

To Drone or Not to Drone



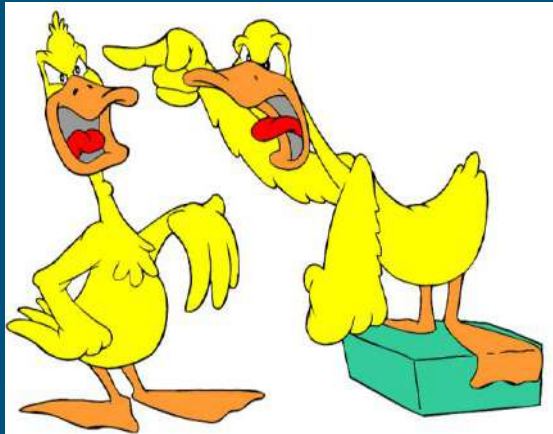
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Unit Overview



The purpose of this unit was to help students hone their **argumentative writing** skills, using topics from a CTE class to help them translate their skills to classes outside of ELA. The unit was taught in a Microsoft Engineering II class, which is why we incorporated the topic of drone usage into the writing of an argumentative essay. To prepare students for the performance task, lessons were done to model how to synthesize information from multiple sources, including text and video. The sample topic was operational systems -- another CTE topic -- to help the students become familiar with note-taking skills, MLA citations, and the actual writing of an argumentative essay. These mini lessons prepared the students for the final performance task on the topic of drone usage for non-military purposes, hence, "to drone or not to drone." 🔊

Microsoft Engineering II

- Second level of Microsoft Engineering
- Mixed grade level, but most students are 10th graders
 - Lessons were designed based on 10th grade standards
- Prerequisite standards taught in ELA and refined in this unit



Emphasized Standards

CCSS.10.RI.8: **Delineate and evaluate the argument and specific claims in a text**, including the validity of the reasoning as well as the **relevance and sufficiency** of the evidence.



CCSS.10.W.8: Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; **assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation.**



Emphasized Standards


CCSS.10.W.1: Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.

- A. Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among claim(s), counterclaims, reasons, and evidence.
- B. Develop claim(s) and counterclaims fairly, supplying evidence for each while pointing out the strengths and limitations of both in a manner that anticipates the audience's knowledge level and concerns.



Lesson 1 Comparing Positive and Negative Aspects of an Idea



- **Goal:** Students will investigate how sources are used to help gather information to determine the quality of an item or company. 
- *(RI.7): Analyze various accounts of a subject told in different mediums, determining which details are emphasized in each account.*
- *(R1.8): Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient.*

Activating Strategy:

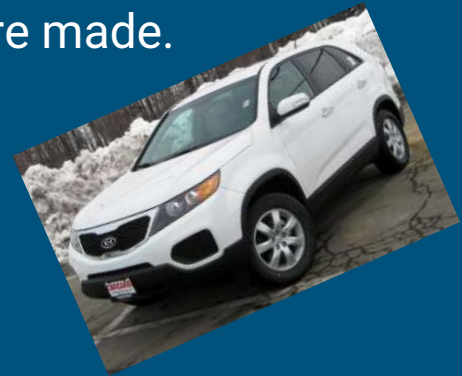


Comparison of Two Vehicles. Using Specifications sheets, **analyze** of make an **analysis** of the two specified cars. Once evidence is collected, final choices are made.



As a class we will review, what and why specific decisions were made.

Were these , **Subjective**? Or **Objective** decisions?



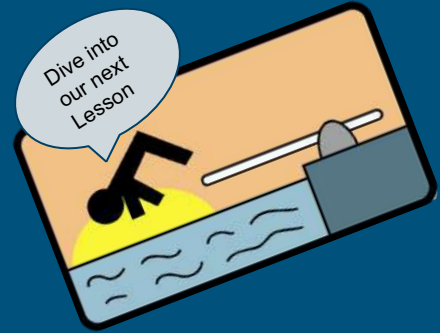
Key Vocabulary: Comparison, Analyze/Analysis, and Subjective vs. Objective,

Define the positive and Negative of a certain product.

