

PARAGRAPH DEVELOPMENT

INTRODUCTION

- Developing well-structured paragraphs is essential for effective technical communication.
- Paragraphs tell the readers where the topics begin and end, thus helping them assimilate the contents in an organized manner.
- Technical documents such as reports, proposals, and letters contain several units of information.
- Well-structured and adequately developed paragraphs enable the readers to demarcate each unit of information and grasp them without much difficulty
- There is no fixed rule about the length of a paragraph.
- *A paragraph is a group of sentences or a single sentence that forms a unit. In other words, it is a group of related sentences which express a single idea.*
- A paragraph may be an opinion, provide information through the use of facts and details, tell a story or simply describe a person, a place, an object, or a feeling.

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- Before you begin to determine the composition of your paragraphs, you must first understand what the *controlling idea* is in your specific piece of writing.
- What is the main point that you are trying to convey to your reader?
- The information that comprises your paragraphs should be built around this controlling idea.
- In other words, your paragraphs should remind your reader, at every possible point, that there is a recurrent relationship between your controlling idea and the information in each paragraph.
- The controlling idea functions like a seed through which your paper, and your ideas, will grow.

INTRODUCTION

- The whole process is an organic one—a natural progression from the seed of an idea to a full-blown paper where there are direct, familiar relationships between all of the ideas in your paper.
- Once you have decided what your controlling idea will be, then you should choose information that will help to support and perpetuate that idea throughout the entire paper.
- That information takes the form of sentences that comprise each paragraph of your paper.
- The decision about what to put into your paragraphs begins with the germination of an idea or thought.
- This ‘germination process’ is better known as *brainstorming*.

INTRODUCTION

- Generating Ideas
 - A good way of starting the process of generating ideas is to write a mission statement describing your subject, audience, purpose, and format. You should be able to answer the following questions:
 - Who is my target audience?
 - What do I want to say?
 - Why am I writing it?

INTRODUCTION

- Whatever the topic of your paper may be, it is always a good idea to think about all of the issues that surround your topic and the ultimate goals that you want to express. This process can take on many forms.
- What form you choose will depend heavily on your style or approach in the pre-writing stage of the whole process.
- Some writers prefer to write down all the relevant issues in a series of phrases or words that express some greater idea.
- For others, this process involves a collection of information in the form of sentences.
- Choose whichever method suits you, but remember that prewriting is an essential requirement for paragraph development.
- Building paragraphs can be just as involved as building a major skyscraper:, there must be a solid, well-built foundation that supports each paragraph.
- Any cracks, inconsistencies, or other corruptions of the foundation can cause the whole paper to crumble.

INTRODUCTION

- Thinking on Paper
 - Do not do all your planning in your head as you could end up losing valuable ideas. There are many ways in which you can ‘think on paper’.
 - Lists: This is a simple method of just jotting down ideas as they occur, especially in the initial stages.
 - Columns: This system is useful for some topics. If there is an argument, for example, you can collect information ‘for and against’ or you may enter ideas under a small number of categories.
 - Web diagram or mind map: This is a very productive form of planning. Write your main idea in the centre of the page, then link it to other ideas as they come to you.
 - Flowchart: By graphically depicting the steps in a procedure, you can ensure that a chronological organization is maintained and that no steps are omitted.

CENTRAL COMPONENTS OF A PARAGRAPH

● Topic Sentence

- A topic sentence is a sentence that expresses the main idea of a paragraph.
- This sentence is also known as key sentence or theme sentence.
- All the other sentences in the paragraph must explain or illustrate the topic sentence.
- It tells the reader what to expect about the information that will follow.
- If the remainder of the paragraph does not fulfill the ‘promise’ of the topic sentence, the paragraph will lack units coherence, and adequate development.
- Topic sentences can appear at several points in a paragraph, either at the beginning, middle, or end.

CENTRAL COMPONENTS OF A PARAGRAPH

● Examples of Topic Sentences

- *Many television cartoons contain an unhealthy amount of violence.*
 - Notice that this sentence clearly identifies that the key topic of the paragraph is violence in television cartoons. It also indicates that the remainder of the paragraph will discuss how much violence cartoons typically contain, and how/why this violence is unhealthy for viewers.
- *The cockroaches that inhabit many city apartments and homes are parasites that are almost impossible to exterminate completely.*
 - This topic sentence clearly identifies that the key topic of the paragraph is cockroaches. It also indicates what the remainder of the paragraph will discuss the difficulty of exterminating cockroaches. The reader can then expect the rest of the paragraph to explain how and why cockroaches are difficult to eliminate.

