Finding the Right Tempo: Using Music to Enhance Pedagogy in the Classroom

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My Journey

Career Transition:

• Former Math 1 and Business Academy teacher for Mallard Creek STEM Academy (Charlotte, NC), where I taught business/economics to 6th-8th graders.

• Started full-time at Rowan-Cabarrus Community College in January 2022 and have remained connected to MCSA and advising the business electives department on curriculum.

• Nominated for 2023 ACBSP International Teaching Award by RCCC for using music in the higher education classroom to showcase diversity and real-world application through popular culture.

• Today, in addition to my role at RCCC, I am a doctoral student of economics and Adjunct Faculty at Gardner-Webb University.

Prior to education, over a decade of experience in Yum! Brands, Inc, M.H. Alshaya Company (Kuwait), and Carrols Corporation in operations and training roles.
Purposeful Design

Alignment with curriculum standards:
• Teachers need to plan lessons that align with the educational standards established by their state or district. These standards outline what students should know and be able to do at each grade level.

Clear learning objectives:
• Teachers need to clearly articulate the learning objectives for each lesson or unit. These objectives should be specific, measurable, and aligned with the curriculum standards.

Assessment strategies:
• Teachers need to plan assessment strategies that align with the learning objectives and allow for ongoing evaluation of student progress.

Differentiated instruction:
• Teachers need to plan lessons that meet the diverse needs of their students. This might involve differentiating instruction based on learning style, skill level, or cultural background.

Real-world Application:
• Questions used to connect knowledge to real-world contexts must be topics that are frequently encountered within workplace or in everyday life (Halpern, 1998).
**Team-Based Learning**

<table>
<thead>
<tr>
<th>Preparation:</th>
<th>Readiness Assurance:</th>
<th>Application Activities:</th>
<th>Peer-Review Process:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Students are assigned course readings or active videos (EdPuzzle). These are completed as homework and must be individualized per iRAT (Michaelsen &amp; Sweet, 2008).</td>
<td>• When entering class, students are provided the same homework questions they once completed individually via iRAT. This allows students to support each other and earn credit on tRAT, with immediate feedback (Miaahelsen &amp; Sweet, 2008).</td>
<td>• Activity is introduced. The class is broken into several small groups (5-7 students) and provided real-world assignment to analyze and complete.</td>
<td>• The peer-review process is a method brought into the TBL experience to eliminate free-riders (Michaelsen &amp; Sweet, 2008).</td>
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Standard 1: Scarcity

- Productive resources are limited. Therefore, people cannot have all the goods and services they want; as a result, they must choose some things and give up others.

Standard 2: Decision Making

- Effective decision making requires comparing the additional costs of alternatives with the additional benefits. Many choices involve doing a little more or a little less of something: few choices are “all or nothing” decisions.

Standard 3: Allocation

- Different methods can be sued to allocate goods and services. People acting individually or collectively must choose which methods to use to allocate different kinds of goods and services.

Standard 4: Incentives

- People usually respond predictably to positive and negative incentives.
  - (Siegfriend et. al., 2010)
Popular Culture Resources

• Resources:
  • Economics Media Library
  • The Economics Instructor’s Toolbox
  • Music4Econ
  • Broadway Economics

• Journals:
  • Journal of Economics Teaching (JeT)
  • Journal of Economic Education (JEE)
  • Journal for Economic Educators (JFEE)

[Not to be exhaustive]
Classroom Model

• Together, the CEO, CFO, Vice-President, and Secretary are known as the Council. Any member can be removed from their role by ¾ vote, demoting them to the role of team member. New CEOs are appointed each academic month by instructor. No officer can participate in consecutive periods. Team members can also be fired from their roles and forced to seek new employment or must work on project alone.

Table 1: Council Leadership Roles

<table>
<thead>
<tr>
<th>Job Title</th>
<th>Roles</th>
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<tbody>
<tr>
<td>Chief Executive Officer (CEO):</td>
<td>This is the highest-ranking official in the company structure and is appointed by the instructor(s). They manage the decisions of overall operations and act as the main point of communication between the company and its stakeholders.</td>
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<tr>
<td>Chief Financial Officer (CFO):</td>
<td>This role is seen as the second-highest ranking official in the company, due to the high impact CFO’s play on the financial health of their companies. This role is elected by all group members.</td>
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<tr>
<td>Vice-President:</td>
<td>This individual is seen as someone who plays a significant role in business strategy and development. They work closely with the CEO and CFO to assure management of specific departments within the company. The Vice-President is selected by the CFO and CEO. In the event they cannot decide, the team must decide the vacancy by vote – single-majority rules.</td>
</tr>
<tr>
<td>Secretary:</td>
<td>The Secretary is responsible for accurate records of meetings and decisions made by the Council. They are responsible for ensuring that all members or the Council are kept up to date on any decisions made. The CEO, CFO, and Vice-President selects their own Secretary.</td>
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</tbody>
</table>
Preparation

- In this design, students are required to read-through or complete mini-readings or EdPuzzle videos introducing the topic.
You are planning a party for your friend's birthday. You have $20 to spend on decorations, snacks, and drinks. Your friend wants you to buy balloons, cupcakes, and soda for the party. However, you realize that you can only afford two out of the three items with your $20 budget.

