

將辯論融入必修課程：總體經濟學

Incorporating Class Debates into a Required Course: Macroeconomics

曹真睿¹

TSAUR, JEN-RUEY¹

¹ 國立中央大學經濟學系副教授

¹ Associate Professor, Department of Economics, National Central University

E-mail : jenruey@g.ncu.edu.tw

摘要

課堂辯論被認為是一種有效教學工具，有助於提高學習者的推理與論證技能。本研究透過分析筆者教授「總體經濟學(下)」之期末辯論活動，探討學生參與總體經濟政策辯論的過程與收穫。期能透過課堂辯論，提升學生的學習動機與興趣，讓學生擁有學習的主導權、親自思考與辯證，藉以培養出具備自主學習能力、可以建構自己知識系統的學生。

關鍵字：主動學習；課堂辯論；總體經濟學

Abstract

In-class debate is considered to be an effective pedagogical tool that helps to improve learners' reasoning and argumentative skills. This study examines the process of the in-class debate conducted by the author in her Macroeconomic II class. It is hoped that students' motivation and engagement can be enhanced through the in-class debate. In addition, given that active learning is based on self-directed and autonomous learning, students are expected to construct or make their own knowledge based on their present stage of cognitive development.

Keywords : active learning; in-class debate; macroeconomics

Introduction

Begin with Benjamin Franklin's famous quote: "Tell me and I forget. Teach me and I remember. Involve me and I learn." Following Franklin's spirit, during the past 35 years, more and more pedagogies emphasizing active learning have been applied in teaching (Allsop, Young, Nelson, Piatt, & Knapp, 2020). In addition, the concept of letting students be their own masters (Yan, 2012) and student-centered teaching have been increasingly emphasized (Wu & Wu, 2015).

McKinney (1998) lists some active learning activities that can be implemented in the classroom regardless of the age of students as well as the number of students. These active learning activities include: (1) Think-Pair-Share; (2) collaborative learning groups; (3) student-led review sessions; (4) games; (5) analysis or reactions to videos; (6) student debates; (7) student generated exam questions; (8) mini-research proposals or projects / a class research symposium; (9) analyze case studies; (10) keeping journals or logs; (11) write and produce a newsletter; and (12) concept mapping.

Unlike passive learning, which is traditionally based on teacher instruction, active learning is based on self-directed and autonomous learning methods (Minhas, Ghosh, & Swanzy, 2012). When educators implement active learning pedagogies in the classroom, students are not only expected to listen to the content of the lesson, but also to participate fully in reading, writing, discussion, and problem solving (Bean & Melzer, 2021). Literature suggests that active learning not only enhances participation, engagement, and learning, but also facilitates communication and interaction. More importantly, active learning helps increase sense of community and connectedness. As a result, learning satisfaction is improved (Bonwell & Eison, 1991; Freeman et al., 2014; Michael, 2006; Prince, 2004). According to Hsu (2012), students who taught by "action-reflection" method are abler to connect different concepts, have better critical thinking skills, and have more positive attitudes.

This study analyzes a debate activity conducted by the author in a required course titled "Macroeconomics II." Classroom debates have been recognized as an effective teaching method to enhance students' reasoning and argumentation skills (Malloy, Tracy, Scales, Menickelli, & Scales, 2020; Oros, 2007; Zorwick & Wade, 2016). Chen and Zhao (2020) pointed out that: "Besides reading, thinking and cooperation, how to express thoughts and feelings correctly are also important abilities. To be able to speak in a meaningful and organized way, and to successfully persuade others to accept one's own viewpoints and opinions is the art of speaking and writing that we should learn." Hopefully, the incorporation of class debates into courses can enhance students' motivation and interest in learning.

This paper is organized as follows. The first section is introduction. The second section is the literature review. The third section is the implementation and design of the study. The fourth section is the results and discussion. The last section states the limitations and future extensions.

Literature Review

Traditionally, most curriculum reforms are initiated by educational authorities (for example, the 108 Curriculum Guidelines). However, in addition to top-down changes, teachers' beliefs about teaching are the most important factor influencing the implementation of curriculum reforms (Lin, 2020). That is, teachers are the key factor determining the success or failure of a curriculum reform. As a result, it is important to raise teachers' awareness of the new curriculum and guide them to rethink their own role in the new curriculum (Wu & Wu, 2021). The literature review is divided into two parts: 1. active learning and classroom debates; and 2. the effectiveness of classroom debates.

