



Technical Report Writing

Paragraph Writing



Why Paragraph?

The Race to Develop the Moon

By
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In January, the China National Space Administration landed a spacecraft on the far side of the moon, the side we can't see from Earth. Chang'e-4 was named for a goddess in Chinese mythology, who lives on the moon for reasons connected to her husband's problematic immortality drink. The story has many versions. In one, Chang'e has been banished to the moon for elixir theft and turned into an ugly toad. In another, she has saved humanity from a tyrannical emperor by stealing the drink. In many versions, she is a luminous beauty and has as a companion a pure-white rabbit.

Chang'e-4 is the first vehicle to alight on the far side of the moon. From that side, the moon blocks radio communication with Earth, which makes landing difficult, and the surface there is craggy and rough, with a mountain taller than anything on Earth. Older geologies are exposed, from which billions of years of history can be deduced. Chang'e-4 landed in a nearly four-mile-deep hole that was formed when an ancient meteor crashed into the moon—one of the largest known impact craters in our solar system.

You may have watched the near-operatic progress of Chang'e-4's graceful landing. Or the uncannily-cute robotic amblings of the lander's companion, the Yutu-2 rover, named for the moon goddess's white rabbit. You may have read that, aboard the lander, seeds germinated [cotton, rapeseed, and potato; the Chinese are also trying to grow a flowering plant known as mouse-ear cress], and that the rover survived the fourteen-day lunar night, when temperatures drop to negative two hundred and seventy degrees Fahrenheit. Chang'e-4 is a step in China's long-term plan to build a base on the moon, a goal toward which the country has rapidly been advancing since it first orbited the moon, in 2007.

If you missed the Chinese mission, maybe it's because you were lured on the remarkably inexpensive spacecraft from SpaceX, an Israeli nonprofit organization, which crash-landed into the moon on April 11th, soon after taking a selfie while hovering above the lunar surface. The crash was not the original plan, and SpaceX has already announced its intention of going to the moon again. But maybe you weren't paying attention to SpaceX, either, because you were anticipating India's Chandrayaan-2 moon lander, expected to take off later this year. Or you were waiting for Japan's first lunar-lander-and-rover mission, scheduled to take place next year. Perhaps you've been distracted by the announcement, in January, on the night of the super blood wolf moon, that the European Space Agency plans to mine lunar ice by 2025. Or by Vice-President Mike Pence's statement, in March, that the United States intends "to return American astronauts to the moon within the next five years."

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A Paragraph....

- Roughly consists of about 150 words
- It consists of an opening point called a **topic sentence**
- The topic sentence is followed by a series of specific sentences called **supporting sentences** that support the topic sentence
- These series of specific sentences give reasons/evidence to support your topic sentence of the paragraph
- It ends with a **closing sentence**

Structure of a Paragraph

- Topic Sentence
- Reason/Supporting Sentence 1
 - Details that develop reason 1
- Reason/ Supporting Sentence 2
 - Details that develop reason 2
- Reason/ Supporting Sentence 3
 - Details that develop reason 3
- Concluding Sentence

The Topic Sentence

The First Step to Effective Paragraph Writing

Topic Sentence

- The POINT of your paragraph should be clear and precise
- The point of your paragraph should be written in a **single sentence**
- The topic sentence has two parts:
 - It has a **topic** (the **subject** of the paragraph/sentence)
 - What the writer **thinks about the topic/subject**

The Start of a Paragraph

The Lead and the Ending



The most important sentence in any article is the first one. If it doesn't induce the reader to proceed to the second sentence, your article is dead. And if the second sentence doesn't induce him to continue to the third sentence, it's equally dead. Of such a progression of sentences, each tugging the reader forward until he is hooked, a writer constructs that fateful unit, the "lead."

What is the Topic
Sentence?

What Do We Mean By Big Data?

“Big data” refers to datasets whose size is beyond the ability of typical database software tools to capture, store, manage, and analyze. This definition is intentionally subjective and incorporates a moving definition of how big a dataset needs to be in order to be considered big data—i.e., we don’t define big data in terms of being larger than a certain number of terabytes (thousands of gigabytes). We assume that, as technology advances over time, the size of datasets that qualify as big data will also increase. Also note that the definition can vary by sector, depending on what kinds of software tools are commonly available and what sizes of datasets are common in a particular industry. With those caveats, big data in many sectors today will range from a few dozen terabytes to multiple petabytes (thousands of terabytes).

