JOURNAL OF ECONOMICS TEACHING

# The Most Magical Way to Teach: Disney Music In The Classroom

The Walt Disney Company, and its subsidiaries, are responsible for some of the most popular movies in existence. One of the things that makes the classic Disney movie unique is its soundtracks. Many of the movies have key songs that can be used to teach various economics concepts in the high school and postsecondary classroom. We provide three detailed lesson plans that outline how to use Disney music to teach foundational concepts, but also include a more extensive table that includes concepts covered in a variety of Disney songs.

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## Introduction

All consumers, at some point, will watch a film produced by or connected with The Walt Disney Company. Disney published its first fully animated film, Snow White and the Seven Dwarfs, in 1937. Its film collection reaches a wide range of viewers, as they are available in multiple languages and can include subtitles in even more languages. Their seeming ubiquity increases the likelihood that international students also have some familiarity with the films housed in the heralded "Disney vault." The popularity of these movies is amplified with amusement rides and characters at six theme parks located around the globe and Disney's growing cruise ship service. Beyond the films themselves, many people also love the music associated with Disney films. The official Disney Music VEVO channel on YouTube has over 24 million subscribers from around the world. Spotify reports that Disney's artist profile has 3.97 million monthly listeners.

For many older students, Disney songs and films bring students back to their childhood, and can be used to build a bond between students and teacher. Anecdotally, it is difficult to identify a student without fond memories of or experiences with Disney. The popularity and cultural influence of Disney films could also increase the interest in the number of students pursuing a degree in economics if they feel connected to the material through Disney. This interest may also have spillover benefits as future parents teach economic lessons to their children while watching the films together. The goal of education is to understand and be able to apply the content—not memorize information for a test. Nostalgia can be a very powerful feeling and can be an asset to student learning (Sperb 2018).

In many classrooms, both at the high school and college level, lecturing and passive learning prevail. Pure lecturing is an easy way to structure lessons, but is tiring by the end of the day. Educators are doing the bulk of the work, while students sit quietly and listen. The "chalk and talk" approach is outdated, and alternatives have existed for decades (Becker, Becker, and Watts 2006). Engaging students with more creative pedagogical approaches can enliven a classroom, but also can re-engage educators who may find themselves burned out teaching the same content in the same manner semester after semester. The lesson plans presented below provide a relatively easy transition for an educator looking to make a marginal change to the way they are currently teaching their course.

## Literature Review

The economics classroom, both at the high school level and the post-secondary level, hasn't changed much over the past few decades. Asarta, Chambers, and Harter (2021) survey economics educators based on previous surveys conducted by Becker and Watts (2001) and Watts and Schaur (2011). While some questions of the survey were updated to address technological advancements in the profession, many of the results appear consistent with the past two surveys. The use of "traditional lectures" were very frequently used, but educators adjusted their delivery to frequently incorporate computer-generated displays (PowerPoint) rather than primarily teaching with a whiteboard. While the median instructor continues to hold frequent discussions with their students, there has at least been a significant increase in the use of discussion among students and a small increase in the use of small-group assignments. The lesson plans outlined below capitalize on this growth by presenting resources that encourage student-to-student discussion on small-stakes assignments.

Other forms of active learning have seen almost no change among the average instructor. Some activities, like classroom games, simulations, and experiments, actually shifted from being rarely used to never used by the majority of instructors. The topics covered in the

classroom also appear to be more homogenous than in the past. References to diversity and inclusion, gender issues, culture, sports, and the lives of eminent economists were somewhat present in about half of the classrooms surveyed in the past. In the most recent survey, more than half of all respondents say they never reference these topics. The results are surprising given the large amount of work that has gone into developing teaching resources to help educators provide more relevant examples (Wooten et al. 2021), in addition to the work of the American Economic Association in addressing diversity issues within the profession (Bayer, Hoover, and Washington 2020).

While there has been some growth in the use of active learning over the past few years, it's not entirely clear that educators are even the best judge of how much active learning is actually occurring (Sheridan & Smith 2020). Many faculty (and department chairs) do not believe that graduate school adequately prepared them to begin teaching (Allgood, Hoyt, and McGoldrick 2018) despite new faculty devoting half of their time to teaching (Allgood & McGoldrick 2019). Given the time constraints placed on new faculty, many of them revert to "traditional" methods because of the cost associated with learning new methods. In a survey of faculty attending the American Economic Association annual meetings, Goffe and Kauper (2014) find that only one-third of educators believe students learn best from lectures. About 40% of respondents who do not believe lecture is the best method still use lectures because they are cost effective.

