

Choosing a side: Investigating student outcomes in argumentative writing

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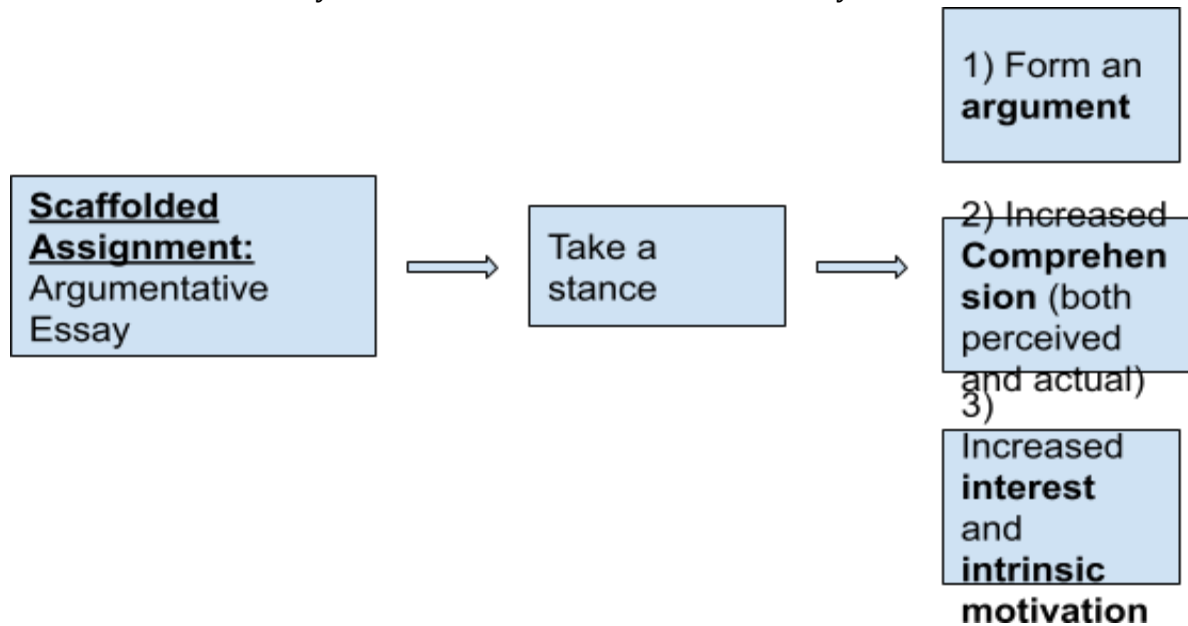
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Introduction and Justification

As evident in the 2020 election and its aftermath, today's sociopolitical climate is extremely polarized. Teachers must prepare students for the "real world" polarized climate they will enter into after high school as citizens, while at the same time helping them to practice essential academic skills. Students need to be able to form good arguments using reliable evidence, but how can teachers make this happen and what will it lead to? This paper explores the impact of implementing argumentative essays in the social studies classroom. In order to allow students to focus on the argument part, the teacher should provide a scaffolded assignment to help the students identify/analyze good sources, help outline the structure of their paper, and provide opportunities for feedback. Scaffolding the assignment reduces the complexity of the project, and allows the students to focus on the main idea- taking a stance with evidence.

Forming an argument by taking a stance and using good evidence in their essays should also help my students 1) increase their comprehension (both perceived and actual), and 2) increase their interest and intrinsic motivation. After my students complete this project, the goal is to demonstrate their understanding of content by writing an argumentative essay, which will in turn help them be able to 1) form arguments, 2) increase comprehension, and 3) increase their interest and intrinsic motivation. All three of these

outcomes are necessary in the current climate we live in today.



Literature Review

There is little research on the chain of events I propose in my study. Students need this assignment to prepare them for the polarized political climate of the current world. Taking a stance and the ability to form evidence based arguments is a necessary skill for the society of today. How will this assignment help students achieve an ability to argue, increase in comprehension, and increase in motivation/interest? By reducing the complexity of the assignment, scaffolding, students will be able to focus on taking a stance in the world.