I. Active Learning and Classroom Debate

Kennedy (2007) pointed out that students learn in a variety of ways and therefore higher education needs to provide a variety of teaching strategies and forms of assessment to meet different learning needs. Classroom debate is one of the different ways that promote active learning. However, opponents of classroom debates argue that it reinforces dualistic prejudices or simply reinforces students' preconceived ideas. Kennedy (2009) notes that despite a fear of participating in debates, prior to the first debate about 75% of participants indicated that they would consider debate as a pedagogical strategy. After the debate was over, 85% of participants indicated that they would consider debate as a pedagogical strategy. This result is consistent with Goodwin (2003), the findings showed that, while a few students reported distress and anxiety with the competitiveness feature of the debates, most of them reported that they felt quite happy with participating in debate exercises.

Jackson (2009) mentions that "debate is not intended to be an end in itself, but rather a means to desirable educational outcomes that complement other teaching techniques and student experience." Zare & Othman (2013) state that the effectiveness of debates depends on the clarity of the issues being debated and the lack of favoritism towards one side of the argument.

II. Effectiveness of Classroom Debates

According to Oros (2007), debates are related to collaborative learning and critical thinking. To be specific, in-class debates can enhance students' skills in reasoning and questioning through expressing pro and con positions. Tessier (2009) states that although the format of debates affects students' learning, debates can enhance learning skills regardless of the format of debates. In particular, students are able to integrate evidence gathered in debates and apply it to relevant topics.

Yang and Rusli (2012) collect quantitative and qualitative data to compare the differences in students' learning using traditional lectures and classroom debates. Notably, the results show that the majority of students believed that classroom debates are more inspiring than traditional lectures. To be specific, classroom debates stimulate students to think about the topics, help students develop critical thinking skills, and give students opportunities to connect what they have learned to real-life issues. Zare & Othman (2015) also explored the impact of classroom debates on students' learning effectiveness from students' perspectives. The respondents believed that debates help them improve their critical thinking skills and oral communication skills. In addition, debates also enhance students' mastery of course content, increase their level of confidence, overcome stage fright, and improve their teamwork skills.

Critical thinking plays an essential role in logical thinking, decision making and problem solving. Therefore, critical thinking is one of the key skills that underpin the ability of university graduates to become productive labor force. In addition, critical thinking helps individuals distinguish evidence from opinion. Critical thinking also helps individuals determine whether a conclusion is supported by evidence or personal opinion. Without the ability to think critically, exaggerated and/or questionable claims may be misinterpreted (Parra, Barriga, Díaz, Cuesta, 2021; Santos, 2017). Rodriguez-Dono and Hernández-Fernández (2021) refer to debates as a key factor in the acquisition of knowledge, the development of sustainability and critical thinking skills. Majidi, Janssen, and Graaff (2021) point out that classroom debates enhance written and oral argumentation skills in terms of structure and quality through multilevel data analysis.

Campo, Galindo-Domínguez, Bezanilla, Fernández-Nogueira, and Poblete (2023) used a survey of 263 Spanish university students to analyze the effectiveness of different pedagogical approaches that aims to enhance critical thinking skills. The article mentions that the two main ways of understanding critical thinking are: reasoning/arguing and questioning/asking oneself. The results show that, according to the order and frequency of students' preferences, the best method of developing critical thinking is debate ($f=650$; 19.7%), followed by PBL (project/problem based learning) ($f=468$; 14.2%), and then practices in real contexts ($f=364$; 11.0%). Surprisingly, oral presentations ($f=59$; 1.8%) and flipped classrooms ($f=30$; 0.9%), which have been advocated in many programs, were perceived by students as having very limited effects on the development of critical thinking skills.