There has been sizable growth in the number of resources available for educators looking to engage students with more active learning assessments (Picault 2019), and many of those resources are accessible online (Picault 2021). An overarching theme of the resources that have been developed has been to enhance student engagement by identifying resources that connect to their personal lives. The methods of connecting students with the material is as broad as incorporating art into assessments (Al-Bahrani et al. 2016) to engaging with students on social media (Al-Bahrani and Patel 2015a).

The use of pop culture in the classroom has varied from using brief scenes from hit television shows like The Big Bang Theory (Tierney et al. 2016), Breaking Bad (Muchiri, Paraschiv and Wooten, 2022), and Seinfeld (Ghent, Grant, and Lesica 2011), to using entire films like Moneyball (Wooten and White 2018) and Harry Potter (Podemska-Mikluch & Deyo 2014). The Walt Disney Company is directly and indirectly connected with many of the teaching resources that have been developed over the past decade. Knudsen and Duncan (2018) provide brief summaries of ten Disney films and their connection to concepts often covered in a principles course. Some Disney films, like Cinderella or The Little Mermaid, are part of a broader collection of fairy tales that illustrate economics concepts as well (Mandzik 2020). The depth of resources varies, but many highlight only specific examples of concepts rather than fully detailed lesson plans.

The Walt Disney Company is an entertainment conglomerate that manages a variety of subsidiaries that some people may not realize are connected to the parent company. These resources are indirectly connected to The Walt Disney Company because of this arrangement. Lesson plans and teaching opportunities have been identified for ESPN's 30 for 30 series (Al-Bahrani and Patel, 2015b), various Pixar films (Mateer et al., 2021), and various films from the Star Wars franchise (Smith, Rousu, and Hackenberry, 2021). O'Roark (2017) details how economic concepts can be found in various superhero storylines, many of which fall under Disney's Marvel Studios, while Rousu and Conrad (2017) outline economics concepts covered in the musical Hamilton, which was adapted by Disney into a musical film in 2020. While resources have been developed and identified that utilize visual media to teach economics concepts, the main resource missing from the "Disney Teaching Vault" has been the music from their

associated soundtracks.

## Teaching with Music

The ability to use music in the classroom has grown over the past decade as streaming services like Apple Music and Spotify have introduced listeners to a library of songs that would have likely been unavailable to most consumers even a decade before (Krueger 2019). Much of the earliest work on teaching with music focused on identifying a handful of key songs that covered important topics (Tinari & Khandke 2000, Van Horn and Van Horn 2013, Hall and Lawson 2008), but none of which referenced music from classic Disney films. Some educators (Al-Bahrani et al. 2017) have asked students to create their own music videos as a summative assessment, but more recent work has looked at how specific genres of music can be used to teach economics concepts (Rousu et al. 2021). Educators have explored genres and specific artists as wide-ranging as show tunes (Rousu 2016, Rousu 2018), country music (Melichar 2018), The Beatles (Staley 2020), and K-Pop (Wooten, Geerling, and Calma 2021).

Fewer economics researchers have studied the impact that music has on learning key concepts. McClough and Heinfeldt (2012) empirically find that student understanding improves with the use of music lyrics to introduce topics, but caution that the results are specific to very clear examples of the concept in the song. More nuanced connections or complicated topics did not benefit from the use of music. In a randomized experiment involving students enrolled in a statistics course, Lesser, Pearl, and Weber (2016) found that student scores increased when their online content included music relative to those who were assigned course content alone.

## Teaching Guides

We provide 3 detailed lesson plans that cover key principles of economics and build on students' familiarity with popular Disney music. Each of the lesson plans include links to the Spotify streaming option or music videos available on the Economics Media Library (Wooten 2018) so that educators can stream the songs directly from the internet or share links with students. Each lesson plan includes the associated standards developed by the National Council for Economic Education's (2010) Voluntary National Content Standards in Economics and the content area from College Board's Macroeconomics (2020a) and Microeconomics (2020b) content guide.

