Argumentation

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In everyday conversation, the word, *argument*, often refers to your opinion on a topic. However, when you debate, the word, *argument*, refers to a four-part structure, which consists of a **Claim, Warrant, Evidence,** and **Inference**. This four-part structure is more properly known[1] as a **Simple Argument** (SA), and when one offers several SAs in support of a resolution, one is creating a **Complex Argument** (CA), which is often called a **Case**. What follows is a description of the four parts of a Simple Argument.

A. The Simple Argument

1) The **Claim**, which is sometimes called the 'Point', is an assertion that the idea, which is put forward, supports the Resolution. To add clarity to your position, we recommend that you begin your claim with a restatement of the resolution, which is immediately followed by a reason for why one should support the resolution. To add further clarity to your position, we recommend that you restate the thesis and offer the claim in one sentence. Doing so forces the speaker to be very precise about the wording of the Claim, a practice that enhances clarity.

2) The **Warrant** is a brief explanation of why your chose the evidence. Doing so should include a description of the writer of the evidence and the source of the evidence. By doing this, you are also creating an introduction to your evidence.

3) The **Evidence** is information that clarifies the Claim, which is necessary because the listener needs some information that serves to validate the Claim. Most often, the best Evidence describes a real-life experience because it helps the listener to image how the Evidence supports the Claim. Real life experience is revealed in Evidence in the following four ways: Evidence by Example, Evidence by Expert Opinion, Evidence by Social Consensus and Evidence by Objective Data. For more on this, please see the post, *Types of Evidence.*

4) The **Inference** is an explanation of how the Evidence supports the Claim, which is necessary because this relationship is not always clear. To make it clear, we recommend that you refer to key phrases from the Evidence that support the Claim. We also recommend that you clarify the kind of reasoning that connects the evidence to the claim. For more on this, please see that post, *Types of Inferences.*

[1]If you take a course at university on *Argumentation and Rhetoric*, you would be introduced to Formal and Informal reasoning. **Formal reasoning**, which includes symbolic logic and syllogistic reasoning, rarely reflects the way most people think in daily life

when resolving a problem. However, **Informal reasoning**, which includes Simple and Complex Arguments, significantly reflects how most people make professional and personal decisions.

B. The Complex Argument

In a debate, each team needs to create at least three Simple Arguments, all of which, depending on your side, either support or deny the resolution. When you bring three or more Simple Arguments (SAs) to support the Resolution, you have a **Complex Argument**, which is also called a **Case**. Although this is the essential structure of all **Cases**, there are three variations of Complex arguments.

1) Coordinate: The most common form of a complex argument, which is the one used in a debate, is called coordinate because one SA by itself is not strong enough to support the thesis. However, if you offer several SAs, which is usually three or four, you are more likely to convince the listener of your position. For example, consider this Resolution: *Professional athletes are overpaid.* To support the resolution, consider the following claims: *1) Average families cannot afford tickets. 2) Most tickets are sold to successful corporations. 3) Athletes add relatively little value to society.* Although one of these claims alone could not convince the listener, all three SAs, when considered together, serve to present the resolution from different perspectives, which is more likely to convince the listener.

2) Conclusive: Unlike the coordinate structure, one SA in a conclusive complex argument is enough to support the resolution. The distinction lies in the nature of the resolution itself. Whereas the *coordinate* complex argument argues a resolution that is non-conclusive, which means that the resolution cannot be proven with absolute certainty, whereas the *conclusive* complex argument argues a resolution that can be proven with absolute certainty, which means that the topic is a measure of the physical world. For example, consider the following resolution: *Global warming harms natural habitats.* The following claims could be used to support the resolution: 1) *Global warming causes Greenland to melt*; 2) *the glaciers melting reduce necessary water sheds*; 3) *the rising waters levels destroy dry habitats*.   The evidence for each of these claims is indisputable, so only one SA, one could say, is necessary to support the resolution.

3) Chronological: A chronological complex argument means that one SA is true only when the previous SA is also true. It is like a series circuit of lights on a Christmas tree--if one light goes out, the rest of them also go out. Consider the following resolution: *The company is responsible for her death.* To support this resolution, consider the following claims: 1) *She fought the fire on the Pacific ridge for 12 hours straight.* 2) *The company*

never told her that the winds changed the direction of the fire. 3) *Without knowing, she walked out the same way that she arrived.* 4) *She became trapped and perished in the fire.* Therefore, the company is responsible for her death. Although this type of complex argument is uncommon in debating, it is frequently found in real life when one tries to determine who is responsible for an outcome.