CENTRAL COMPONENTS OF A PARAGRAPH

● Topic Sentence

- Beginning a paragraph with a topic sentence is one of the best ways to achieve clarity and unity in one's writing.
- It is not only the most common paragraph arrangement but also fits most units of technical information.
- In fact, this arrangement is so appropriate for structuring technical information that most writers feel it can be used for virtually all paragraphs in a technical document.

CENTRAL COMPONENTS OF A PARAGRAPH

● Topic Sentence

- Ending the paragraph with the topic sentence is the second most common paragraph arrangement.
- Paragraphs, which follow this arrangement, present the supporting details first and from them logically proceed to the conclusion which is stated in the topic sentence.
- Such paragraphs often begin with what may appear as the topic sentence; but the final sentence contains the essential idea.
- Burying the topic sentence within the paragraph is the third arrangement, it is rarely used because it does not emphasize the topic sentence.
- Nevertheless, you can sometimes use this arrangement for special effect.

CENTRAL COMPONENTS OF A PARAGRAPH

● Coherence

- Most convincing ideas in the world, expressed in the most beautiful sentences, will move no one unless those ideas are properly connected.
- Unless readers can move easily from one thought to another, they will surely find something else to read or turn on the television.
- Coherence refers to the clear and logical linking of ideas in a paragraph.
- When you change the main ideas or topics within a paragraph, confusion often results.
- But even when all the sentences in your paragraph are related to and contribute some meaning to the topic sentence, the paragraph will turn out to be ineffective if those sentences are not appropriately and adequately cohered.
- In other words, each sentence should be well linked with the sentence that precedes and follows it.

CENTRAL COMPONENTS OF A PARAGRAPH

● Coherence

- There are four basic mechanical considerations in providing transitions between ideas:
 - Use of pronouns
 - Repetition of key words or phrases
 - Use of transitional tags
 - Use of parallel grammatical structure

CENTRAL COMPONENTS OF A PARAGRAPH

● Pronoun Reference

- Pronouns quite naturally connect ideas because pronouns almost always refer the reader to something earlier in the text.
- You cannot say ‘This is true because without causing the reader to consider what ‘this’ could mean.
- Thus, the pronoun causes the reader to sum up, quickly and subconsciously, what was said before (what this is) before going on to the because part of your reasoning.
- Needless to say, it must always be perfectly clear what a pronoun refers to.
- If the reader cannot instantly know what this is, then your sentence is ambiguous and misleading.
- Also, do not rely on unclear pronoun references to avoid responsibility: ‘They say that ...

CENTRAL COMPONENTS OF A PARAGRAPH

- Repetition of Key Words and Phrases
 - Writers often resist connecting ideas by repeating key words and phrases so as not to sound repetitive.
 - We have been trained to avoid redundancy.
 - Now we must learn that catching a word or phrase that is important to a reader's comprehension of a piece and replaying that word or phrase creates a musical motif in the reader's head.
 - Unless it is overworked and obtrusive, repetition lends itself to a sense of coherence (or at least to the illusion of coherence).

CENTRAL COMPONENTS OF A PARAGRAPH

● Repetition of Key Words and Phrases

- Remember Abraham Lincoln's advice:
- *You can fool some of the people all of the time, and all of the people some of the time, but you cannot fool all of the people all of the time.*
- In fact, you cannot forget Lincoln's advice because it has become part of the music of our language, with its effective use of the repetition device of key words like fool, some, all, and time.
- The bottom line is that appropriate use of this device in your writing leads to better comprehension and retention of the meaning.