Table 1 provides the topic, the affiliated Disney film and song, and a set of relevant vocabulary covered in each lesson. Appendix 1 includes a lengthier set of songs that could be used in other parts of the course and are subdivided by course topic. The topics for the lesson plans presented in Table 1 were selected because the concepts are often covered in the first units of both microeconomics and macroeconomics courses and allow an educator to start the term with an active learning experience.

**Table 1: Overview of each lesson plan**

| Lesson | Topic | Film & Song | Vocabulary |
|---|---|---|---|
| 1 | Sunk Costs | *Frozen*: Let It Go | sunk cost, marginal decision |
| 2 | Absolute & Comparative Advantage | *Beauty & The Beast*: Gaston | absolute advantage, comparative advantage, gains from trade, specialization, terms of trade, trade |
| 3 | Factors of Production | *Moana*: How Far I'll Go | capital, entrepreneurship, human capital, labor, land, physical capital |

Topic 1: Sunk Costs

Film: Frozen

Song: Let It Go

Spotify Link: https://open.spotify.com/track/0qcr5FMsEO85NAQjrlDRKo?si=85319c6150e1430b

Music Video Link: https://econ.video/2021/07/09/frozen-let-it-go/

Song Summary: Frozen is the story of two princesses, Anna and Elsa. Elsa has magical powers that she is forced to hide her entire life until her coronation ceremony. Elsa flees to the cold, remote mountains and sings "Let it Go" after finally accepting her magical powers and letting go of the pressure to hold back her true self.

CEE Standards: Standard 2: Decision Making

College Board AP Unit: Microeconomics Unit 1: Basic Concepts

Vocabulary: sunk cost, marginal decision

Group Activity: Give each student 2 notecards. Ask students to write down the best response and the worst response for the prompt below:

Anna has asked her servants for fish, but halfway into the meal, she feels really full and doesn't finish the meal. The castle doesn't contain a refrigerator, so she can't save it for tomorrow. She needs to decide whether to eat the fish or throw it away. Anna feels guilty about wasting food when there are so many people in her village who are hungry. What would you suggest Anna do?

Assign students a random card and have them defend the response on the card as "the right" response. Have other students identify issues with the response.

Guided Discussion: Explain the definition of sunk cost. Have students exchange note cards and then determine if the other group had presented a decision that was in line with the sunk cost concept. Collect the note cards in a pile and then read aloud the cards that demonstrated the sunk cost fallacy.

Music Introduction: Play "Let it Go" from Frozen using one of the links above.[1] Key lines from the song include "I'm never going back. The past is in the past. Let it go, let it go."

Student Discussion: Independently, have students summarize on a notecard what Elsa intends to "let go" with her new decision. Have students identify some reasons that Elsa may have trouble letting go of her burden. Ask students to identify a decision in their life that they also "let something go" and why it was in line with the concept of sunk costs.

[1]Lyrics are available at https://www.disneyclips.com/lyrics/frozenlyrics5.html

Topic 2: Absolute & Comparative Advantage

Film: Beauty and the Beast

Song: Gaston

Spotify Link: https://open.spotify.com/track/0zstgBrV1t1g6n4jHrUVBY?si=b285177ed62f4f4a

Song Link: https://econ.video/2021/07/09/beauty-and-the-beast-gaston/

Song Summary: Gaston has been rejected by Belle, but Lefou (his friend) has stepped in to help him feel better. The entire pub comes together to list all the ways that Gaston is better than the rest of the town. He is so good at a wide variety of things, except for chess, and his friends want to let him know.

CEE Standards: Standard 5: Specialization, Standard 6: Trade

College Board AP Unit: Macroeconomics Unit 1: Basic Concepts, Microeconomics Unit 1: Basic Concepts

Vocabulary: absolute advantage, comparative advantage, gains from trade, specialization, terms of trade, trade

Group Activity: Ask each student to list three activities that they believe they are exceptionally good at.[2] Have students form pairs to go over each other's list and see if they have any of the same items on the list. Identify a matching pair of students who have listed a similar activity and then have the two students discuss and make a case for why they believe they may be the best in the class at that activity.

Music Introduction: Play "Gaston" from Beauty and the Beast using one of the links above.[3] Key lyrics from the song include "No one shoots like Gaston" and "I use antlers in all of my decorating."

