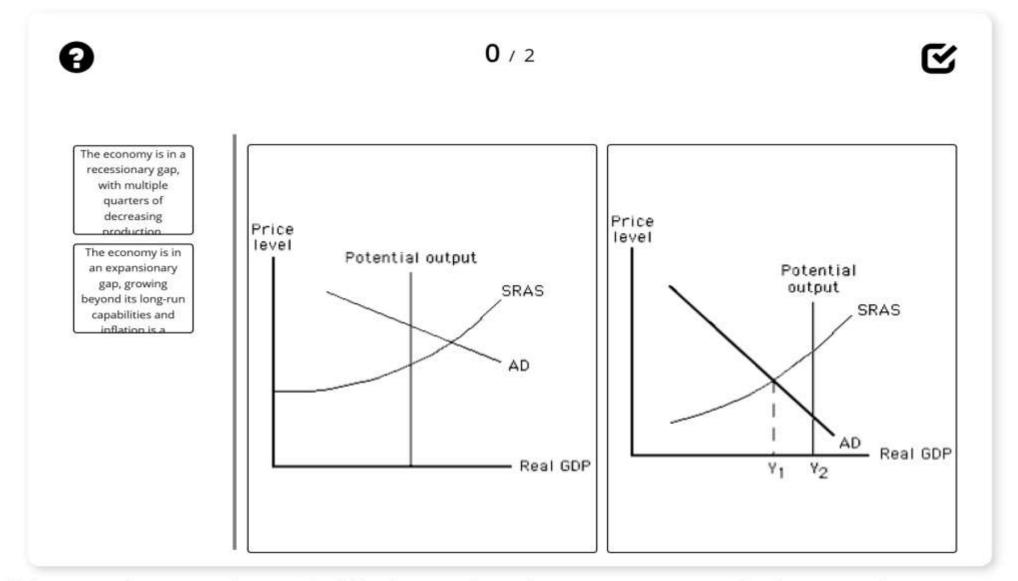


In this case, the level of aggregate demand is higher than expected, the short run equilibrium level of output is above potential output, and the unemployment rate is below the natural rate of unemployment. The goal of fiscal policy when the economy is in an expansionary gap would be to shift the aggregate demand curve to the left, decreasing both output and the price level. To accomplish this goal, policy makers would want to use **contractionary fiscal policy**:

- decrease government purchases
- increase taxes
- decrease transfer payments

## **Matching Activity**

Match the description of the economy with the appropriate aggregate supply and demand graph.



Now suppose the economy is in a recessionary gap. Answer the following questions about an economy experiencing a recessionary gap.

Now suppose the economy is in a **recessionary gap**. Answer the following questions about an economy experiencing a recessionary gap. Value: 1 For an economy in a recessionary gap, what conditions would we expect to see? O a. Price Level higher than expected & Output higher than Potential Output O b. Price Level lower than expected & Output higher than Potential Output O c. Price Level higher than expected & Output lower than Potential Output O d. Price Level lower than expected & Output lower than Potential Output **Check Answer** Value: 1 The government could choose to use \_\_\_\_\_ Fiscal Policy to close a recessionary gap. O a. Contractionary O b. Expansionary **Check Answer** Value: 1 The goal of the Fiscal Policy efforts in a recessionary gap would be to: a. Increase Aggregate Supply ○ **b.** Decrease Aggregate Supply ○ **c.** Increase Aggregate Demand O d. Decrease Aggregate Demand **Check Answer** 





1/3

Choose the correct fiscal policy actions to be used if the economy is experiencing a recessionary gap. Click on the check box in the upper right hand corner to check your answer.













# **Benefits of Using SoftChalk**

## For Faculty:

- Simple set-up and content creation.
- Large variety of activities customizable to specific content.
- Self-graded and ability to integrate into LMS.
- Easy to share and can be quickly incorporated in multiple sections by different faculty.