CENTRAL COMPONENTS OF A PARAGRAPH

Original	Revised
<p>This broadcast <i>packet switching</i> should be distinguished from the store-and-forward variety. To handle the demands of growth, our system can be extended using repeaters for <i>signal regeneration</i>, filters for traffic localization, or gateways for internet work address extension. (Lack of repetition.)</p>	<p>This broadcast <i>packet switching</i> should be distinguished from the store-and-forward variety. To handle the demands of growth, our system can be extended using <i>packet</i> repeaters for signal regeneration, <i>packet</i> filters for traffic localization, or <i>packet</i> gateways for internet work address extension. (The main point, <i>packets</i>, is now highlighted.)</p>
<p>It is common knowledge that organic molecules are the basis of life. When the earth was in its infancy, it had only inorganic molecules. As it cooled down, the latter combined to form the former, making life on earth possible. Therefore, any place in the universe that harbours organic ones can be a possible source of life. (Lack of repetition.)</p>	<p>It is common knowledge that <i>organic molecules</i> are the basis of <i>life</i>. When the <i>earth</i> was in its infancy, it had only <i>inorganic molecules</i>. As it cooled down, the <i>inorganic molecules</i> combined to form <i>organic molecules</i>, making <i>life on earth</i> possible. Therefore, any place in the universe that harbours <i>organic molecules</i> can be a possible source of <i>life</i>.</p>
<p>The length of the transistor that can function as a long channel device is strongly related to its <i>junction depth</i>. The <i>junction depth</i>, of the drain implant, can be reduced by <i>lowering the implant energy</i>. But <i>lowering the implant energy</i> increases the channelling probability for drain implant. (Monotonous repetition.)</p>	<p>The length of the transistor that can function as a long channel device is strongly related to its junction depth. Lowering the implant energy (and thereby increasing the channelling probability for drain implant) reduces the junction depth of the drain implant.</p>
<p>The <i>technical description</i> of a process describes how something works. The <i>description</i> begins with general information about the overall function of the process. The <i>technical description</i> then proceeds to the specific materials or skills required. (Monotonous repetition.)</p>	<p>The <i>technical description</i> of a process describes how something works, beginning with the general information about the overall function of the process, and proceeds to the specific materials or skills required.</p>

CENTRAL COMPONENTS OF A PARAGRAPH

- Using Transitional Tags
 - Providing transitions between ideas is largely a matter of attitude.
 - You must never assume that your readers know what you know.
 - In fact, it is a good idea to assume not only that your readers need all the information that you have and need to know how you arrived at the point you are at, but also that they are not quite as quick as you are.
 - You might be able to leap from one side of the stream to the other; however, do consider that your readers might need a few stepping stones, and be sure to place them in readily accessible and visible spots.

CENTRAL COMPONENTS OF A PARAGRAPH

● Using Transitional Tags

- Transitional tags run the gamut from the most simple—the little conjunctions: and, but, nor, for, yet, or, (and sometimes) so—to more complex signals, including the conjunctive adverbs and transitional expressions such as however, moreover, nevertheless, and on the other hand.
- The use of the little conjunctions—especially and but—comes naturally for most writers.
- However, the question whether one can begin a sentence with a small conjunction often arises.
- Is not the conjunction at the beginning of the sentence a sign that the sentence should have been connected to the prior sentence?
- Well, sometimes, yes. But often the initial conjunction calls attention to the sentence in an effective way, and that is just what you want.

CENTRAL COMPONENTS OF A PARAGRAPH

● Using Transitional Tags

- Look at the following sentences:
 - *Thus a new form of energy has to be developed in a big way. And nuclear energy could very well be the solution.*
 - *First, they assumed that water could be supplied by a centralized system. But, the cost was too high.*
- Beginning a sentence with a conjunction too often can be distracting, so do this only occasionally to add a refreshing dash to a sentence and speed the narrative flow of your text.
- Of all the cohesive devices we have discussed so far, transitional tags play a major role in providing a smooth flow to your paragraphs.
- Transitions come in the form of single words, phrases, sentences, and even whole paragraphs.
- They help to establish relationships between ideas in a paragraph and to create a logical progression of those ideas in a paragraph.
- Without transitions, your paragraph will not be unified, coherent, or well developed.

Using Transitional Tags

- Look at the following paragraph and the transitions that it uses from idea to idea (in italics):
- Juggling the demands of a job with the demands of being a full-time student makes good academic performance difficult. Many students are forced to choose between good work on the job and good work in the classroom. *Often*, good work in the classroom is compromised for good work on the job because the job pays the rent. *In addition*, those students who do manage to perform well in both areas usually do so at the expense of their health. *For example*, several students complain of the inability to handle the stress of both a job and school. *In fact*, the stress of both can often cause headaches, dizziness, fatigue, and other ailments, which slow the body down and prevent adequate performance in either area. *To eliminate the threat of being in the middle between job and school*, students have to form a balance between the demands of work and the demands of the classroom. *Ultimately*, managing your time more effectively, working the same number of hours in smaller chunks, and planning ahead can all help in alleviating some of the stress to the body and to the mind.