Which two items would you choose to buy for the party, and why? Explain your reasoning and describe how scarcity impacted your decision-making process.
DECISION-MAKING

You have been saving money for months to buy a new game console. You have $200 to spend, and you have narrowed down your choices to two options: a popular console that costs $250, and a less popular console that costs $200. The popular console has better graphics and more exclusive games, but the less popular console has a larger library of games and is more affordable. You need to make a decision about which console to buy.

Which console would you choose to buy, and why? Explain your reasoning and describe how economic concepts like opportunity cost and trade-offs impacted your decision-making process.
ALLOCATION

You are a student council member at your school, and you have been put in charge of planning the end-of-year celebration. The celebration will include food, drinks, decorations, and entertainment, and you have a budget of $1,000 to allocate towards these items. You need to decide how much money to allocate to each item in order to make the celebration a success.

If you oversaw planning the end-of-year celebration, how would you allocate the $1,000 budget towards food, drinks, decorations, and entertainment? Explain your reasoning and describe how the economic concept of allocation impacted your decision-making process.
INCENTIVES

Your teacher has offered extra credit points to students who complete an additional assignment. The assignment is optional but completing it will earn you five extra credit points towards your final grade. You have already earned a good grade in the class, but you are considering completing the assignment to boost your final grade even more.

If you were in this situation, would you complete the optional assignment to earn the extra credit points? Explain your reasoning and describe how the economic concept of incentives impacted your decision-making process.
PS5 by Salem Ilese, Tomorrow X Together, & Alan Walker
1. How does scarcity affect the decision-making process in a relationship?

2. How can economic concepts like opportunity cost and marginal analysis be used to evaluate the dilemma in the song? Be sure to define opportunity costs and marginal analysis.

3. How do incentives affect behavior in relationships? Provide an example.

4. Explain the concept of allocation and how it applies to the relationship in the song.

5. How can understanding economic concepts improve decision-making in relationships? Provide an example.
Disney’s Encanto

**Musical Selection:** The Family Madrigal, featured in Disney’s Encanto

**Grade Level:** 4th Grade

**Topic:** Applying and analyzing music to understand income and economic growth.

**Time:** 45 - 60 minutes

**Instruction Method:** Team-Based Learning; Active Learning

**Voluntary National Content Standards in Economics**

C.S. 13 Income

C.S. 15 Economic Growth

**Learning Objectives:**

1. Define and recognize the concepts of income and economic growth, including their impacts on decision-making from the provided musical selection.
2. Analyze the family’s income sources and how they contribute to the economic growth of the community.
3. Evaluate the benefits and setbacks of the Madrigal family’s economic activity and relationship between them and the town (community).
The Family Madrigal – Disney’s Encanto
• What is the family's source of income in the song? Hint: This could be a trick question. Think about it!
• How does the family use their powers to earn a living?
• How do the townspeople benefit from the Madrigal family's work?
• How does Isabela Madrigal contribute to the family's income?
• How does the family's income affect their relationships with the townspeople?

The family’s income is critical to the wealth of the town. According to the outline of the movie laid out in the beginning by Abuela, she mentions the powers of the Madrigal family has grown their home to a paradise. The family creates meaningful goods and services for the town and in return, allows the townspeople to focus on other skills that help their community thrive.
What is the family's source of income in the song? Hint: This could be a trick question. Think about it!

It’s the magical powers granted from the Encanto.
How does the family use their powers to earn a living?

The family uses their powers to create goods and services for their community. Some of these goods include Isabela’s beautiful flowers and plants or Luisa’s strength and ability to perform work for the community, which they sell to the people in their town.
How do the townspeople benefit from the Madrigal family's work?

The townspeople benefit from the Madrigal family's work by purchasing the family's goods and services. The movie also depicts business cycle is at work.
How does Isabela Madrigal contribute to the family's income?

Isabela Madrigal contributes to the family's income by creating beautiful and intricate patterns with her powers, which they also sell. The movie also outlines that Isabella has an interest in the “not so perfect” flower arrangements and like other types of plants. Which, could be a niche market opportunity.
How does the family’s income affect their relationships with the townspeople?

The family’s income is critical to the wealth of the town. According to the outline of the movie laid out in the beginning by Abuela, she mentions the powers of the Madrigal family has grown their home to a paradise. The family creates meaningful goods and services for the town and in return, allows the townspeople to focus on other skills that help their community thrive.
Student Group Presentations
Table 2: Self-Evaluation

<table>
<thead>
<tr>
<th></th>
<th>Underperforming</th>
<th>Needs Improvement</th>
<th>Emerging</th>
<th>Average</th>
<th>Exceptional</th>
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</thead>
<tbody>
<tr>
<td>Participation</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Communication</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Responsibility</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Initiative</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Collaboration</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Overall</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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Questions?

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With a zero.

Resources