Technical Writers

There are professional technical writers who do nothing but write. Some of them work within industry to develop users manuals, scripts for training films, or marketing material for industrial equipment. Others work as freelancers on individual projects within their areas of technical expertise. There are also professionals such as engineers, scientists, and technicians who do various types of technical writing as a necessary part of their everyday work. They write memoranda to inform their supervisors of progress, journal articles to contribute to the collective knowledge of their disciplines, and grant proposals for government support. Most technical writing is done by these technical professionals. Students make up another large group whose success depends on clear, concise, accurate writing.

WHAT NOT TO DO WHEN
WRITING PARAGRAPHS!

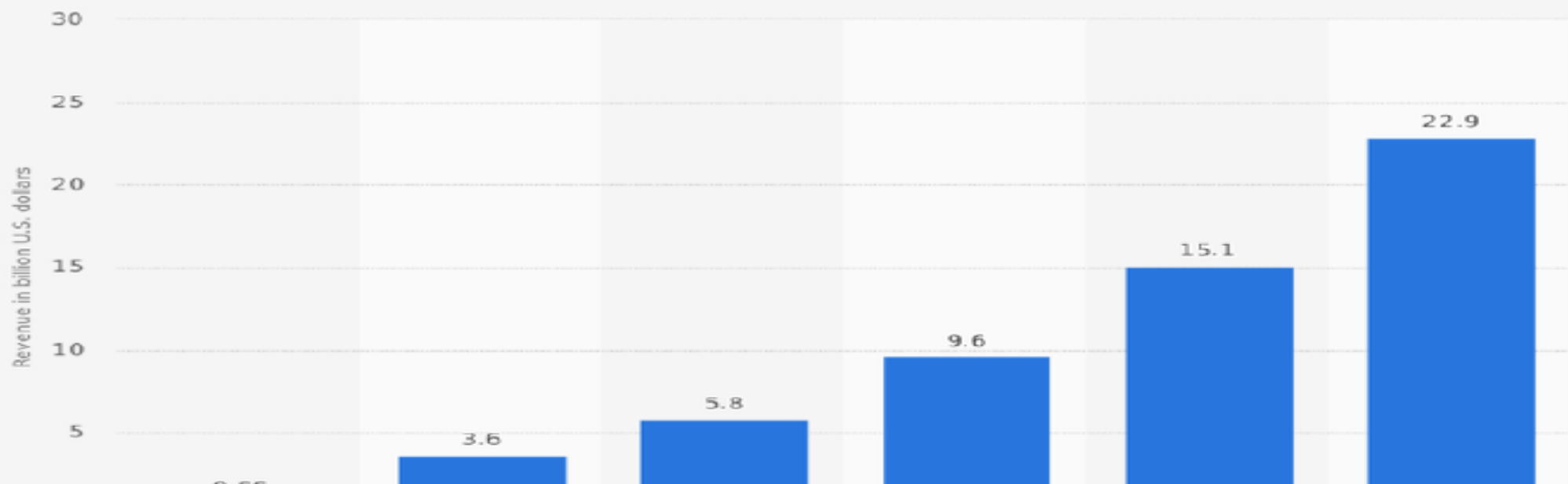
CHAPTER 2: DISCUSSION

2.1 APPLICATIONS OF VR

2.1.1 VR IN ENTERTAINMENT

It is definitely going to be the one of the next big hits in the upcoming years. Virtual Reality has led many businesses to engage teenagers with technology. The VR industry is growing at a really rapid pace. More entertainment like Virtual Reality Theme Park Rides and Virtual Reality Movie Theaters will be in demand soon.

