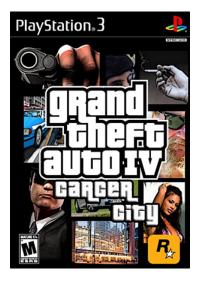
The Relationship between Music and Student Enjoyment of Economics Class: How to Compete with Chlamydia, Cocaine, and Grand Theft Auto.







Simon Medcalfe Assistant Professor of Finance Hull College of Business Augusta State University 2500 Walton Way Augusta, GA 30904 Telephone: 706 667 4541 E-mail: <u>smedcalfe@aug.edu</u> I continually strive to make my economics classes interesting and enjoyable to my students. Unfortunately, as a panelist on the BBC radio show *The News Quiz* said, I am up against chlamydia, cocaine, and Grand Theft Auto!

One way to stimulate interest is through the use of music. In fact several previous papers and poster presentations at the American Economic Association annual meeting have introduced this theme. For example, Hall and Lawson (n.d.) showcase the use lyrics in a writing assignment to improve economic reasoning and understanding. Raehsler (2009) finds a positive influence of the use of music on attendance and student perceptions of the instructor and course from university student evaluations of teaching. Raehsler also indicated there was a positive influence on final examination scores.

The focus of this paper and poster however, is slightly different – we are interested in the student's thoughts on the pedagogy. To do so, students answered a survey independent of university course evaluations. This allowed the instructor to ask questions specific to the use of music in economics.

Introduction to Economics is a course aimed at non-business majors. A broad range of majors are represented in the student body including, but not limited to, engineering, nursing, sociology, history, English and education. The course was taught once in the spring of 2009 including music as part of the instruction. A pop music video (usually from YouTube) was played in class and the accompanying lyrics were presented via a projector. Questions were then posed to stimulate discussion of the economic concepts conveyed in the lyrics. Sometimes the questions were taken from the website From ABBA to Zeppelin and sometimes they were made up by the instructor. The timing of the video depended on the nature of the lyrics and traditional class content. Some classes began with the video to introduce the topic, while others were used after the topic had been introduced and were used to solidify understanding or generate debate. For example, the lyrics to *Ghost Town* by The Specials were used after the introduction of supply and demand so students could apply shifts in demand and supply to nightclubs. *Money for Nothing* by Dire Straits was used to introduce the concept of opportunity cost by asking can you ever get anything for nothing? This is a particularly useful piece of music because as respondents at an online summit at Brenau University suggested, the opportunity cost of being a musician may include sexually transmitted diseases and drug addiction! In the fall of 2009 the course was taught without music so that student responses could be compared.

Appendix A and B provide the survey questions for each class. In the spring of 2009 students (n=34) were asked about their enjoyment of music and lyrics in economics as well as whether that use increased their interest in the subject. They were also asked if their understanding of economics was helped by the use of music and whether the use of music should be expanded. Students were asked to answer the questions based on a 5-point likert scale (1 = strongly agree,..., 5 = strongly disagree). There were also two open ended questions. In the fall, students (n=38) were asked only if they enjoyed the economics course and if it increased their interest in economics and their understanding of economic states their interest in economics and their understanding of economics course and if it increased their interest in economics and their understanding of economic scale their interest in economics and their understanding of economic concepts.

The mean, mode and median responses to these questions are presented in Tables 1 and 2. Student enjoyment was higher when music was included in the class. However, the questions may not be asking exactly the same thing. Students in the spring were asked if they enjoyed music and lyrics in economics, while students in the fall were asked if they enjoyed economics. The introductory course in economics did increase students' interest in economics, but the average responses were very similar between the spring and the fall. Similarly, students (self reported) understanding of economics was increased through the course though again, the average responses were very similar.

To determine if there was any significant difference in student responses the data was analyzed using ordered probit regression. Students' enjoyment, interest and understanding were used as dependent variables with a dummy variable equal to 1 if the student was in the spring class that utilized music. The results presented in Table 3 suggest that student enjoyment of the course was significantly higher with music than without. However, no such association can be identified for student interest and understanding. This suggests that while music does increase student enjoyment, more traditional instructional techniques are still required for raising interest and understanding of economics.