C. Coordinate Complex Argument (Sample)

Because the coordinate complex argument is the most common Case in a debate, consider the following example, which consists of three simple arguments, which support the following resolution:

THBT: Digital devices should be banned in the classroom.

> **Claim 1:** The human mind cannot transition easily between two or more sources of information.
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> **Claim 2:** International test scores have been falling over the past decade
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> **Claim 3:** The format of information on the computer screen encourages the mind to not read line by line.
>
> **Claim 4:** Reading information online reduces the level of deep reading.
>
> **Claim 5:** An example of an Extension of the evidence in Simple Argument 4.

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In the SAs below, the **Claim** is highlighted in red, the **Warrant** is in purple, the **Evidence** is green and the **Inference** is in blue.

Simple Argument 1:

Cell phones should be banned in the classroom because the human mind cannot transition effectively from one task to another. It instead needs time to focus on the new task because such focus requires the recalling of information, both structures and content, from long term memory. In her book, *Distracted* (2008), Maggie Jackson observes that every time we shift attention, our brain must reorient itself, which further places demands on our mental resources.

> "The brain takes time to change goals, remember the rules needed for the new task, and block out cognitive interference from the previous, still vivid activity. Even

switching between two tasks can add substantially to our cognitive load, impeding our thinking and increasing the likelihood that we'll overlook or misinterpret important information." (79)

The author clearly observes that the brain cannot quickly shift from one task to another because understanding requires knowing "the rules needed for the new task." In other words, a person only understands what he is observing when he compares it to other information he knows already in his memory, which requires some time to recall so that it can serve to help the student to understand the current information of instruction. Moreover, the previous information, say from a cell phone, creates "cognitive interference" because it lingers in the mind of the student as he transitions to understand the information offered by the instructor. During this time of transition, especially if the student does so several times during a lesson, the student will probably miss or "misinterpret important information." For this reason, the cell phone should be banned from the classroom.

Simple Argument 2:
Digital devices should be banned in the classroom because international test scores of high school students have been falling over the past decade, which correlates with the time when school boards around the world began spending billions of dollars on ICT in schools. To make this correlation, let us turn to the assessment results of the Program for International Student Assessment (PISA), which is the foremost assessment of international student performance for science, mathematics and reading. The testing has been done every three years since the year 2000, and recently, in 2015, they published the results, based on the most recent three assessments, in the study, *Students, Computers and Learning,* the results of which are summarized below by the director, Andreas Schleicher.

"Students who use computers moderately at school tend to have somewhat better learning outcomes than students who use computers rarely. But students who use computers very frequently at school do a lot worse in most learning outcomes, even after accounting for social background and student demographics." (3)

The director of the study states clearly that the use of computers in education, when used "moderately," improves the "learning outcomes" of students. By "moderate," he means no more than 20 minutes of computer time a day. (88) However, when computers are used "very frequently," students perform poorly in "most learning outcomes." By "frequent," of course, he means more than 20

minutes a day, but in practice, many students use ICT for much longer, and the longer the usage--generally speaking--the lower the score. This is true even when they accounted for other factors, such as "social background," which includes wealth and cultural differences, and "student demographics," which includes gender and aptitude differences. Because of these observations, and because many students use cell phones very frequently during moments of instruction, cell phones should be not used the classroom.

Simple Argument 3:
Digital devices should be banned in the classroom because the format of information on the computer screen discourages the mind from reading line by line. In a 2006, Jacob Nielson conducted a study called, *F-shaped Pattern for Reading Web Content*, on how the eyes move while reading Web users. To complete the study, he asked 232 people to wear a small camera that tracked their eye movements as they read pages on a text and browsed other content. His findings are remarkable because they clearly show that most people, while reading a web page, follow the pattern of roughly the letter F, which is not conducive for developing sustained concentration.