Research Design and Implementation

I. Research Methodology

In the course of “Macroeconomics II”, the in-class debates are used to provide an integrated overview of the one-year compulsory courses. It is hoped that through this active-learning activity, students can gain a deeper understanding of the six major controversies in macroeconomic policy: 1. How actively should policymakers try to stabilize the economy? 2. Should the government fight recessions with spending hikes or tax cuts? 3. Should monetary policy be made by rule or discretion? 4. Should the central bank aim for an inflation rate near zero? 5. Should the government balance its budget? 6. Should the tax laws be reformed to encourage saving?

Take “Macroeconomics II” in Spring semester 2023 as an example, the layout of in-class debates is described as follows:

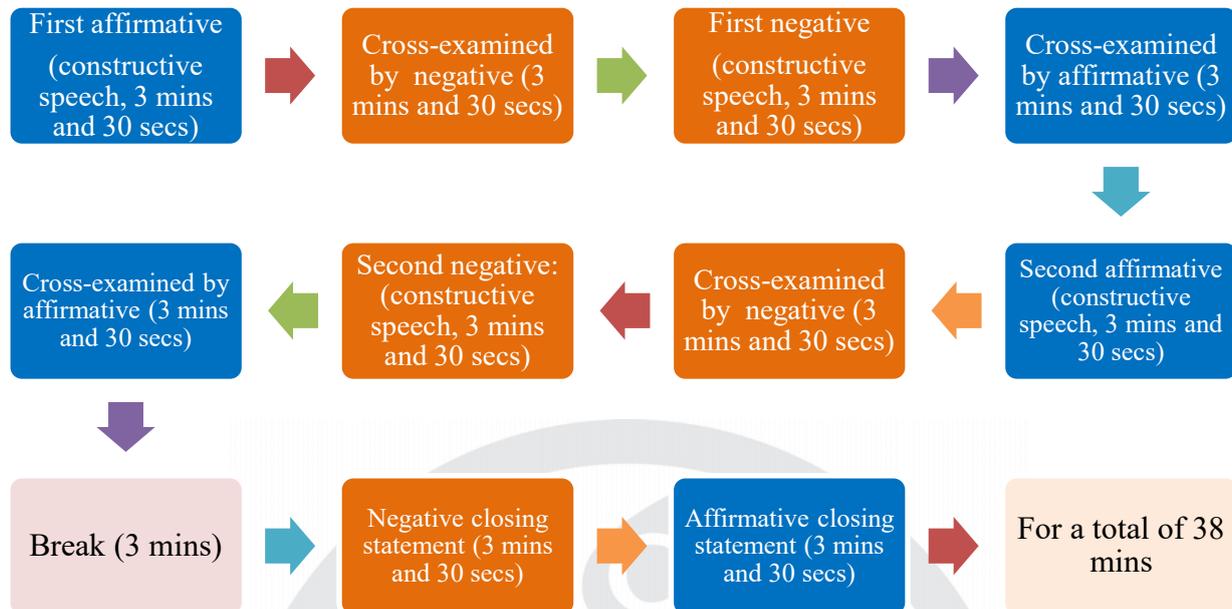
- I. Divide the 84 students into 12 groups. Students were allowed to choose their own group members and submit their group lists by March 17, 2023, while those who do not have their own groups will be arranged by the teaching assistants. For flexibility, students were told: “We respect your (students’) group arrangement. However, there may be fine-tuning of the group arrangement if the number of groups does not meet the needs of the course.”
- II. The final group arrangement is announced on March 31, 2023. On the same day, the date of debates (May 19, May 26, or June 2), debate topic, and affirmative or negative side are determined through the online raffle tool (<https://lab.sp88.com.tw/luckydraw/>).

- III. A three-hour long debate workshop is given on March 31, 2023. An experienced debater, Yi-Ting Chung, was invited to be the speaker of the workshop.
- IV. On the official dates of debates (May 19, May 26, and June 2), scoring sheets were distributed to three judges. Each debate topic was judged by three judges, one is an experienced debater, Yi-Ting Chung, and the other two are professors of Economics. A scoring sheet (in Chinese) is attached in the Appendix for reference.
- V. After the debates, students were asked to submit their debate evaluation and self-reflection form through the ee-class learning platform. A debate evaluation and self-reflection form (in Chinese) is attached in the Appendix for reference.