Argumentative Essays:

Argumentative essays are ways for students to express their opinion with supporting evidence and facts. Essay writing can teach critical thinking skills and effectively help develop interpretation, analysis, evaluation, inferencing, and explanation skills (Sharadgah et al., 2019). These skills are particularly useful in social studies classes, where students are required to use their skills to develop meaning and understanding.

Interest and Intrinsic Motivation:

Intrinsic motivation is when you engage in a behavior because you find it rewarding, therefore motivating you to complete it. In their self-determination theory, Deci and Ryan (2000) argued that people are more intrinsically motivated in environments that support their needs for autonomy, competence, and relatedness.

Perceived Comprehension and Actual Comprehension:

Teachers often assess actual comprehension, through products like standardized tests, essays, etc. After a unit, students demonstrate their understanding by producing a product. However, perceived comprehension, or how my students think they are performing, is not something that is measured frequently. I have rarely asked my students how they think they are doing, or allowed them an opportunity to think about their thinking.

Purpose Statement and Research Questions

The purpose of this study is to evaluate the outcomes of students taking a stance by writing argumentative essays. Arguing with evidence is a necessary skill that can be applied in many contexts. Furthermore, argumentative essays are common assessment tools used across many content areas to demonstrate understanding.

Research Questions:

Does a scaffolded assignment that allows students to take a stance in a polarized climate lead to...

1. the ability to form an argument with evidence?
2. an increase in both perceived comprehension and actual comprehension?
3. an increase in interest and intrinsic motivation?

Methods

I first gave my students the pre-intervention questionnaire to gauge their intrinsic motivation in social studies and perceived understanding of the progressive movement (see Appendix A). Intrinsic motivation was measured using the interest and enjoyment items subscale of Ryan's (1982) Intrinsic Motivation Inventory. Next, I gave my students a pretest of the content.

The final product of this unit was an argumentative essay on the students' overall understandings of this content. This was not assessed by the side of the argument they chose, but how they constructed and elaborated their stance. These essays were collected and assessed for content, sources, accuracy, etc. (rubric); similar to how the other assignments with student autonomy were assessed.

After the unit was over I again asked students to complete the Likert-type questionnaires. The students also received a posttest of the content and an open-ended question for feedback on the argumentative essays. Throughout the intervention, I wrote notes in my field journal to document the challenges I faced in using the argumentative essays.

Context/Participants/Sample

I conducted my study in a US History class in a public high school located in St Mary's County, MD. The study was conducted in my class consisting of one period of ninth

grade US History and was classified as a “Pre-AP” course. The class consisted of 16 Academy of Visual and Performing Arts students, and no students had an IEP (Individualized education plan).

Intervention/Action Strategy

At the end of the first unit I taught, The Progressive Era, students constructed an argumentative essay (thesis, counter argument, supporting sources) in which they argued whether the progressive movement was a success or a failure. This assignment was scaffolded, I provided them with a rubric, essay outline, source bank, and feedback. Students were assessed on their ability to support their argument with the provided sources.

Data Collection

This was a mixed methods study. I collected quantitative data in the form of Likert-type questionnaires and content comprehension quizzes. I collected qualitative data in the form of field notes and an open-ended item to provide a more in-depth picture of the effectiveness of the intervention (see Table I).