## For Students:

- Designed for the adult learner lessons are user friendly, not cartoonish, and intuitive.
- Easily accessed and include accessibility features.

While we think there are many benefits, how do our students perceive these exercises and the activities used in them?

# **Student Perception Survey**

A survey was administered in our Principles of Macroeconomics courses in Spring 2023 and Fall 2023.

Traditional F2F sections: 3

Hybrid sections: 2

Fully Online sections: 4

We collected 147 student responses.

Spring: 83

Fall: 64

**Table 1** Summary statistics for a two-semester SoftChalk student perceptions survey.

CATEGORY	FREQUENCY	PERCENTAGE
Gender		
Male	67	45.6%
Female	77	52.4%
Some Other Way	1	0.7%
Prefer Not to Answer	2	1.4%
<b>Student Classification</b>		
Dual-Enrolled (High School)	33	22.4%
College Freshman	59	40.1%
College Sophomore	35	23.8%
College Junior	15	10.2%
College Senior	5	3.4%
<b>Course Modality</b>		
In-Person	64	43.5%
Online	40	27.2%
Hybrid	43	29.3%
Semester Surveyed		
Spring 2023	83	56.5%
Fall 2023	64	43.5%
Instructor/Modality		
Instructor $1 - in$ -person only	64	43.5%
Instructor 2 – hybrid only	24	16.3%
Instructor 3 – online only	28	19.0%
Instructor 4 – hybrid and online	31	21.1%

Students were surveyed in Spring 2023 (83) and Fall 2023 (64) semesters. For n=147 usable survey responses, this table summarizes the sample.

Table 2 Student feedback on SoftChalk activities by course modality.

The SoftChalk Activities helped me to understand economic concepts.

	In-Pe	erson, n=63	Onli	ne, n=40	Hybri	d, n=43	Total, n=146	
Strongly Disagree	0	0.0%	3	7.5%	2	4.7%	5	3.4%
Disagree	0	0.0%	3	7.5%	3	7.0%	6	4.1%
Neutral	9	14.3%	5	12.5%	11	25.6%	25	17.1%
Agree	31	49.2%	14	35.0%	17	39.5%	62	42.5%
Strongly Agree	23	36.5%	15	37.5%	10	23.3%	48	32.9%

The SoftChalk Activities helped improve my preparation for quizzes and tests.

	In-Pe	erson, n=64	Onli	ne, n=40	Hybri	1d, n=43	Total	, n=147
Strongly Disagree	0	0.0%	3	7.5%	2	4.7%	5	3.4%
Disagree	1	1.6%	3	7.5%	3	7.0%	7	4.8%
Neutral	11	17.2%	5	12.5%	14	32.6%	30	20.4%
Agree	24	37.5%	16	40.0%	13	30.2%	53	36.1%
Strongly Agree	28	43.8%	13	32.5%	11	25.6%	52	35.4%

The SoftChalk Activities were simple to use and navigate.

	In-Pe	erson, n=64	Onli	ne, n=40	Hybri	d, n=43	Total	, n=147
Strongly Disagree	0	0.0%	4	10.0%	3	7.0%	7	4.8%
Disagree	0	0.0%	1	2.5%	5	11.6%	6	4.1%
Neutral	12	18.8%	3	7.5%	4	9.3%	19	12.9%
Agree	24	37.5%	20	50.0%	18	41.9%	62	42.2%
Strongly Agree	28	43.8%	12	30.0%	13	30.2%	53	36.1%

I enjoyed completing the SoftChalk assignments.

	In-Pe	erson, n=64	Onli	ne, n=40	Hybri	id, n=43	Total	, n=147
Strongly Disagree	0	0.0%	4	10.0%	1	2.3%	5	3.4%
Disagree	2	3.1%	5	12.5%	6	14.0%	13	8.8%
Neutral	27	42.2%	11	27.5%	12	27.9%	50	34.0%
Agree	20	31.3%	10	25.0%	17	39.5%	47	32.0%
Strongly Agree	15	23.4%	10	25.0%	7	16.3%	32	21.8%

The interactive approach of SoftChalk Activities was effective for learning.