"Nielson found that hardly any of the participants read an online text in a methodical, line-by-line way, as they'd typically read a page of text in a book. The vast majority skimmed the text quickly, their eyes skipping down the page in a pattern that resembled roughly the letter F. They'd start by glancing all the way across the first two or three lines of text. Then their eyes would drop down a bit, and they'd scan about halfway across a few more lines. Finally, they'd let their eyes cursorily drift a little further down the left side of the page. (134)

Nielson's research clearly shows that the reading patterns of students online "resembled roughly the letter F" in which the eyes read a few lines at the beginning of the article, then glance down at the length of the article and then read a few more lines in the middle of the article before moving onto the next article. This eye movement, which is practiced by the "vast majority" of people, clearly does not train the eye to read line by line, which is necessary for the development of good reading habits, for unless the muscles that control eye movement are 'exercised' to move on the horizontal line repeatedly, a student will find the practice of reading unappealing because the eyes will feel tired. Because the format of the content on a web page often contains many distractions, such as images, font variations, the layout of information, the web page does not train the eye to read on the horizontal line. Unless one reads on

the horizontal line, the ability of the mind to think deeply is compromised. For this reason, digital devices should not be allowed in the classroom.

Simple Argument 4:

Digital devices should be banned from the classroom because reading information online does not develop deep concentration. The idea of deep concentration means the ability to dwell on a text, whether a novel of an article, for an extended length of time, so the mind of the reader can reconstruct the thoughts of the writer and understand the subtle ideas that are put forward. However, research has shown that the average reader spends very little time reading an online page before moving onto another. The research, which was conducted in 2008 by an Israeli company called Click Tale, analyzed the viewing habits of a million people using corporate Web pages, and it found the following remarkable information, which is clearly not conducive for the development of sustained concentration.

In most countries people spend, on average, between 19 to 27 seconds looking at a page before moving on to the next one, including the time required for the page to load into their browser's window. German and Canadian surfers spend about 20 seconds on each page, U.S. and U.K. surfers spend about 21 seconds, Indian and Australian spend about 24 seconds and the French about 25 seconds. (136)

This research, which is based on a very large sample size of "a million visitors," clearly shows that essentially all people, regardless of one's culture, skim online texts and never settle into reading an article online for an extended period. Even if one considers the longest readers, the French, who read a text for "25 seconds" on average before "moving onto the next one," it is hardly enough time to develop a deep level of concentration, and even if one considers the 2 second discrepancy between 25 and 27 seconds, where "27 seconds" represents those readers, one may assume, who are outliers in their behaviour, it is too small of a discrepancy to conclude that a small percentage of the population successfully reads articles online for an extended period. In my view, this research strongly indicates that online reading discourages extended concentration, which is essential for the development of good reading habits. Therefore, digital devices should be banned from the classroom.

Simple Argument 5:

What follows is an example of an **Extension** for Simple Argument 4, which means that the speaker uses different Evidence to *support* and *strengthen* a previous Claim.

Digital devices should be banned from the classroom because reading information online does not develop deep concentration. If you recall, my partner referred to a study that showed how most people view a Web Page for no more than 27 seconds before moving onto another, which is not a practice that promotes the development of deep concentration. Another group of researchers corroborated this claim with a different study, in which 25 people, randomly chosen, were monitored for about a hundred days each. The researchers tracked the time spent per page when the participants viewed about 50,000 Web pages collectively. They were particularly interested to learn whether the participants on average spent more time viewing longer articles. As one might expect, the participants indeed spent more time viewing longer articles, but the increase was insignificant, which is implied in the following evidence.

Nielson found that as the number of words on a page increases, the time a visitor spends looking at the page goes up, but only slightly. For every hundred additional   words, the average viewer will spend just 4.4 more seconds perusing the page. Since   even the most accomplished reader can read only about 18 words in 4.4 seconds,   Nielson   told his clients that "when you add verbiage to a page, you can assume that   customers will read 18% of it." And that, he cautioned, is almost certainly an   overstatement.   It's unlikely that the people in the study were spending all their time   reading: they   were also probably glancing at pictures, videos, advertisements, and other   types   of   content. (135)

The conclusions of this study clearly show that reading online is not the same as reading offline because reading online appears to compromise the ability of the reader to demonstrate sustained concentration. As Nielson clearly states, when the length of reading material increases, the amount of reading time does not increase proportionally. Instead, on average, the online reader only reads about 18% of "every hundred additional words." Why does this occur? Presumably, it is because a Web Page often includes other content, such as "pictures, videos, advertisements," which distract the mind from fully concentrating on the text. This distraction is understandable because the mind is constructed to respond favorably to the undiscovered experience. Certainly, reading a novel offers new experiences as the plot unfolds, but it takes more effort to read than it does to simply click on 'distractions' on the Web page. Because these 'distractions' do not exist when reading a offline, reading offline

promotes sustained concentration whereas reading online, such as using a mobile, promotes a lack of sustained concentration. For this reason, cell phones should not be allowed in the classroom.