Timetable on dates of debates:

9:00-9:10	<ul style="list-style-type: none">•Opening•Introduce the outline
9:10-10:25	<ul style="list-style-type: none">• First Debate Topic• Voting for the best debater• Q&A and Judges' feedback
10:25-10:35	<ul style="list-style-type: none">•Break
10:35-11:50	<ul style="list-style-type: none">• Second Debate Topic• Voting for the best debater• Q&A and Judges' feedback
11:50-12:00	<ul style="list-style-type: none">•Group photo

For each debate topic, the order of debate is illustrated in the following chart. Although incorporate debates into the course, it is still a “course” in nature. In other words, the key is to help students learn. Therefore, in each 75-minute debate, about half of the time is spent on debate (38 minutes), and the other half is given to judges to ask questions and provide feedbacks. Debate is the presentation of students’ autonomous learning while judges’ questions stimulate thinking and discussion. In addition, judges’ comments provide different point of views as well as an overall review.



II. Research Tools

The main analyzing data is the debate evaluation and self-reflection form. In addition to basic information such as name, department, and student number, students were asked to fill in the debate topic assigned to their group and their position (pro or con), as well as the role they played in the debate (argument, question, reply, or conclusion). Students were also asked to record the winner of the debate determined by the judges. In addition, students will be asked to answer the following six questions to further understand their views and what they have learned from the debate:

1. Based on your opinion, which side won? Explain what you think was the key to the victory.
2. What were the strengths/weaknesses of your team? Consider the following: team organization and preparedness; good examples and reasoning used to prove each point; strong counterarguments.
3. What were the strengths/weaknesses of your opponent's team?
4. What were your own strengths and weaknesses as an individual?
5. What did you learn from the debate?
6. What was the most impressive perspective you learned?

Lilly (2012) mentioned that students are assigned a debate position that may influence their views. In order to determine whether this statement is true, a “pre-test” and a “post-test” will be added to the “Macroeconomics II” in the Spring semester 2024. After the introduction of the debate topic, students will be asked to choose the position they agree with (the pre-test). Students will again be asked to choose the position they agree with after the debates are over (the post-test).

Results and Discussion

The in-class debate over macroeconomic policy is about to enter its fourth year of experimentation. Although it holds the same debate topics, it has been adjusted and improved every year based on the students' feedback. For example, in the first year, many students responded that although they had learned a lot, more than 90% of them had no experience in debates, which made the process quite intimidating and stressful. For this reason, a three-hour long debate workshop was planned since the second year.

As far as the procedure is concerned, it has been modified as well. In the first two years, in order to encourage the students to have a more comprehensive understanding of the issues, an online roulette wheel was used to determine the pro or con side only one hour before the official debate activity. However, some students responded that this would catch them off guard and they might even take the wrong side. Therefore, since the third-year's trial, students were given the opportunity to know the topic of the debate and the side of their position before the debate workshop.

The evaluation method has also been revised year by year. In the first two years of the learning, due to the Covid-19 pandemic, the debates were held online. In the first year, the evaluation method was to use a google form to allow instructors, teaching assistants, and students to evaluate the debater. Specifically, the evaluation consists of four performance-oriented descriptions: (1) understanding of the topic; (2) usage of facts and data; (3) defense of the other side of the argument; and (4) respect for different points of view. In the second year, in order to avoid biases result from peer pressure, two members from the NCU Debate Club were invited to be the judges. However, some students responded that the experienced debater judges may not be familiar with economic issues. As a result, their evaluation may only base upon debating skills, which is obviously not the purpose of incorporating in-class debates into the required course. Therefore, the judicial panel since the third year is composed by two professional judges (Doctor of Economics) and one debater.

Limitations and Future Extensions

In the Spring semester 2023, sophomore-year high school students were invited to be audience of the in-class debates. A number of high-school students mentioned that the content was too difficult from them due to many terminologies. Despite the level of difficulty, the overall evaluation of the activity is quite high by high-school teachers and students. Therefore, cooperation among different econ departments might be worth to try. It is hoped that students can learn more from different composition of the audience. In addition, as Professor Ying-Chen Chen mentioned on May 26 2023, hope this learning activity would give students motivation to take advanced courses and improve their ability to understand the issues.