	In-Pe	erson, n=64	Onli	ne, n=40	Hybri	id, n=43	Total	, n=147
Strongly Disagree	0	0.0%	3	7.5%	1	2.3%	4	2.7%
Disagree	0	0.0%	1	2.5%	4	9.3%	5	3.4%
Neutral	11	17.2%	3	7.5%	6	14.0%	20	13.6%
Agree	31	48.4%	21	52.5%	19	44.2%	71	48.3%
Strongly Agree	22	34.4%	12	30.0%	13	30.2%	47	32.0%

I wish all of my economics courses included SoftChalk Activities to help me.

	In-Pe	erson, n=64	Onli	ne, n=40	Hybri	id, n=43	Total	, n=147
Strongly Disagree	0	0.0%	5	12.5%	3	7.0%	8	5.4%
Disagree	0	0.0%	1	2.5%	8	18.6%	9	6.1%
Neutral	24	37.5%	7	17.5%	10	23.3%	41	27.9%
Agree	25	39.1%	21	52.5%	14	32.6%	60	40.8%
Strongly Agree	15	23.4%	6	15.0%	8	18.6%	29	19.7%

I completed the following number of assigned Soft Chalk Activities.

	In-Pe	erson, n=63	Onli	ne, n=40	id, n=43 T		Total, n=146	
All of Them	31	49.2%	29	72.5%	28	65.1%	88	60.3%
Some of Them	29	46.0%	10	25.0%	15	34.9%	54	37.0%
None/Don't Remember	3	4.8%	1	2.5%	0	0.0%	4	2.7%

A summary of the student survey answers, sorted by modality, with slight differences in number of responses.

**Table 3** Student rankings of SoftChalk activities by course modality.

Sorting or Drag'N'Drop

	In-Pers	on, n=59	Onlin	ne, n=36	Hybri	id, n=42	Total, n=137	
Ranked 1st	18	30.5%	8	22.2%	16	38.1%	42	30.7%
Ranked 2 <sup>nd</sup>	22	37.3%	20	55.6%	9	21.4%	51	37.2%
Ranked 3 <sup>rd</sup>	14	23.7%	6	16.7%	11	26.2%	31	22.6%
Ranked 4 <sup>th</sup>	5	8.5%	2	5.6%	6	14.3%	13	9.5%

Interactive Identification

	In-Perso	on, n=59	Onlin	Online, n=36		d, n=42	Total, n=137	
Ranked 1st	10	16.9%	7	19.4%	4	9.4%	21	15.3%
Ranked 2 <sup>nd</sup>	15	25.4%	11	30.6%	13	31.0%	39	28.5%
Ranked 3 <sup>rd</sup>	23	39.0%	15	41.7%	16	38.1%	54	39.4%
Ranked 4th	11	18.6%	3	8.3%	9	21.4%	23	16.8%

Crossword Puzzles

	In-Pers	son, n=59	Onlin	ne, n=36	Hybr	id, n=42	Total, n=137	
Ranked 1st	3	5.1%	1	2.8%	8	19.0%	12	8.8%
Ranked 2 <sup>nd</sup>	13	22.0%	4	11.1%	8	19.0%	25	18.2%
Ranked 3 <sup>rd</sup>	9	15.3%	3	8.3%	5	11.9%	17	12.4%
Ranked 4 <sup>th</sup>	34	57.6%	28	77.8%	21	50.0%	83	60.6%

Quiz Questions

_ ~ ~	In-Pers	on, n=59	Onlin	ne, n=36	Hybri	id, n=42	Total	, n=137
Ranked 1st	26	44.1%	21	58.3%	20	47.6%	67	48.9%
Ranked 2 <sup>nd</sup>	13	22.0%	4	11.1%	10	23.8%	27	19.7%
Ranked 3 <sup>rd</sup>	11	18.6%	11	30.6%	9	21.4%	31	22.6%
Ranked 4th	9	15.3%	0	0.0%	3	7.1%	12	8.8%

A summary of student ranking of Soft  $\overline{Chalk}$  activity types, sorted by modality with n=137 respondents.