Virtual reality (VR) video gaming sales revenue worldwide from 2015 to 2020 (in billion U.S. dollars)



Transcription:

ⓧ "Look, having nuclear—my uncle was a great professor and scientist and engineer, Dr. John Trump at MIT; good genes, very good genes, OK, very smart, the Wharton School of Finance, very good, very smart—you know, if you're a conservative Republican, if I were a liberal, if, like, OK, if I ran as a liberal Democrat, they would say I'm one of the smartest people anywhere in the world—it's true!—but when you're a conservative Republican they try—oh, do they do a number—that's why I always start off: Went to Wharton, was a good student, went there, went there, did this, built a fortune—you know I have to give my like credentials all the time, because we're a little disadvantaged—but you look at the nuclear deal, the thing that really bothers me—it would have been so easy, and it's not as important as these lives are (nuclear is powerful; my uncle explained that to me many, many years ago, the power and that was 35 years ago; he would explain the power of what's going to happen and he was right—who would have thought?), but when you look at what's going on with the four prisoners—now it used to be three, now it's four—but when it was three and even now, I would have said it's all in the messenger; fellas, and it is fellas because, you know, they don't, they haven't figured that the women are smarter right now than the men, so, you know, it's gonna take them about another 150 years—but the Persians are great negotiators, the Iranians are great negotiators, so, and they, they just killed, they just killed us."

Facial recognition is extremely safe, as it cannot be hacked, there is nothing to steal or change. Its accuracy depends on the data stored in the database; with large amounts of data the accuracy rate is almost perfect. Recognizing is processed really quickly; therefore verification is quick and efficient making it easier to identify thieves, trespassers and criminals. Facial Recognition is only going to improve over the years.

Facial Recognition must protect people's rights, safety and privacy.

Identity Theft is a major issue that causes people to question the use of facial recognition. If a person is held captive all their sensitive information can immediately be unlocked just by holding their smartphone in front of them. Privacy issues arise due to people wondering where their facial data is stored and who has access to it.

Chapter 2: The future of data-5G

How is 5G better in usability:

Wireless networking developments have resulted in exponential growth of mobile devices, i.e. smartphones. The introduction of 4 G and LTE (Long Term Evolution) networks, from video streaming to live gaming, has provided us with more rich content.

While the 5 G network may still be under construction, there is no question that the analysts and studies will provide exciting information. A competition is already taking place to see who will first launch the new wireless technology. There are always advantages and disadvantages to discuss with each new generation of data network.

The issue is how the network plans to capitalize on its advantages while protecting its customers from its shortcomings that eventually will decide its performance. Such information is important because consumers want to know what impact a 5 G network will have on their smart device use.

TOPIC OF PARAGRAPH/ESSAY: MY LIFE AT BITS PILANI DUBAI CAMPUS

ANNOUNCEMENT



This essay is about the life of a BITS Pilani Dubai Campus Student.

Is This a Good
Topic
Sentence?

TOO BROAD



Student life in college is a mixed bag of fun and hard work.

TOPIC SENTENCE



My life at BITS Pilani Dubai Campus is everything I wished for.

TOO NARROW



I am a Fourth Year Student of Computer Engineering who lives in Abu Dhabi.

So, What Do You Think Are the Key Attributes of Good Topic Sentences?

- They are clear
- **They make a point**
- They are a single, crisp, sentence
- They are general in that they do not have specifics elaborated in the sentence itself
- A topic sentence is NOT the title of your essay/report