Using Transitional Tags

A list of transitional words/phrases indicating the purpose for which they are used is given below:

Intention

1. Addition
2. Time
3. Place
4. Examples
5. Similarity
6. Contrast

Transitional Words/Phrases

and, or, nor, moreover, again, first, secondly, thirdly, next, last, lastly, finally, even more important, furthermore, also, in addition, further, besides
while, after, when, meanwhile, during, next, then, in the past, immediately, later, soon, in the meantime, afterwards, following, at length, after a few days, never, always, whenever, sometimes, now, once, simultaneously
here, there, nearby, beyond, wherever, opposite to, adjacent to, neighbouring on, bordering
for example, as an illustration, to demonstrate, specifically, for instance, to illustrate, again, such as
in the same way, by the same token, similarly, in like manner, likewise, in similar fashion
on the contrary, in contrast, nevertheless, but, at the same time, although that may be true, nonetheless, on the other hand, yet, and yet, notwithstanding, otherwise, however, after all, though, despite this fact

Using Transitional Tags

7. Clarification

that is to say, in other words, to put it another way, to explain, to clarify, to rephrase it, i.e. (means 'in other words'), still, conversely, instead, even so, for all that, namely

8. Cause

because, on account of, for that reason, due to the fact that

9. Effect

therefore, consequently, as a result

10. Purpose

thus, hence, accordingly, in order to, for this purpose

11. Qualification

so that, to that end

12. Intensification

indeed, to repeat, by all means, undoubtedly, to be sure

13. Summary

to summarize, in sum, in short, to sum up, in brief, in summary

14. Conclusion

to conclude, in conclusion, finally, therefore, thus, it is now obvious that, with this object, with that in mind, thereupon, then, so, on the whole, as I have said

15. Concession

admittedly, granted, it is true, to be sure, almost, nearly, probably, perhaps, maybe, although, in fact, without doubt, doubtlessly, obviously, unquestionably, inescapably, certainly, surely, of course, nobody denies, clearly, even though, in a manner of speaking, to be more precise, of course, needless to say

Using Transitional Tags

16. Spatial order above, below, in the distance, nearby, beyond, opposite to/adjacent to, in front/in back, to the right/to the left
17. Numerical order first, second, third, etc.; in the first place, secondly, thirdly, etc.; to begin with; next; finally
18. Emphasis again, for this reason, indeed, most compelling evidence, on the negative side, significant that, to emphasize, truly, another key point, frequently, in fact, most important information, on the positive side, surprising, to point out, with this in mind, first thing to remember, important to realize, key point, must be remembered, point often overlooked, surprisingly enough, to repeat

Using Transitional Tags

Original

1. The advent of internal combustion engine and electric motor ended the use of pedal power in small-scale industries and in agricultural processing. India has abundant human power. Over 40 million bicycles are used for transportation. The pedal power potential has not been fully realised in small-scale agricultural activities. (No transitions.)

2. Stress can have many side effects. A supervisor feeling pressure to complete a difficult project may become irritable, develop ulcer, or succumb to illness such as cold, flu, or more serious diseases. A student preparing for exams just the day before may feel nervous, frustrated and may *even* develop exam fever. (Inadequate use of transitional tags.)

3. I follow the same steps when I write. *First*, I research my topic. *Then*, I write an outline. *After that* I start writing. The *final* and most important step is editing and proofreading. *This last step, although* it takes less time than the others, is *the one* I dread *most of all*. (Too many tags.)

4. It is amazing how quickly the students begin to understand the concept of a paragraph. *On the positive side*, this can also be used for creative writing. *First*, the concept will be introduced in a novel study format. *Then* the students may be encouraged to write a rough draft of a story. From their rough draft they follow the instructions for the typical plot line. *As soon as this* is over, they begin to develop their points more fully. *Not only* will the students' writing improve dramatically, they will *also* have been introduced to the elements of a story. (Too many tags.)

Revised

The advent of internal combustion engine and electric motor ended the use of pedal power in small-scale industries and in agricultural processing. *Even though* India has abundant human power *and* over 40 million bicycles are used for transportation, the pedal power potential has not been fully realised in small-scale agricultural activities.

