



Writing T-Chart Thesis-Proof Organizer

CIP 11.0801 Web Page, Digital/Multimedia and Information Resources Design

Organize information for an argumentative paper by identifying support and opposition.

Program Task:	PA Core Standard: CC.3.6.11-12.A
702: Identify the types and application of programming languages	<p>Description: Write arguments focused on discipline-specific content.</p> <ul style="list-style-type: none">• Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences the claim(s), counterclaims, reasons, and evidence.• Develop claim(s) and counterclaims fairly and thoroughly, supplying the most relevant data and evidence for each while pointing out the strengths and limitations of both claim(s) and counterclaims in a discipline appropriate form that anticipates the audience's knowledge level, concerns, values, and possible biases.

Program Associated Vocabulary:	Writing Associated Vocabulary:
Programming languages Syntax Semantics Input/output operations	Thesis Statement Claim Argumentative writing Opposition Summary

Program Strategy:	Literacy Strategy:
<p>Use the thesis-proof organizer strategy to ensure that students develop their proposition and thesis statement with appropriate evidence before they start writing.</p> <p>After introducing the thesis-proof organizer strategy and before starting the assignment, present the following prompt to the students:</p> <p><i>You are a member of the IT division at a large retail company. Your division provides support for all</i></p>	<p><i>Whole Group</i></p> <p>Lead students through a simulation of establishing a proposition/thesis statement and determining arguments for and against the proposition. Use a topic about which students will have strong opinions.</p> <p>Present the proposition: Same-sex schools are preferable to co-educational classes.</p> <p>Have students share as much evidence as they can to support the proposition. Record the brainstorming on chart paper, the board or electronically.</p>

Program Strategy:	Literacy Strategy:
<p>major operations, including inventory control, payroll, billing and processing payments. The head of your division has recently retired and a new head has just joined the company. The new director has asked your team to evaluate the programming languages that your group is using and make recommendations on whether new programming languages should be adopted in addition to the current languages or to replace current practices.</p>	<p>Next, have students share as much evidence as they can generate that opposes the proposition.</p>
<p>After you have researched available languages, develop a recommendation to your division leader about which programming languages your group should use. Support your recommendation with specific evidence that this is the best alternative. Also, address why other languages are not as good or appropriate for your company's tasks.</p>	<p>At this point, students determine their thesis statement, which will clearly state whether they support or oppose the proposition.</p>
<p>Have students brainstorm which functions are necessary for the tasks that the company uses. This list will inform which characteristics are critical for programming languages.</p>	<p>Share the template with the students. You can provide the template or simply show it for them to copy.</p>
<p>Students should then develop a comparison chart for potential programming languages. These can be languages that they have already learned or languages that they research. Use this chart to develop a proposition: Language 1 would be best to use.</p>	<p>Make the point that the best argumentative writing addresses and refutes the other side. This often requires additional research.</p>
<p>Once students have a proposition, have them complete a thesis-proof organizer. It is possible that more than one language will be appropriate, but each one would require a separate organizer for developing.</p>	<p>Guided Practice Provide pairs of students with pro and con articles on a single topic. One good source for this is Newsela.</p>
<p>Students will develop the chart with evidence to support the language they chose. On the right side, they will identify arguments that some might make for another language. This will help them address and refute other arguments.</p>	<p>Have them develop a proposition on the topic of the articles and identify support and opposition from the articles.</p>
<p>At this point, meet with each student or team to discuss their recommendation and evidence. Help them determine whether they have sufficient evidence to support their recommendation before they move into writing the proposal.</p>	<p>Once they have completed the organizer, have them write a thesis statement.</p>
<p>Once students have enough information to determine their precise recommendation, they will draft a thesis statement for the proposal and then proceed to compose the entire proposal. The two evidence columns will provide information to develop the proposal.</p>	<p>Application After presenting a scenario or task for students, have them develop a preliminary proposition related to the task. Use the thesis-proof organizer to record the proposition.</p>
	<p>Based on their research or experiences, students then identify evidence that supports and refutes the proposition. These notes and their sources go into the organizer.</p>
	<p>Once students have enough information to determine their position, have them draft their thesis statement for the assigned writing.</p>
	<p>In debriefing, use the following questions:</p>
	<ul style="list-style-type: none"> • Why is it important to identify evidence for the side opposite yours?
	<ul style="list-style-type: none"> • Why is it helpful to organize notes this way?
	<ul style="list-style-type: none"> • Why is it important to summarize the notes?

Program Strategy:	Literacy Strategy:
	<p>Listen for:</p> <ul style="list-style-type: none"> • Understanding why it is important to identify opposing arguments. • It is important to clearly identify evidence that supports your thesis. • This activity requires students to think about a topic from multiple perspectives.

Instructor's Script – Thesis-Proof Organizer

The thesis-proof organizer helps students determine evidence that supports or refutes their proposition. This ensures that they have investigated various options and can defend their position thoroughly.

Proposals are essentially written arguments: “what I am presenting is better than other options.” It is critical that students can identify evidence that supports their propositions. It is also important to know the counter-arguments so that they can be addressed.

Common Mistakes Made by Students

Young children attempt persuasion from a very young age. They, however, most often rely on selfish reasons to try to get someone to do what they want: “because you like me” or “because this will make me happy.” In arguments, it is critical that writers can identify not only what they want someone to do, but also the other sides of the proposition. They need to identify evidence that will support their side and evidence that might be used against this idea. This allows them to address those concerns.

CTE Instructor's Extended Discussion

There are thousands of programming languages in the world today. One of the challenges of programmers is to choose the most effective, efficient and cost-effective language for their purposes. While many students may not have to defend their choice of programming languages, they need to be clear on the advantages and disadvantages of various languages for different tasks.

Sample Questions

Career and Technical Concepts

Question	Answer
<p>In-vogue languages vary by employment sector. Financial and enterprise systems need to perform complicated functions and remain highly organized, requiring languages like Java and C#. Media- and design-related webpages and software will require dynamic, versatile and functional languages with minimal code, such as Ruby, PHP, JavaScript and Objective-C.</p> <p>Source: Mashable</p> <p>Based on this paragraph, if you were recommending a programming language for a bank, you need to identify a language that is</p> <ul style="list-style-type: none">A. Versatile.B. Highly organized.C. Easily available.D. Readable.	<p>B. Highly organized</p>

PA Core Reading Concepts

Question	Answer
<p>If you were identifying evidence that supports the thesis that students should be paid for grades, which of the following would be most helpful?</p> <ul style="list-style-type: none">A. Some students think grades would go up.B. Schools do not have money for this incentive.C. At XYX High School, grades went up when students were paid \$5 for each A.D. Researchers investigated grades at 100 schools across three states.	<p>C. At XYX High School, grades went up when students were paid \$5 for each A.</p>

Thesis-Proof Organizer Template

Proposition/Thesis Statement:	
Support	Opposition
Summary	
<i>Make sure to document sources.</i>	