Table I

Research Questions and Data Sources

Research Questions:	Data source 1	Data source 2
Does a scaffolded argumentative essay assignment lead to the ability to form an argument with evidence?	Content Test on Progressive Era (pretest and posttest)	Student products - argumentative essay outcomes
Does a scaffolded argumentative essay assignment lead to an increase in both perceived comprehension and actual comprehension?	Likert-Type Perceptions of Understanding Scale (Pre-intervention and Post intervention)	Content Test on Progressive Era (pretest and posttest)
Does a scaffolded argumentative essay assignment lead to an increase in interest and intrinsic motivation?	Likert-Type Interest/Enjoyment Scale (Pre-intervention and Post intervention)	Open-Ended Survey item (Post-Intervention Only)

Data Analysis

I analyzed changes in students' intrinsic motivation and perceived understanding using two-tailed paired t tests. Changes in content test scores were evaluated using a one-tailed paired t test. All effect sizes were calculated using Cohen's *d*. Patterns in the qualitative data (i.e., from the field journal and student responses) were explored by identifying codes associated with particular types of challenges and using second-level codes to examine subthemes.

Validity Concerns

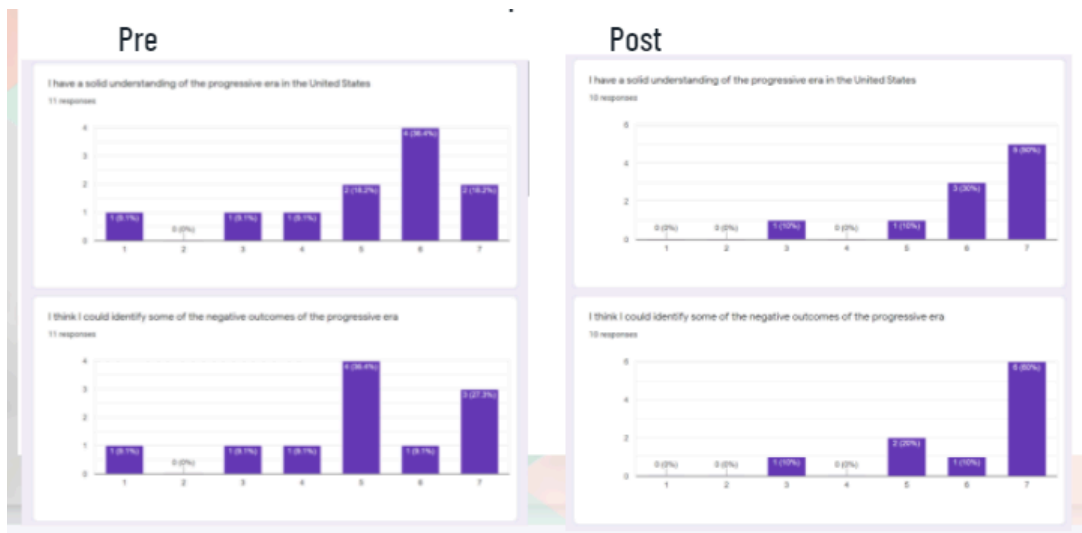
In many cases, I collected multiple forms of data to answer a single research question to bolster the reliability of my findings. For example, I relied not only on changes in students' perceptions of understanding, but also their observed understanding in the form of content tests. Similarly, asking students to report on the effectiveness of argumentative essays ensured that I did not have to rely solely on my own perceptions based on my field journal notes.