Reference

一、中文部分

- 吳俊憲、吳錦惠 (2015)。翻轉教室－啟動教室裡寧靜的革命。台灣教育評論月刊，4(6)，174-178。
- 吳俊憲、吳錦惠 (2021)。國小108課綱校訂課程計畫系統發展與問題評析。臺灣教育評論月刊，10(8)，1-7。
- 林進材 (2020)。從課程改革的軌跡論述教師教學理念的實踐與轉變。臺灣教育研究期刊，1(1)，157-175。
- 徐綺穗 (2012)。大學教學的創新模式－「行動－反思」教學對大學生學習成就、批判思考意向及學業情緒影響之研究。課程與教學季刊，15(1)，119-150。
- 陳宥均、趙榮華 (2020)。辯來辯去—國小高年級辯論會課程初探與課後分析。臺灣教育評論月刊，9(7)，133-141。

二、英文部分

- Allsop, Jared; Young, Sarah J.; Nelson, Erik J.; Piatt, Jennifer; & Knapp, Doug (2020). Examining the benefits associated with implementing an active learning classroom among undergraduate students. *International Journal of Teaching and Learning in Higher Education*, 32(3), 418-426.
- Bean, John C. & Melzer, Dan (2021). *Engaging ideas: The professor's guide to integrating writing, critical thinking, and active learning in the classroom* (3rd ed.). Hoboken, NJ: John Wiley & Sons.
- Bonwell, Charles C. & Eison, James A. (1991). Active learning: Creating excitement in the classroom. ASHE-ERIC Higher Education Reports No. 1. Washington, D.C.: The George Washington University, School of Education and Human Development.
- Campo, Lucia; Galindo-Domínguez, Héctor; Bezanilla, María-José; Fernández-Nogueira, Donna; & Poblete, Manuel (2023). Methodologies for fostering critical thinking skills from university students' points of view. *Education Sciences*, 13(2), 132, 1-12.
- Chen, YC., Hand, B. & Park, S (2016). Examining elementary students' development of oral and written argumentation practices through argument-based inquiry. *Science and Education*, 25, 277-320.
- Freeman, Scott; Eddy, Sarah L.; McDonough, Miles; Smith, Michelle K.; Okoroafor, Nnadozie; Jordt, Hannah; & Wenderoth, Mary P. (2014). Active learning increases student performance in science, engineering, and mathematics. *Proceedings of the National Academy of Sciences*, 111(23), 8410-8415.
- Goodwin, J. (2003). Students' perspectives on debate exercises in content area classes. *Communication Education*. 52(2), 157-163.
- Jackson, Michael (2009). Debate: A neglected teaching tool. *Peabody Journal of Education*, 50(2), 150-54.