Guided Practice: After playing the song, display the following output table on an overhead projector. The following table details the number of elk and rabbits that Gaston and Lefou can produce from hunting in one hour.

| | Elk | Rabbits |
|---|---|---|
| Gaston | 8 | 10 |
| Lefou | 3 | 6 |

Gaston has a clear absolute advantage in both hunting elk and rabbits, since his output is much more than Lefou. Using the table above, demonstrate how comparative advantage is calculated using these values. Gaston would complete the task of hunting elk, since his opportunity cost is lower than Lefou, while Lefou would hunt rabbit since his opportunity cost is lower. Thus, they trade with each other.[4]

[2]Some guided discussion by the instructor will ask students to consider physical activities like pushups, clapping, shooting basketballs, etc.

[3] Lyrics are available at https://www.disneyclips.com/lyrics/lyrics45.html

[4]The solution for determining the opportunity cost and comparative advantage is available in the Appendix.

Topic 3: Factors of Production

Film: Moana

Song: "Where You Are"

Spotify Link: https://open.spotify.com/track/2bwSCluNtVrQPVddCi8sOW?si=aebf710b18a74b79

Song Link: https://econ.video/2022/02/10/moana-where-you-are/

Song Summary: Chief Tui and Moana sing of their island paradise on Motunui. Moana is encouraged to celebrate her roots and focus on her life on the island instead of her journey to sea. Because the island is cut off from the outside world, they must work together to produce "all they need." Their island contains all the available resources at their disposal.

CEE Standards: Standard 3: Allocation, Standard 6: Specialization, Standard 14: Entrepreneurship

College Board Advanced Placement Unit: Macroeconomics Unit 1: Basic Concepts, Microeconomics Unit 1: Basic Concepts

Vocabulary: capital, entrepreneurship, human capital, labor, land, physical capital

Group Activity: Split the class into two groups. On an overhead board, draw a 2x2 matrix that includes labels for the four factors of production: land, labor, capital, and human capital. Have pre-written index cards prepared in a basket with various words on them with references to inputs mentioned in the song linked above.[5] Instruct students to choose a word from the basket and then write that word on the board in the correct box. If the student is correct, award a point to their team. Alternate the drawing until all words have been pulled.

Music Introduction: Play "Where You Are" from Moana using one of the links above.[6] Key lines in the song include: "Consider the coconut. Consider the tree. We use each part of the coconut. That's all we need." and "We make our nets from the fibers. The water is sweet inside. We use the leaves to build fires. We cook up the meat inside."

Guided Discussion

1. Have students list the factors of production that are required to produce a functional island society.
2. If Moana were intent on leaving this society, what factors of production would be necessary for Moana to sail away from her island?

## Conclusion

The magic of Disney can be extended to a classroom or a lecture hall. Building relationships with your students can make the classroom experience more meaningful for both students and instructors. One way to improve that experience is to find a shared experience around a popular childhood memory, like Disney films and music. Each of these lessons, and the songs identified in the Appendix, capitalize on the nostalgia and entertainment of The Walt Disney Company to convey key economics concepts. Even if students do not go on to major in economics, they may one day pass along their knowledge of economics to their children and grandchild through a shared Disney moment later in life.

[5]Words on the card may include things such as coconut, wood, palm tree leaves, saws, hammer, wind, etc.
[6]Lyrics are available at https://www.disneyclips.com/lyrics/moana-where-you-are.html

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## Appendix 1: Additional Disney Songs to Teach Economic Concepts

**Basic Concepts**

| Film | Song | Key concepts |
|---|---|---|
| *Aladdin* | One Jump | Command economy |
| *Alice in Wonderland* | Alice Theme | Scarcity<br>Choices |
| *Descendants* | Better Together | Supply and demand<br>Equilibrium |
| *Descendants 2* | It's Goin' Down | Gains from trade |
| *Frozen* | Into the Unknown | Asymmetric information<br>Risk<br>Uncertainty |
| *Frozen 2* | Show Yourself | Invisible hand |
| *The Little Mermaid* | Part of Your World | Wants and scarcity |
| *Mickey Mouse Clubhouse* | Mickey's Mousekedoer | Production possibilities curve |
| *Moana* | You're Welcome | Factors of production |
| *Moana* | Where You Are | Trade |
| *Mulan* | Make a Man Out of You | Diminishing marginal returns |
| *Onward* | I Got a Hold of You | Equilibrium<br>Invisible hand<br>Free Markets |
| *Princess and the Frog* | Friends on the Other Side | Technology |
| *Tarzan* | Strangers Like Me | Factors of production<br>Human capital |
| *The Jungle Book* | The Bare Necessities | Wants vs. needs |