- Learning Activity 1 - Compare the Operating Systems of Windows and Macintosh Operational systems....Collect positive and negative information of both operating systems.



- Learning Activity 2:
 - Collect positive and Negative Information
 - WHAT types do we compare?
 - Are all aspects of information reliable?
 - Did we obtain info on same specifications?
 - Is our opinion Subjective or Objective?



Summarizer: Did we have enough information to work with?

Lesson 2 - Pathway Specific Content

Goal: Students vet accurate and innacurate information from biased media sources to provide evidence to a formed thesis statement about operating systems

(R8)

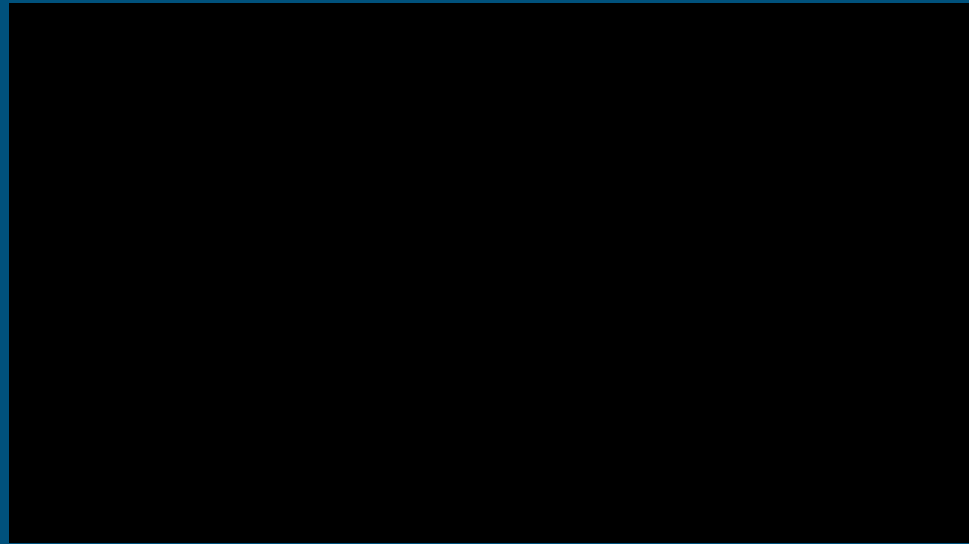
- Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is valid and the evidence is relevant and sufficient
- Identify false statements and fallacious reasoning



Lesson 2 - Pathway Specific Content

Activating strategy: students watch a youtube compilation of “top ten” funniest Mac vs. PC ads.

Students fill out a graphic organizer highlighting accurate/inaccurate statements and what would correct the statements.



Lesson 2 - Pathway Specific Content

Learning Activity: students read two contrasting articles about Microsoft Windows and Mac OSX and craft a thesis statement indicating which is the better OS.



Lesson 3 - Evaluating Claims and Evidence



- Goal: students choose most relevant and persuasive evidence (RI8)
- Students read an article and evaluated most relevant evidence
- Students revisited their thesis statements from Lesson 2 and identified a piece of relevant evidence

Activator: A good claim is...

A good claim (or thesis) is...

Submit

20 characters remaining



the opinion on a sub
argumentative
to the point
important

a good overview

opinionated

proveable

understanding

clear/ coinsise

clear and precicise

to the point. vaild

thesis
useful
clear

your stance. meaningful factual and percise. how you feel

Assignment: Students find strong, relevant evidence...