Stress can have many side effects. *For instance*, a supervisor feeling pressure to complete a difficult project may become irritable, develop ulcer, or possibly even succumb to illness such as cold, flu, or more serious diseases. *Similarly*, a student preparing for exams just the day before may feel nervous and frustrated, and may *even* develop exam fever.

I follow the same steps when I write. I start with researching my topic. *After* preparing an outline, I start writing. The *final* and most important step of editing and proofreading scares me a lot *though* it takes less time than the others.

It is amazing how quickly the students begin to understand the concept of a paragraph. This can also be used for creative writing. *After* the concept has been introduced in a novel study format, students may be encouraged to write a rough draft of a story. From their rough draft they follow the instructions for the typical plot line and begin to develop their points more fully. *Not only* will the students' writing improve dramatically, they will *also* have been introduced to the elements of a story.

CENTRAL COMPONENTS OF A PARAGRAPH

● Using Transitional Tags

- Do not overload your text with transitional expressions merely because you know these devices connect ideas.
- They must appear naturally where they belong, or you run the risk of annoying your reader.
- On the other hand, if you can read your entire paragraph and discover none of these transitional devices, then you must wonder what, if anything, is holding your ideas together.
- Practise by inserting a tentative *however*, *nevertheless*, or *consequently*.
- Reread the paragraph later to see if these words provide the glue you needed at those points.

CENTRAL COMPONENTS OF A PARAGRAPH

- Parallelism

- Parallel structures are a particularly powerful way to communicate information because they create structural repetitions that emphasize and connect ideas.
- In grammatical terms, two structures are parallel if they have the same grammatical forms (both nouns or both participles).

CENTRAL COMPONENTS OF A PARAGRAPH

● Parallelism

- Ideas within sentences that are joined by *coordinating conjunctions* must also be parallel.
- For example, ‘*system*’ and ‘*peripherals*’ are joined by coordinating conjunctions in each of the following phrases.
- These structures are appropriately parallel because the items coordinated are the same part of speech (i.e. system and peripherals are both nouns):
 - Either system or peripherals
 - neither system nor peripherals
 - Both system and peripherals
 - Not only the system but also the peripherals

Parallelism

Non-parallel

1. The questionnaire seeks this information: what is our union status, how much should we pay, and number of employees.
2. They know not only accounting, but they also listen to music.
3. Even the best communicators learn as much as possible about their listeners and tailor their remarks to their interests, attitudes, and what their values are.
4. The system can help conceive a product and have it redesigned.

Parallel

1. The questionnaire seeks this information: union affiliation, pay rate, and number of employees.
2. They not only know accounting but also listen to music.
3. Even the best communicators learn as much as possible about their listeners and tailor their remarks to their interests, attitudes, and values.
4. The system can help conceive a product and redesign it.

Coherence Devices in Action

Version 1

The ancient Egyptians were masters of preserving dead people's bodies by making mummies of them. Mummies several thousand years old have been discovered nearly intact. The skin, hair, teeth, fingernails and toenails, and facial features of the mummies were evident. It is possible to diagnose the disease they suffered in life, such as smallpox, arthritis, and nutritional deficiencies. The process was remarkably effective. Sometimes apparent were the fatal afflictions of the dead people: a middle-aged king died from a blow on the head, and polio killed a child king. Mummification consisted of removing the internal organs, applying natural preservatives inside and out, and then wrapping the body in layers of bandages.

Version 2

The ancient Egyptians 'were masters of preserving dead people's bodies by making *mummies* of them. **In short**, *mummification* consisted of removing the internal organs, applying natural preservatives inside and out, and then wrapping the body in layers of bandages. **And** *the process* was remarkably effective. **Indeed**, *mummies* several thousand years old have been discovered nearly intact. *Their* skin, hairs, teeth, fingernails and toenails, and facial features are still evident Their diseases in life, such as smallpox, arthritis, and nutritional deficiencies, are still diagnosable **Even** their fatal afflictions are still apparent a middle-aged king died from a blow on the head; a child king died from polio.

CENTRAL COMPONENTS OF A PARAGRAPH

● Coherence Devices in Action

- Though weak, the first version is not a total washout.
- It starts with a topic sentence, and the sentences that follow are clearly related to the topic sentence.
- In the language of writing, the paragraph is unified (i.e., it contains no irrelevant details).
- However, the paragraph is not coherent.
- The sentences are disconnected from each other, making it difficult for the reader to follow the writer's train of thought.