Results

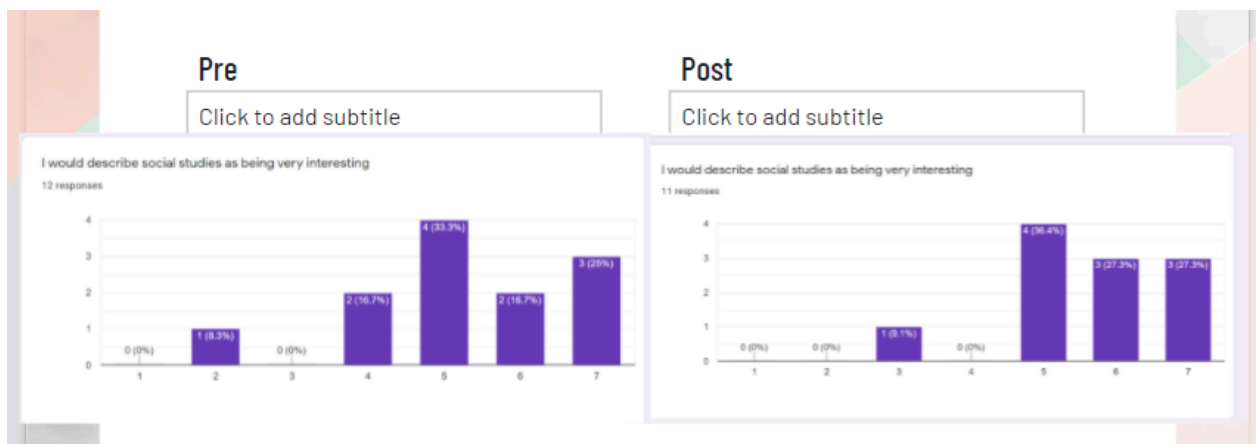
This study resulted in a statistically significant increase with a large effect size (1.08). The students went from not really understanding (52%) to having a solid understanding of content (82%). I also found it important to note that students who did not improve with their post-test scores demonstrated their understanding of the topic through writing an argumentative essay. Uniformly, they did well. One issue I had was with submission rates. During the pandemic, students were not turning in work, so having them complete pre/post-tests was a task on its own.

This means my students demonstrated an ability to argue, increased their comprehension (both perceived and actual), and increased their intrinsic motivation/interest.

Pre/Post-Questionnaire 2: Perceived Comprehension



Pre/Post-Questionnaire 1: Interest



Conclusions and Implications

My students were successfully able to demonstrate their ability to argue over the period of my intervention. Later on in class, I had my students do a scaffolded mock trial assignment where they were demonstrating the same skills as they did in the argumentative essays. They were arguing using evidence, this time in a “real world” example. Even though I struggled initially with participation, my students were surviving a crazy year, and overall I view this study as successful.

Limitations

This year, with hybrid instruction and battling hardships, my students showed their resilience. Uniformly, they did well and were successfully able to demonstrate their understanding of both content and arguments with evidence. One issue I had was with submission rates. During the pandemic, students were not turning in work, so having them complete pre/post-tests was a task on its own. I will also note that my sample size was quite small, and for this small class size, the rate of participating was satisfactory. I was only able to conduct this study for my freshman year because the rest of my students were AP Government students preparing for the AP exam in May.

Implications

This study could be implemented across many content areas. Argumentative essays are a common assessment tool used across diverse disciplines. To allow students to focus on the argument with evidence, teachers could scaffold the assignment to reduce complexity.

References

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Appendix

Questionnaires

7- Point Likert-type scale, with anchors of “not at all true, somewhat true, and very true”

Interest/Enjoyment (Intrinsic Motivation; adapted from CITE)

- I enjoy social studies very much
- I have fun in social studies.
- Social studies is boring. (R)
- Social studies does not hold my attention at all. (R)
- I would describe social studies as being very interesting.
- I think social studies is quite enjoyable.
- While I'm in social studies, I find myself enjoying what we are doing.

Perception of Understanding

- I have a solid understanding of the progressive era in the United States
- I think I could identify some of the negative outcomes of the progressive era
- I think I could identify some of the positive outcomes of the progressive era
- I know what advances were made in women's rights during the progressive era
- I understand what setbacks were faced by African American people during the progressive era
- I have a solid understanding of the Great Depression.
- I could sufficiently explain the Franklin D. Roosevelt's New Deal to someone who didn't know anything about it.
- I could sufficiently explain the Harlem Renaissance to someone who didn't know anything about it.

Post-Intervention Only:

Did you think it was helpful to write the argumentative essays? Are there different ways you would have liked to do it? Explain.

Progressive Era Pre/Post Test (Content)

Ch. 9 Progressivism Test

Respond to the following questions by **HIGHLIGHTING** the correct answer...