1. Type the thesis statement you wrote about Operating Systems.
"I believe that Microsoft operating systems are much better than Mac operating systems because every device that runs a Windows OS, which is much more user friendly, is also able to be customized with both hardware and software to more uniquely fit the user."
2. Return to the articles you read last class period about Windows and Macintosh operating systems. Open the article that will best support your thesis statement.
 - a. [A Mac User Falls for PC Again](#)
 - b. [Ten Reasons Macs are Better Than PCs](#)
3. Find a direct quote from the article that supports your thesis statement. Type the quote here: My quote from article B is "Microsoft included app-snapping in previous Windows versions, but now it suggests other open apps or windows to place next to it. It also lets you tile up to four windows on the screen".

...and justify why they chose it.

4. Why is the detail you highlighted relevant to your claim?
It shows how user friendly the most recent version of windows is.
5. How the detail you highlighted make your argument stronger?
It supports my claim with a quote from an article in support of Windows 10. It also brings up how far windows has come in the last three or four versions.
6. What additional information might you need to include in your argument in order to make your argument stronger?
I might need to include the capabilities and modifications that can be made on windows devices as well as a comparison to the same thing for Mac devices.

Submit your completed work to Schoology.

Lesson 4 - Citing Sources using MLA Format



Prerequisite Standards:

RI1: Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

L4: Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *grades 9-10 reading and content*, choosing flexibly from a range of strategies.

Standards:

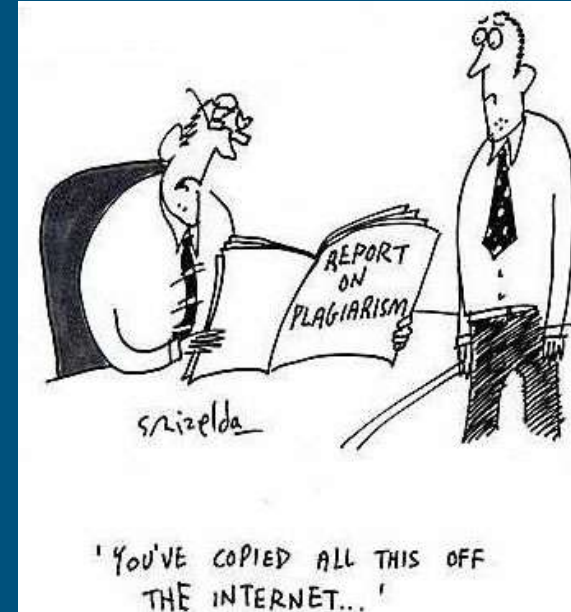
W.9-10.8 Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation.



Activating Strategy: viewed videos on the purpose of citing sources and a “how to”

Assessment Prompt for Learning Activity 1:
MLA sample sentences

Assignment: create citations for a fictitious writing piece



Lesson 5: Writing an Argument

Goal: students formally write their argument (W1)

Students return to pieces of their arguments from previous lessons

Rewrite the thesis from Lesson 2



Integrate evidence chosen in Lesson 3

Correctly cite evidence using strategies from Lesson 4

Incorporate a counterclaim and rebuttal (taught in ELA)

Students reviewed a sample essay and discussed strengths and weaknesses

Thesis Statements: Students revised and submit as many times as necessary

Submission 1



7.5/10 I think Mac is better because it is good for all areas (business, gaming, etc.).



 Add Comment

Submission 3

10/10 The mac operating system is better because the mac allows users to multi task quickly.



 Add Comment

Discussion after reading sample essay



 Edited · Tue May 10, 2016 at 9:13 am

One thing the article did well was state an educated opinion and backed it up with reasons.

One thing the article is missing is a rebuttal and had more opinion than fact which should be fixed.

Unlike 😊 2 · Reply



 Tue May 10, 2016 at 9:16 am

This maintained a very professional tone throughout the entire essay, but it also did not have a rebuttal and there wasn't all that much fact behind it and it was rather short.

Like · Reply

 Hide 1 reply



Christina Scheffel Tue May 10, 2016 at 9:18 am

Right – If it doesn't have a rebuttal, it's missing a counterclaim too.

