

Persuasive Research Paper Types: **Problem/Solution** v. **Issue/Conclusion** v. **Issue/Resolution**¹

You are allowed to write any kind of persuasive argument.

a "problem" versus an "issue": a problem needs a *solution* but an issue needs a *conclusion or resolution*

NOTE: There is overlap! Sometimes, a resolution or conclusion *also* suggests action-based ideas for the future.

problem = you identify a **problem** that requires fixing, e.g. something that affects health or welfare

solution = an **action-based** set of ideas of how to solve that problem, founded upon evidence (may be a student's own solution *or* a solution found in the research that the student found evidence to support): "Here's how to solve the problem."

Example:

RQ: "What are the effects of light pollution on society?"

Problem: "Light pollution is harmful to the environment and people."

Solution: "After examining a variety of options, the best solution is changing how we design our lighting, focusing on creating lighting that is less damaging, such as..."

issue = a **topic worthy of debate** that is not necessarily a problem. You identify that there is a debate going on, e.g. what caused a historical event; whether or not nationalism is a positive societal attribute; whether recreational marijuana should be legalized; whether or not uniforms are necessary.

conclusion = a **judgement** of a situation. Usually, something that has happened in the past that we need to make judgments regarding. The authors sometimes provide some suggestions for moving forward, as part of their examination of the implications of their conclusions. But sometimes they are setting straight the record.

Example:

RQ: "Did a strong patriarchal system exist in Mayan and Aztec cultures?"

Issue: "There's a debate between scholars of ancient civilizations as to what degree power was distributed, especially between men and women."

Conclusion: "After examining the evidence, we conclude that women in Mayan and Aztec cultures were in a subordinate position in all spheres of life, *not* in gender parallel positions."

issue = a **topic worthy of debate** that is not necessarily a problem. You identify that there is a debate going on, e.g. what caused a historical event; whether or not nationalism is a positive societal attribute; whether recreational marijuana should be legalized; whether or not school uniforms are necessary.

resolution = an **understanding** about an issue that fundamentally changes things, possibly leading to suggestions or recommendations → How to move forward. A resolution causes you to think differently and potentially change your behavior or suggest further research. The authors usually provide some suggestions for moving forward, as part of their examination of the implications of their resolution.

Example:

RQ: "Is the resurgence in nationalist sentiment in the world an issue of concern?"

Issue: Nationalist movements are gaining power all over the world, particularly in Brazil, the UK, and the United States. This has led to a debate on the value of "nationalism" in nation-states.

¹ With thanks to Joshua M. Smalley, who provided the initial basis to the definitions solution, conclusion, and resolution and the Chernobyl example.

Resolution: While nationalism in the broader sense of pride in one's nation and national identity can have positive effects, it seems to become problematic when it focuses on exclusivity: Who should be part of the "nation" and who not. Therefore, we suggest that governments work to create an inclusive national identity. More research needs to be conducted as to what methods to create inclusivity would be most effective.

Let's apply this to the nuclear disaster of the **Chernobyl Power Plant in 1986:**

A **Solution** to the **problem of nuclear power plant dangers** = Human input and automation can be combined in order to mitigate future catastrophes. There are four methods by which this can be achieved...

A **Resolution** to the **issue of whether or not nuclear power is worth the risk** = Given what we know when things go wrong as seen in Ukraine and Japan, we need to think differently about the risks versus needs regarding nuclear energy; we need to find alternative methods or drastically modify our current methods if we care more about people and the environment. Given the colossal destruction, we need to see our roles as more significant than we currently do.

A **Conclusion** to the **issue of why Chernobyl was so destructive (or why it happened)** = With the available information, it was clear that a more humanitarian and efficient response was needed in Ukraine at the time of crisis. The mismanagement by authorities in Chernobyl can never happen again.

NOTE: Whether it is a conclusion, resolution, or a solution, you should state it near the beginning in answer to your research question, because it is your thesis/argument.

Examples from the released high-scoring papers and presentations below:

Issue-->Conclusion Essay:

Issue: Hong Kong teaches children in Cantonese, its cultural dialect. But Mandarin is much more widely spoken in the world.