1. During the Progressive Era, the Temperance Movement sought to ban alcohol from being made, sold, or consumed in the United States. The movement ultimately succeeded with the passage of which of the following pieces of legislation?
 - a. The Clayton Anti-Trust Act
 - b. The 18th Amendment
 - c. The Square Deal
 - d. The Underwood Tariff
2. The Progressive Movement had three overarching goals it, more or less, accomplished. They were economic, social, and political. Which of the following was the SOCIAL goal of the Progressives.
 - a. Restore job and wealth opportunities
American life
 - b. Return governing power back to the people
American culture
 - c. Correct injustices in
 - d. Encourage the spread of

Use the following passage to answer questions 3, 4, & 5.

“There would be meat that had tumbled out on the floor, in the dirt and sawdust, where the workers had tramped an spit uncounted billions of tuberculosis germs. There would be meat stored in great piles in rooms;...and thousands of rats would race about on it...A man could run his hand over these piles of meat and sweep off handfuls of the dried dung of rats. These rats were nuisances, and the packers would put poisoned bread out for them; they would die, and then rats, bread, and meat would go into the hoppers together.”

- Upton Sinclair, “The

Jungle”

3. The purpose of this passage was to...
 - a. Advertise for employment on a meat-packing facility
 - b. Encourage a president to visit the facility and order it to clean

- c. Make the author famous as a writer in order to get a movie deal
 - d. Make the people aware of these nasty habits in order to promote change
- 4. The author of this passage, Upton Sinclair, could be labeled as...
 - a. A muckraker
 - b. An instigator
 - c. A politician
 - d. A suffragist
- 5. After reading *The Jungle*, Teddy Roosevelt and the Congress of 1906 did which of the following in order to promote change in the meatpacking industry?
 - a. Took complete control of the meat industry and made it a government agency
 - b. Put a quota on how much meat an average person could purchase or consume
 - c. Passed a law requiring meatpacking facilities to meet hygiene standards
 - d. Declared a national emergency
- 6. Despite what they may have claimed, all of the Progressive presidents failed to do the same thing. Which of the following was the topic which they all failed on?
 - a. Lowering tariffs
 - b. Advancing civil rights for African-Americans
 - c. Conservation
 - d. Trust-Busting
- 7. Which group achieved suffrage during the Progressive Era?
 - a. African-Americans
 - b. Women
 - c. Poor citizens
 - d. Immigrants
- 8. Which of the following was not a part of the Square Deal?
 - a. Conservation
 - b. Consumer Protection
 - c. Trust-busting

- d. Governmental Reform
9. Woodrow Wilson was responsible for all of the following except...
- a. Clayton Anti-Trust Act
 - b. Underwood Tariff
 - c. 19th Amendment
 - d. Meat Inspection Act

Use the following passage to answer question 10.

“The fact is that we cannot, by law subordinate the strong to the needs of the weak without destroying the very essence of that which has made the majority of men today the strong, reliant and competent beings they are - personal liberty.

No man...who has studied the history of government...needs to be told that the safeguarding of that which we call the personal liberty of man is the primary and most vital essential to all human progress, and that no law affecting that liberty in the slightest particular [manner], however charitable, however [noble] the motives may appear that prompt it, can be enacted without danger to the whole system upon which our civilization is founded.

- Percy Andreae, “On Prohibition and Liberty”

10. In this passage, the author makes an argument about Prohibition and its impact on the American political system and America’s political beliefs. From what you can see from this excerpt, what is the author’s point or claim?
- a. Prohibition will work to better American lives and American liberties

- b. The strong should exert their influence over the weak in order to make morally acceptable laws
 - c. Prohibition infringes upon [interferes with in some way] people's personal liberties and freedoms
 - d. Prohibition is essential to human progress and is thus justified
11. Did you think it was helpful to write the argumentative essays? Are there different ways you would have liked to do it? Explain.