A question to students in the spring asked if the use of music should be expanded. Their responses (see row 5 of Table 1) suggest that about one song a class is about right. Comments from students in the open ended questions suggested that music was a good attention grabber and to introduce economic concepts. Some students did want the use of music expanded either with assignments related to the music or greater economic analysis of the lyrics. Some draw backs that students mentioned included some difficulty in hearing the lyrics due to some poor quality videos on YouTube. Also, perhaps reflecting the preferences of the instructor, students prefer current songs. Although the aim of this paper is not to analyze students' understanding of economic concepts except in their own self reported way, some initial evidence from the spring 09 macroeconomics exam is relevant to the debate. Question 10 asked: Which of the following persons would not be considered unemployed?

(a) an auto worker vacationing in Florida during a layoff

- (b) a college student actively seeking a summer job
- (c) a construction worker who has given up looking for work after 18 months without a job

(d) a retiree looking for part-time work to supplement his Social Security income Sixty three percent of students responded correctly with answer (c). Question 41 of the exam asked a question based on a lyric that had not been presented in class:

"Is it worth the aggravation to find yourself a job when there's nothing worth working for?" These lyrics from Oasis suggest the singer is

- (a) a discouraged worker
- (b) cyclically unemployed
- (c) frictionally unemployed
- (d) structurally unemployed

Fifty seven percent of students responded correctly with answer (a). However, of those twenty students who correctly answered the music question correctly, 75% also got question 10 correct. Since this percentage is higher than the overall percentage for question 10 (X%), music does seem to increase a student's understanding of economic concepts.

Overall, students enjoy the use of music and lyrics in Introduction to Economics. However, there is little evidence that, in its current usage, music increases students own perceptions about their interest in or understanding of economics. Students are not keen on expanding its use but enjoy the introduction of topics via popular music.

References

Hall, Joshua C. and Lawson, Robert A. (n.d.) Using music to teach economics.

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Raehsler, Rod D. (2009) The Use of Popular Music to Teach Introductory

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Appendix A: Student Survey ECON 1810, Spring 2009

Circle the response that best describes how far you agree with the following statements:

- 1. I enjoyed the use of music and lyrics in ECON 1810
 - strongly agree
 agree
 neutral
 disagree
 strongly disagree
- 2. The use of music in ECON 1810 increased my interest in economics
 - strongly agree
 agree
 neutral
 disagree
 strongly disagree
- 3. The use of music and lyrics in ECON 1810 helped me understand economic concepts
 - strongly agree
 agree
 neutral
 disagree
 strongly disagree
- 4. The use of music and lyrics in ECON 1810 should be expanded
 - 1 strongly agree 2 agree 3 neutral 4 disagree 5 strongly disagree
- 5. Explain your answer to question 4. That is, how and why should music and lyrics be expanded? Why should it not?
- 6. Please provide any other comments about the use of music and lyrics in ECON 1810 (continue on the back if necessary).

Appendix B: Student Survey ECON 1810, Fall 2009

Circle the response that best describes how far you agree with the following statements:

- 1. I enjoyed ECON 1810
 - 1 strongly agree 2 agree 3 neutral 4 disagree 5 strongly disagree
- 2. ECON 1810 increased my interest in economics
 - strongly agree
 agree
 neutral
 disagree
 strongly disagree
- 3. ECON 1810 helped me understand economic concepts
 - strongly agree
 agree
 neutral
 disagree
 strongly disagree

Table 1: Averages with music

	Mean	Mode	Median
I enjoyed the use of music and lyrics in ECON 1810	1.64	1	2
The use of music and lyrics in ECON 1810 increased my	2.24	3	2
interest in economics			
The use of music and lyrics in ECON 1810 helped me	1.88	2	2
understand economic concepts			
The use of music and lyrics in ECON 1810 should be expanded	2.39	3	3

Note: Likert scale (1= strongly agree,..., 5= strongly disagree)

Table 2: Averages without music

	Mean	Mode	Median
I enjoyed ECON 1810	2.24	2	2
ECON 1810 increased my interest in economics	2.32	2	2
ECON 1810 helped me understand economic concepts	1.87	2	2

Note: Likert scale (1= strongly agree,..., 5= strongly disagree)

Dependent variable	Coefficient on music	Standard error
Enjoyed	671	.267
Interest	112	.251
Understand	.012	.261

Table 3: Ordered probit analysis

Note: Likert scale (1= strongly agree,..., 5= strongly disagree)