Table 4 Student rankings of different types of learning materials by course modality. N=134

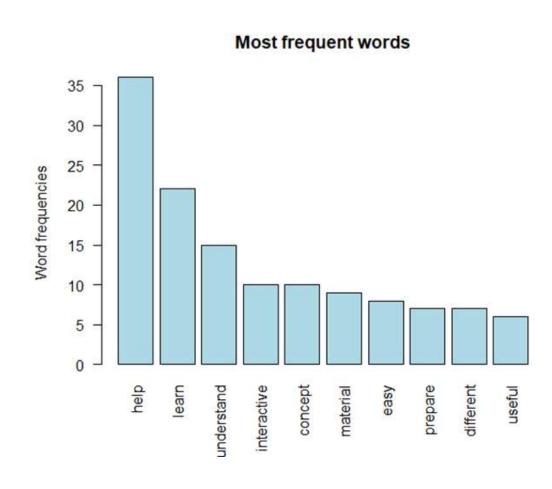
5-3 - 040-0-00	In-Person, n=59		Online, n=35		Hybrid, n=40		Total, n=134	
Ranked 1st	5	8.5%	10	28.6%	6	15.0%	21	15.7%
Ranked 2 <sup>ed</sup>	4	6.8%	4	11.4%	8	20.0%	16	11.9%
Ranked 3 <sup>rd</sup>	7	11.9%	9	25.7%	7	17.5%	23	17.2%
Ranked 4th	23	39.0%	8	22.9%	2	5.0%	33	24.6%
Ranked 5th	20	33.9%	4	11.4%	17	42.5%	41	30.6%
Posted or Linked Vid	eos					110000000		
V6 000 6 101	In-Person, n=59		Online, n=35		Hybrid, n=40		Total, n=134	
Ranked 1st	18	30.5%	8	22.9%	9	22.5%	35	26.1%
Ranked 2nd	20	33.9%	7	20.0%	12	30.0%	39	29.1%
Ranked 3rd	14	23.7%	9	25.7%	9	22.5%	32	23.9%
Ranked 4th	7	11.9%	7	20.0%	6	15.0%	20	14.9%
Ranked 5th	0	0.0%	4	11.4%	4	10.0%	8	6.0%
SoftChalk Activities						1		
na constant	In-Person, n=59		Online, n=35		Hybrid, n=40		Total, n=134	
Ranked 1st	15	25.4%	14	40.0%	11	27.5%	40	29.9%
Ranked 2 <sup>nd</sup>	23	39.0%	8	22.9%	8	20.0%	39	29.1%
Ranked 3 <sup>rd</sup>	17	28.8%	4	11.4%	6	15.0%	27	20.1%
Ranked 4th	3	5.1%	7	20.0%	10	25.0%	20	14.9%
Ranked 5th	1	1.7%	2	5.7%	5	12.5%	8	6.0%
Other Supplemental I								
210000000000000	In-Person, n=58		Online, n=35		Hybrid, n=40		Total, n=133	
Ranked 1 <sup>st</sup>	21	36.2%	3	8.6%	4	10.0%	28	21.1%
Ranked 2nd	8	13.8%	8	22.9%	9	22.5%	25	18.8%
Ranked 3 <sup>rd</sup>	14	24.1%	8	22.9%	12	30.0%	34	25.6%
Ranked 4th	7	12.1%	5	14.3%	12	30.0%	24	18.0%
Ranked 5th	8	13.8%	11	31.4%	3	7.5%	22	16.5%
Cengage Interactiviti	es: Aplia	or MindTap						
	In-Person, n=56		Online, n=35		Hybrid, n=39		Total, n=130	
Ranked 1st	3	5.4%	3	8.6%	14	35.9%	20	15.4%
Ranked 2 <sup>nd</sup>	4	7.1%	10	28.6%	4	10.3%	18	13.8%
Ranked 3 <sup>rd</sup>	4	7.1%	3	8.6%	5	12.8%	12	9.2%
	w 1999							

7.1% 8.6% 12.8% 12 9.2% Ranked 4th 30.4% 17.9% 31 20.0% 23.8% Ranked 5th 34.3% 50.0% 23.1% 37.7% A summary of students' ranking of their preferences for different learning materials.