**Supply and Demand**

| Film | Song | Key concepts |
|---|---|---|
| *Olaf's Frozen Adventure* | That Time of Year | Demand shifts<br>Preferences/Fads |
| *Descendants* | Better Together | Supply and demand<br>Equilibrium |
| *Soul* | It's all Right | Demand shift |
| *Moana* | Shiny | Structural unemployment |

**Production, Cost, and the Perfect Competition Model**

| Film | Song | Key concepts |
|---|---|---|
| *Mulan* | Bring Honor to Us All | Diminishing marginal returns |
| *Sleeping Beauty* | Cleaning the House (Movie Clip) | Diminishing marginal returns |

**Imperfect Competition**

| Film | Song | Key concepts |
|---|---|---|
| *Hercules* | Zero to Hero | Monopoly |

**Market Failure and the Role of Government**

| Film | Song | Key concepts |
|---|---|---|
| *Pocahontas* | Colors of the Wind | Positive externalities<br>Marginal social benefit |

**Economic Indicators and Business Cycle**

| Film | Song | Key concepts |
|---|---|---|
| *Beauty and the Beast* | Be Our Guest | Labor force/ unemployment |
| *Cinderella* | Work Song | Full employment |
| *Tangled* | I've Got a Dream | Frictional unemployment |
| *The Lion King* | Cycle of Life | Business cycle |

**Financial Sector**

| Film | Song | Key concepts |
|---|---|---|
| *Pocahontas* | Virginia Company | Commodity money |
| *Snow White* | Heigh Ho | Commodity money |

**Long-Run Consequences of Stabilization Policies**

| Film | Song | Key concepts |
|---|---|---|
| *Mulan* | Reflection | Phillips curve<br>AD/AS model |

## Appendix 2

The production table listed in Lesson Plan #2 on absolute and comparative advantage was:

**Table A2.1: Production outputs for hunting elk and rabbits**

| | Elk | Rabbits |
|---|---|---|
| Gaston | 8 | 10 |
| Lefou | 3 | 6 |

Gaston has an absolute advantage in hunting elk because he can capture 8 of them in one hour while Lefou can only capture 3. Gaston also has the absolute advantage in hunting rabbits. In one hour, Gaston can capture 10 rabbits while Lefou can only capture 6. While Gaston has the absolute advantage in both items, he may still be able to benefit from trade. To determine the comparative advantage of each hunter, we first need to determine their opportunity cost.

For Gaston, spending an hour hunting elk yields 8 animals caught, but he gives up the opportunity to hunt 10 rabbits. This implies that the opportunity cost of hunting 1 elk is 1.25 rabbits. The reciprocal represents the opportunity cost of hunting rabbits. For every rabbit Gaston catches, he gives up the opportunity to hunt 0.80 elk.

For Lefou, he can snag 3 elk for every hour he is in the forest. In that same time, he could shoot 6 rabbits. The opportunity cost of shooting 1 elk is thus 2 rabbits. For every rabbit he shoots, he gives up 0.50 of an elk. Table A2.2 shows the opportunity cost of each item.

**Table A2.2: Opportunity cost of hunting elk and rabbits**

| | Elk | Rabbits |
|---|---|---|
| Gaston | 1.25 rabbits | 0.80 elk |
| Lefou | 2 rabbits | 0.50 elk |

Comparative advantage is based on which person has the lowest opportunity cost. While Gaston may be the superior hunter overall as the song suggests, he is comparatively better at hunting elk, which is probably while he uses antlers in all of his decorating! His opportunity cost (1.25 rabbits) is lower than that of Gaston (2 rabbits). Lefou is comparatively better at hunting rabbits as his opportunity cost (0.50 elk) is less than Gaston's opportunity cost (0.80 elk).

If Gaston and Lefou go out hunting together, Gaston should specialize in hunting elk and Lefou should hunt rabbits. Under this arrangement, they will capture the most animals possible during their hunt.