CENTRAL COMPONENTS OF A PARAGRAPH

● Coherence Devices in Action

- But the second version shows the same paragraph after being revised for coherence.
- Italics indicates pronouns and repeated/restated key words, bold indicates transitional tag-words, and underlining indicates parallel structures.
- The paragraph is now much more coherent.
- The organization of the information and the links between sentences help readers move easily from one sentence to the next.
- Notice how this writer uses a variety of coherence devices, sometimes in combination, to achieve overall paragraph coherence.

CENTRAL COMPONENTS OF A PARAGRAPH

- Unity
 - Unity refers to the extent to which all of the ideas contained within a given paragraph ‘hang together’ in a way that is easy for the reader to understand.
 - When the writer changes to a new idea—one which is not consistent with the topic sentence of the paragraph—the writer should begin a new paragraph.
 - Unity is important because it aids the reader in going along with the writer’s ideas
 - The reader can expect that a given paragraph will deal only with one main topic; when a new paragraph begins, this signals that the writer is moving on to a new topic.

CENTRAL COMPONENTS OF A PARAGRAPH

● Unity

- Consider the following example:
 - *Employees' attitudes at National Electric Company should be improved.* The workers do not feel that they are a working team instead of just individuals. If people felt they were a part of a team, they would not misuse the tools, or deliberately undermine the work of others. *Management's attitude towards its employees should also be improved.* Managers at National Electric act as though their employees are incapable of making decisions or doing their own work. Managers treat workers like objects, not human beings.

CENTRAL COMPONENTS OF A PARAGRAPH

● Unity

- Note that there are two main ideas presented in this paragraph.
- The topic sentence indicates that the paragraph will deal with the subject of ‘employees’ attitudes’, but halfway through, the paragraph shifts unexpectedly to the topic of ‘management’s attitudes’.
- To achieve unity in this paragraph, the writer should begin a new paragraph when the switch is made from writing about employees to managers.

Adequate Development

- A paragraph is adequately developed when it describes, explains, and supports the topic sentence.
- If the ‘promise’ of the topic sentence is not fulfilled, or if the reader is left with questions after reading the paragraph, the paragraph has not been adequately developed.
- Generally speaking, a paragraph which consists of only one or two sentences is under-developed.
- A good rule of thumb to follow is to make sure that a paragraph contains at least four sentences which explain and elaborate on the topic sentence.

Adequate Development

- Consider the following paragraph.
 - “The topics of leadership and management are both similar to and different from one another in several important ways. To be effective, a manager should be a good leader. And good leaders know how to manage people effectively”.
- The topic sentence promises to discuss ‘several’ points of comparison and contrast between leadership and management, but the remainder of the paragraph falls short of fulfilling this promise.
- Only one point of comparison is raised, and this point is left unexplained.
- Several questions remain unanswered. How are leaders different from managers? In what specific ways are the two alike? Why must a manager be a good leader to be effective? Why must good leaders know how to manage people effectively? To achieve adequate development in this paragraph, these questions should be addressed.

Adequate Development

- Generally speaking, a paragraph should contain between three and five sentences, all of which help clarify and support the main idea of the paragraph.
- When a writer begins a new paragraph, it signals to the reader that the writer is changing thoughts or ideas, or is moving on to discuss a different aspect of the main idea.
- Every idea discussed in the paragraph should be adequately explained and supported through evidence and details that work together to explain the paper's controlling idea.
- There are five steps involved in developing a paragraph

Adequate Development

- Formulation of controlling idea

- The controlling idea is the expression of the main idea, or focus of the paragraph in a sentence or a collection of sentences.
- Paragraph development begins with the formulation of the controlling idea. This idea then directs the paragraph's development.
- Often, the controlling idea of a paragraph will appear in the form of a topic sentence. A topic sentence announces and controls the content of a paragraph.
- Topic sentences can occur at four major points in a paragraph: the beginning of the paragraph, the middle of the paragraph, the end of the paragraph, or at both the beginning and the end of the paragraph.
- Here is how you might begin a paragraph on turning in homework:
- **Learning how to turn in homework assignments on time is one of the invaluable skills that college students can take with them into the working world.**