RQ: "Should Hong Kong more actively pursue Mandarin-oriented education policies?"

→ **Conclusion:** "Yes, because Mandarin is needed to create cultural understanding and to assist in business with mainland China, but Cantonese should continue to be taught because it is tied to culture and tradition."

Suggestions: Train Hong Kong teachers in Mandarin/teaching in Mandarin. Implement Mandarin gradually into the curriculum.

Problem-->Solution Essay:

Problem: Night shifts (working night hours) cause significant health problems.

Research Question: "What do the current health impacts of the night shift suggest about a need for its future regulation in the U.S.?"

→ **Solution:** "An analysis through the economic, medical, and legal angles shows that night shifts do merit governmental regulations. These regulations will ultimately assist employers in minimizing the health risks of workers (mainly caused by circadian misalignment) and in maximizing their well-being and work efficiency."

Issue-->Resolution Essay:

Issue: Paying children for good behavior may not be the best way to encourage moral development.

Research Question: "What are the implications of monetary incentives on child development?"

→ **Resolution:** "Incentives of any kind can have a great effect, but whether or not the achieved effect matches the intended effect is another story. When considered in the context of child development, monetary incentives can have unwanted consequences. Research has shown increased materialism and diminished altruistic tendencies for children with exposure to monetary incentives. Furthermore, monetary incentives can contribute to the loss of intrinsic motivation to learn and to a reduction in creativity. At the same time, however, they can foster a healthy competitive atmosphere, and one cannot disregard their efficacy. Undoubtedly, monetary incentives will continue to be useful for motivating children, both at home and in school."

Suggestions: "Parents should look to limit their use of monetary incentives when disciplining a child. ... teachers must be very cautious to avoid the over-justification effect."

Issue-->Conclusion

Issue: Gene therapy is a new form of treatment, but many are concerned about its practicality and ethicality.

Research Question: "Is gene therapy a viable option for treatment of people with gene-related diseases, ethically, economically, and practically?"

→ **Conclusion:** Yes! Despite the cost, gene therapy is actually more economical than treating those suffering from the diseases in hospital later. Although some religions express ideas that gene therapy would be unnatural, there are a few cases in which exceptions were made for the sake of individual health. Finally, advancements in gene therapy are making the procedures easier, safer and more efficient."

Problem-->Conclusion + Solution

Problem: Severe poverty among the Lakota people of the Pine Ridge Reservation.

RQ: "What are the factors creating poverty among the Lakota and what can be done?"

→ **Conclusion:** The factors are many, from governmental failures to cultural misunderstandings to social issues like a genetic predisposition to alcoholism.

Suggestions: Education among the Lakota should be developed with the Lakota and include cultural courses such as Lakota language and Lakota history, to give the Lakota a greater sense of community ...

Problem-->Solution Essay:

Problem: Agricultural fertilizers are causing environmental harm.

RQ: "Should agricultural fertilizers be regulated by the Iowa government to prevent more harm to the environment due to eutrophication?"

→ **Conclusion and Solution:** "Yes...a government action is the best method of promoting alginate-based fertilizers, instead of individual organizations promoting alginate-based fertilizers."

Issue→Resolution Essay

Issue: The continuance of wars.

RQ: "What could the United Nations do to become more effective at preventing or limiting belligerence between nations?"

→ **Resolution:** The United Nations could ...

Issue→Conclusion Essay

RQ: "Is the United Nations an effective institution for preventing or limiting belligerence between nations?"

→ **Conclusion:** No, the United Nations is not effective at preventing wars, because the same biases, agendas, and strife that occurs outside of the UN also occurs within it; however, the UN is effective in certain other areas, such as ...

Issue→ Conclusion Essay

Issue: Scholars debate whether the Mayans and Aztecs had a gender parallel society or a patriarchal society.

RQ: “Did a strong patriarchal system exist in Mayan and Aztec cultures?”

→ **Conclusion:** Mayan and Aztec women held a subordinate position to men, as demonstrated via their depictions in art and the archeological evidence suggests. They did not have a system of gender parallelism, a competing philosophy.