- Kennedy, Ruth (2007). In-class debates: Fertile ground for active learning and the cultivation of critical thinking and oral communication skills. *International Journal of Teaching and Learning in Higher Education*, 19(2), 183-190.
- Kennedy, Ruth (2009). The power of in-class debates. *Active Learning in Higher Education*, 10, 225-236.
- Lilly, Emily L. (2012). Assigned positions for in-class debates influence student opinions. *International Journal of Teaching and Learning in Higher Education*, 24(1), 1-5.
- Majidi, Abid el; Janssen, Daniel; & Graaff, Rick de (2021). The effects of in-class debates on argumentation skills in second language education. *System*, 101, 102576, 1-15.
- Malloy, Jacquelynn A.; Tracy, Kelly N.; Scales, Roya Q.; Menickelli, Kristin; & Scales, W. David (2020). It's not about being right: developing argument through debate. *Journal of Literacy Research*, 52(1), 79-100.
- McKinney, Kathleen (1998, July). Active learning strategies. *Newsletter from the Center for the Advancement of Teaching*, Illinois State University
- Michael, Joel (2006). Where's the evidence that active learning works? *Advances in Physiology Education*, 30(4), 159-167.
- Minhas, Paras S.; Ghosh, Arundhati; & Swanzy, Leah (2012). The effects of passive and active learning on student preference and performance in an undergraduate basic science course. *Anatomy Science Education*, 5(4), 200-207.
- Oros, Andrew L. (2007). Let's debate: Active learning encourages student participation and critical thinking. *Journal of Political Science Education*, 3(3), 293-311.
- Parra, Yamith J.F.; Barriga, Andrea M.; Díaz, Rodolfo A.L.; Cuesta, Jairo A.G. (2021). Teacher education and critical thinking: Systematizing theoretical perspectives and formative experiences in Latin America. *Revista de Investigación Educativa*, 39(1), 149-167.
- Prince, Michael J. (2004). Does active learning work? A review of the research. *Journal of Engineering Education*, 93(3), 223-231.
- Rodriguez-Dono, Alfonso, & Hernández-Fernández, Antoni (2021). Fostering sustainability and critical thinking through debate—A case study. *Sustainability*, 13(11), 6397, 1-24.
- Santos, Luis F. (2017). The role of critical thinking in science education. *Journal of Education and Practice*, 8(20), 159-173.
- Tessier, Jack T. (2009). Classroom debate format effect on student learning and revelations about student tendencies. *College Teaching*, 57(3), 144-152.
- Yan, S. (2012). Teachers' roles in autonomous learning. *Journal of Sociological Research*, 3(2), 557-562.
- Yang, Chien-Hui & Rusli, Enniati (2012). Using debate as a pedagogical tool in enhancing pre-service teachers' learning and critical thinking. *Journal of International Education Research*, 8(2), 135-144.
- Zare, Pezhman & Othman, Moomala (2013). Classroom debate as a systematic teaching/learning approach. *World Applied Sciences Journal*, 28(11), 1506-1513.

Zare, Pezhman & Othman, Moomala (2015). Students' perceptions toward using classroom debate to develop critical thinking and oral communication ability. *Asian Social Science*, 11(9), 158-170.

Zorwick, Leslie W. & Wade, James M. (2016). Enhancing civic education through the use of assigned advocacy, argumentation, and debate across the curriculum. *Communication Education*, 65(4), 434-444.



Appendix

附錄一：裁單

結辯 20分		答辯 各20分		質詢 各20分		申論 各20分				辯題		一二學年度國立中央大學總體經濟學辯論比賽評分單 政府應不應介入市場穩定經濟	
正								正		第一輪			
反								反		第二輪			
Q & A (20分)								正					
反		正						反					
論點成績 (勝者全拿)			架構成績				參賽組別						
20分給 <input type="checkbox"/> 正方 <input type="checkbox"/> 反方			20分				反方		正方				
			反方		正方		12		10				
總分						黃詩庭	一辯申論	李珮妍					
						陳律翔	二辯申論	林家萱					
反方			正方			林大鈞	三辯質詢	杜采偉					
						謝宜軒	四辯質詢	李孟儒					
勝方： <input type="checkbox"/> 正方 <input type="checkbox"/> 反方						王郁惠	五辯答辯	林汶琦					
						李允辰	六辯答辯	林荷軒					
評審		主席		地點		日期		許弘序	七辯結辯	李珮妍			
		鍾依庭		TR-203		2023/5/19		任選	八辯QA	李孟儒			



附錄二：辯論心得

S23EC2006 總體經濟學 期末辯論心得報告格式

基本資料	姓名		系級		學號	
	辯論組別&主題					
	正反方	<input type="checkbox"/> 正方	<input type="checkbox"/> 反方	評審判定 <input type="checkbox"/> 正方 <input type="checkbox"/> 反方 獲勝		
	擔任角色	<input type="checkbox"/> 一辯或二辯申論 <input type="checkbox"/> 三辯或四辯質詢 <input type="checkbox"/> 五辯或六辯答辯 <input type="checkbox"/> 七辯結辯 <input type="checkbox"/> 八辯 QA				
心得感想						
<ol style="list-style-type: none">1. 根據你的觀點，那一方獲勝？並說明你覺得致勝的關鍵。2. 你覺得你們這一組的強項與弱項分別為何？可就準備的充分度、能否以實例佐證主張...等具體說明。3. 你覺得對手組別的強項與弱項分別為何？並給予對手建議。4. 你覺得你個人的強項與弱項分別為何？5. 你覺得你從辯論中學到什麼？6. 請分享最有感的議題及最有印象的觀點。						