Data is sorted by modality with a differing number of respondents.

# Open Ended Biggest Takeaway from SoftChalk





## **Conclusions**

Most students found the SoftChalk activities easy to navigate, helped them better understand economic concepts, and better prepared them for tests and quizzes.

This was consistent across modalities.

Fully online students ranked SoftChalk activities the highest among helpful course materials.

Overall, the survey results provide evidence that interactive online activities, such as those that can be developed using SoftChalk, are appreciated by students and contribute to student learning.

### **ECON 2106: Principles of Microeconomics**

Perfect Competition: This activity explores the characteristics of perfect competition, firms' short-run versus long-run decisions, profit maximization, and the long-run.

Link: https://softchalkcloud.com/lesson/serve/O3qYLp6MnFwz7h/html

The Production Possibilities Frontier & Opportunity Cost: This activity explores the PPF model and illustrates the opportunity cost that arises when firms make production decisions.

Link: https://softchalkcloud.com/lesson/serve/a3HsBioIPGEVwC/html

### **ECON 2105: Principles of Macroeconomics**

Production Possibilities Frontier & Economic Growth: This activity explores the PPF model and the concepts of opportunity costs, trade-offs, and economic growth.

Link: https://softchalkcloud.com/lesson/serve/w7Woc69GhHNd85/html

A Lesson on Money: This activity explores the evolution of money, its three basic functions, and ideal characteristics.

Link: https://softchalkcloud.com/lesson/serve/zi1EXUm0NdxTkV/html

The Money Multiplier: This activity explores bank reserves, the simple money multiplier, and how the Fed uses these to expand or contract the supply of money.

Link: https://softchalkcloud.com/lesson/serve/75hCsEADeSojR1/html

Using the Simple Spending Multiplier: This activity explores the multiplier, aggregate expenditure line, and real GDP demanded.

Link: https://softchalkcloud.com/lesson/serve/3ilbq69dGUYy2g/html

### **ECON 2105: Principles of Macroeconomics (cont.)**

Exchange Rate Tutorial: This activity explores exchange rates, the appreciation and depreciation of a currency, and the impact on trade and travel. Link: https://softchalkcloud.com/lesson/serve/drtRKpEMbQUCOv/html

Inflation & Interest Rates: This activity explores the relationship between inflation and interest rates. Link: https://softchalkcloud.com/lesson/serve/2xGYTHZuASRKNv/html

Fiscal Policy Tools: This activity explores each of the tools and how they can be used to impact macroeconomic variables.

Link: https://softchalkcloud.com/lesson/serve/h39SPi0RXdQnFv/html

Monetary Policy Tools: This activity explores the Federal Reserve's tools to achieve the dual mandate of price stability and full employment.

Link: https://softchalkcloud.com/lesson/serve/khU4zonZ1wlegj/html

Monetary & Fiscal Policy Tools: This activity reviews the tools of both fiscal and monetary policy and how those might be used during recessionary and expansionary gaps.

Link: https://softchalkcloud.com/lesson/serve/GN28pEsaFmtdBq/html

Sources of Unemployment: This activity explores the four sources of unemployment. Link: https://softchalkcloud.com/lesson/serve/Zqsy7TjfbCYS3c/html

Labor Force Statistics: This activity explores the composition of the labor force and how to calculate the participation rates. Link: https://softchalkcloud.com/lesson/serve/2fd1RmbcB3epjG/html