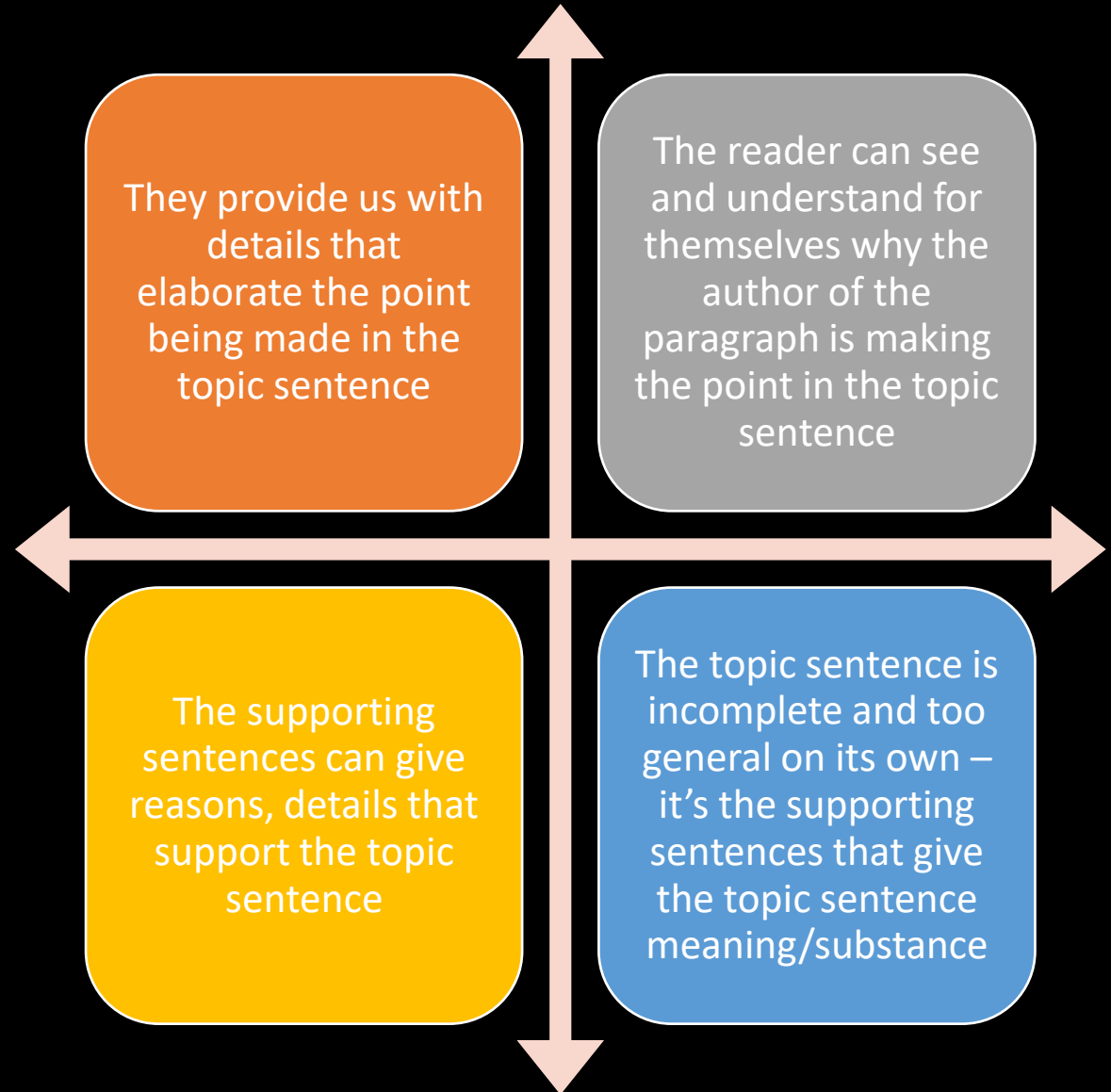


Supporting Sentences

The Second Step to Effective
Paragraph Writing



What Supporting Sentences Do



Supporting
Sentences
Provide....

Definitions

Facts and statistics

Examples and illustrations

Describe a process

Comparisons and contrasts

Cause and effect

Classification and analysis

Analogy

Technical Writing

Technical writing is writing done in the workplace, although the workplace may be an office, a construction site, or a kitchen table. The subject is usually technical, written carefully for a specific audience. The organization is predictable and apparent, the style is concise, and the tone is objective and businesslike. Special features may include visual elements to enhance the message.

WHAT ARE THE SUPPORTING SENTENCES DOING IN THIS PARAGRAPH?

Written Communication

Written communication is essential in the workplace for many reasons. Regardless of the career you choose, you will write in the workplace. Technical writers who help companies manage the information overload are vital resources. Different careers generate different kinds of reports: Nurses chart a patient's medical condition so that the next shift's nurses can continue patient care.

WHAT ARE THE SUPPORTING SENTENCES DOING IN THIS PARAGRAPH?

Which Paragraph Has Better Supporting Sentences

The key to success in college is organization.

A

Knowing what you're doing, when you have to do it, and so on, is a big help for a student. A system is crucial in achieving an ordered approach to study. Otherwise, things become very disorganized and it is not long before grades will begin to drop.

B

Marking dates on calendars is a mark of organised students. They are unlikely to forget exam dates if they do this. Secondly, organised students study regularly and so do not have to cram for their exams.

The background of the slide is a close-up, high-contrast photograph of dark blue or black interlocking puzzle pieces. The lighting creates deep shadows in the grooves between the pieces, emphasizing their three-dimensional texture and the geometric patterns they form.