Like · Reply

Assignment: Short Essay

- Students wrote a short essay similar to the performance task
- Each student received comments after submitting their essay detailing strengths and areas for improvement
- Student exemplars were identified



Performance Task

Students watch videos and read articles about the personal use of drones

Students develop a claim and support it with evidence from the texts



Performance Task Results

Most students scored “on grade level” (3 points in most categories of DOE rubric) in 2 or more categories

Only “above grade level” results were from 11th & 12th grade students (i.e. students who should be above a 10th grade level)

All students made an adequate claim and used the texts to support their claims

Above Grade Level

Individuals should not be allowed to own and operate drones. People like to talk about how drones are a thing of the future and soon everyone will own one, but the reality is that they are just too dangerous for the public. Drones jeopardize people's safety and privacy while only having few positive aspects.

First of all, drones pose a serious threat to the safety of anyone around them. The video "Why Amazon Delivery Drones Won't Work" explained that drones do not have the reaction time required to dodge tree branches or other small, hard to see objects. So what happens if a drone cannot see a kid? Furthermore, the article "Drones reshape US aviation policy" states that "In May, the FAA noted that a near collision between a drone and a commercial airliner in Florida could have had "catastrophic" results" (16). Drones would risk the safety of anyone flying in the air and could potentially lead to accidents resulting in many casualties.

Secondly, Drones bring up the question of privacy. This thought was also brought up by "Why Amazon Delivery Drones Won't Work". Obviously drones need a camera for the operator to be able to pilot it, so what is stopping the pilot from peeking into open windows? What makes this even worse is that there is really no way to prevent this. There is no way to just not have a camera on the drone so how is it prevented? The easiest way is not allowing the public to

High level language

Smooth transitions
and coherent
organization of both
paragraphs and
essay as a whole

Effective quoting and
paraphrasing from
multiple sources, *not
overly relying on one
source*

Extensive explanation

At Grade Level

In the United States, there are many views on the idea of using drones, and while all this confusion can lead to some misconceptions, there is still a lot left to question. While many are against the idea of small aerial vehicles roaming our skies, there are also many for it. Those who are for it have a much more valid standing on the matter considering all the good that can come from cheap and easy surveillance from the sky.

Drones have many uses in the world. The most major is providing an “eye in the sky”, which can allow an operator to see something incredibly large on a smaller scale, much like a map. They also have many fun and recreational uses such as racing and sightseeing. On top of this, as stated in the video against drones “Why Amazon Drones won’t work”, with Amazon’s new idea of drone delivery, people could have internet ordered packages on their doorsteps in under an hour, which, going against the video’s purpose, compliments how incredibly convenient this service is. However there are many misconceptions with drones are that they are easily hacked and could be used to invade someone’s privacy with ease (Why Amazon Drones won’t work, Drones reshape US aviation policy). First off, anything with a computing system could be hacked, and if it is for the purpose of harming the device, there should be a punishment by law similar to the one used for computer

Clear claim and formal tone

Relevant, sufficient evidence from sources

Counterclaims addressed logically

Organized adequately; not as advanced as the above grade level example

Approaching Grade Level

We should support the idea of drones for domestic use it very easy and well-rounded it can get some things done faster and saves a lot of money for example drones delivering items to people via amazon or another popular online shopping website. However there are problems with drones the one is drones can be hacked by people nearby them if they have the equipment. Or worse than that they can get stuck on numerous items such as trees. Well these are issues they still don't over weigh the positives, drones are able to be built at home however it is very expensive about 400 dollars and you can buy a brand new one for 1000-3000 depending on the materials. Drones can fly up to 400 ft. which is a benefit. The only other negative is that they could be used for crimes to steal or bring in things to restricted areas. But with some minor negatives there are more positives so that's why drones should be used for domestic use.

*Special Education student

Still makes a claim and addresses the task

Evidence is logical, but not attributed to sources

Organization is lacking; stream of consciousness rather than separate paragraphs

Some distracting grammatical errors

Questions?

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