Order of the Supporting Sentences



Order of Time

First action: Took a ferry to the island

Second action: Drove the car from the ferry to the centre of the town on the island

Third action: Got a room at a hotel in the town

Had dinner at a nice restaurant

Went to a music concert

Walked along the beach after the concert

Went to bed at midnight

Had breakfast in the hotel

Visited a garden

Drove to the ferry

Final action: Took the ferry home from the island

Order of Emphasis

Why Students Drop Out of College

Students drop out of college for varying reasons. First, some students' parents might not have enough money to send their children to school. Second, many students also feel that school is too boring. Third, in some cases, students find that they cannot concentrate for long hours. Therefore, dropping out for so many students seems to be the only solution they can imagine.

Order of Transition



Transitions help you establish logical connections between sentences, paragraphs, and sections of your papers.



In other words, transitions tell readers what to do with the information you present to them.

Example of Order of Transition

Spot Cleaning

When you select Spot Cleaning, Roomba intensely cleans a localized area by spiraling outward about 3 feet (1 meter) in diameter and then spiraling inward to where it started. When Spot Cleaning, Roomba boosts its vacuum power to provide the best cleaning possible where you need it. To use Spot Cleaning, place Roomba on top of the localized debris and press (Spot) on the robot.

LOGICAL RELATIONSHIP	TRANSITIONAL EXPRESSION
Similarity	also, in the same way, just as ... so too, likewise, similarly
Exception/Contrast	but, however, in spite of, on the one hand ... on the other hand, nevertheless, nonetheless, notwithstanding, in contrast, on the contrary, still, yet
Sequence/Order	first, second, third, ... next, then, finally
Time	after, afterward, at last, before, currently, during, earlier, immediately, later, meanwhile, now, recently, simultaneously, subsequently, then
Example	for example, for instance, namely, specifically, to illustrate
Emphasis	even, indeed, in fact, of course, truly
Place/Position	above, adjacent, below, beyond, here, in front, in back, nearby, there
Cause and Effect	accordingly, consequently, hence, so, therefore, thus
Additional Support or Evidence	additionally, again, also, and, as well, besides, equally important, further, furthermore, in addition, moreover, then
Conclusion/Summary	finally, in a word, in brief, briefly, in conclusion, in the end, in the final analysis, on the whole, thus, to conclude, to summarize, in sum, to sum up, in summary

Some Markers of Supporting Sentences...

Supporting sentences provide specific details and help develop the paragraph through definitions, reasons, particular facts etc

Supporting sentences may help to identify three reasons/definitions/facts that elaborate the topic sentence

Supporting sentences may help to identify a hierarchy of importance within those three reasons

It may help to write *firstly*, *secondly* and *thirdly*...along with your supporting sentences in your paragraph

Avoid repetitive supporting sentences

Concluding Sentence

Have a clear
closing sentence
that summarises
the paragraph

The Ending is as
Important as the
Beginning

Concluding sentences may use words such as therefore,
as a result, consequently...

Why Students Drop Out of College

Students drop out of college for varying reasons. First, some students' parents might not have enough money to send their children to school. Second, many students also feel that school is too boring. Third, in some cases, students find that they cannot concentrate for long hours. **Therefore, dropping out for so many students seems to be the only solution they can imagine.**

Paragraph Checks

Unity

- All the supporting sentences and the concluding sentence MUST be details that refer to the topic sentence of the paragraph – your first sentence of the paragraph
- If a sentence does not in anyway relate to the topic sentence, THROW IT OUT!

- The supporting sentences MUST provide adequate, specific details that refer/elaborate/support the topic sentence of the paragraph
- The supporting sentences MUST give enough evidence/details to support your topic sentence

Support

Coherence

- The supporting sentences must have a method/order of organization – time, emphasis or transition
- The supporting sentences must flow from each other and stick as a whole!

A Preliminary Writing Exercise

Topic Sentences

Write a Paragraph Using One of the Following Topic Sentences

- People can be classified by how they treat their cars.
- If I had to choose, my all time favourite movie/music/book is....
- Living with younger siblings has many benefits.
- Living in the UAE is the best thing to happen to me.
- A four-day work week would be better than a five-day work week.
- The pandemic has been a great teacher to me.
- My life at BITS Pilani Dubai Campus couldn't be better. 😊

THANKS!