Adequate Development

● Explanation of controlling idea

- The explanation is the writer's rationale of his/her thinking about the main topic.
- Paragraph development continues with an expression of the rationale or the explanation that the writer gives for how the reader should interpret the information presented in the topic sentence of the paragraph.
- Here is the sentence that would follow the controlling idea about homework deadlines:
- **Though the workforce may not assign homework to its workers in the traditional sense, many of the objectives and jobs that need to be completed require that employees work with deadlines. The deadlines that students encounter in the classroom may be different in content when compared to the deadlines of the workforce, but the importance of meeting those deadlines is the same. In fact, failure to meet deadlines both in the classroom and in the workforce can mean instant termination.**

Adequate Development (Example)

- The example serves as a sign or representation of the relationship established in the main idea and explanation portions of the paragraph.
- Paragraph development progresses with the expression of some type of support or evidence for the idea and the explanation that came after it.
- Here are two examples that you might use to support the explanation of the homework deadline:

Adequate Development (Example A)

- For example, in the classroom, students form a contract with the teacher and the university when they enroll in a class. That contract requires that students complete the assignments and objectives set forth by the course's instructor, in a specified time, to receive a grade and credit for the course.

Adequate Development (Example B)

- Accordingly, just as a student risks termination in the classroom if he/she fails to meet the deadline for a homework assignment, so, too, does that student risk termination in the workforce.

Adequate Development

- **Explanation** (of example)
 - It is the reasoning behind why you chose to use this/these particular example (s) as evidence to support the major claim, or focus, in your paragraph.
 - The next movement in paragraph development is an explanation of each example and its relevance to the topic sentence and rationale given at the beginning of the paragraph.
 - This pattern continues until all points/examples that the reader deems necessary have been made and explained.
 - None of your examples should be left unexplained; the relationship between the example and the idea should always be expressed.
 - Look at these two explanations of the examples on homework deadlines:

Adequate Development

- Explanation for Example A
 - When a student fails to complete those assignments by the deadline, the student breaks her contract with the university and the teacher to complete the assignments and objectives of the course. This often leaves the teacher with no other recourse than to fail the student and leaves the university with no other recourse than to terminate the student's credit for the course.
- Explanation for Example B
 - A former student's contract with his/her employer functions in much the same way as the contract that student had with his/her instructor and with the university in a particular course.

Adequate Development

- Completion of paragraph's idea or transition into next paragraph
 - This is a review for your reader about the relevance of the information that you just discussed in the paragraph, or a transition to prepare for your reader for the paragraph that follows.
 - The final movement in paragraph development involves tying up the loose ends of the paragraph—reminding the reader of the relevance of the information in this paragraph to the main or controlling idea of the paper.
 - You might feel more comfortable, however, simply transitioning your reader to the next development in the next paragraph.
 - Here is an example of a sentence that completes the paragraph on homework deadlines.

Adequate Development

- Completion of paragraph's idea or transition into next paragraph
 - *Developing good habits of turning in assignments in class now, as current students, will aid your performance and position as future participants in the working world.*
 - Notice that the example and explanation steps of this model (steps 3 and 4) can be repeated as needed.
 - The idea is that you continue to use this pattern until you have completely developed the main idea of the paragraph.

Adequate Development (Complete paragraph)

Learning how to turn in homework assignments on time is one of the invaluable skills that college students can take with them into the working world. Though the workforce may not assign homework to its workers in the traditional sense, many of the objectives and jobs that need to be completed require that employees work with deadlines. The deadlines that students encounter in the classroom may be different in content when compared to the deadlines of the workforce, but the importance of meeting those deadlines is the same. In fact, failure to meet deadlines both in the classroom and in the workforce can mean instant termination. For example, in the classroom, students form a contract with the teacher and the university when they enrol in a class. That contract requires that students complete the assignments and objectives set forth by the course's instructor, in a specified time, to receive a grade and credit for the course. Accordingly, just as a student risks termination in the classroom if he/she fails to meet the deadline for a homework assignment, so, too, does that student risk termination in the workforce. When a student fails to complete those assignments by the deadline, the student breaks her contract with the university and the teacher to complete the assignments and objectives of the course. This often leaves the teacher with no other recourse than to fail the student and leaves the university with no other recourse than to terminate the student's credit for the course. Developing good habits of turning in assignments in class now, as current students, will aid to your performance and position as future participants in the working world. 48

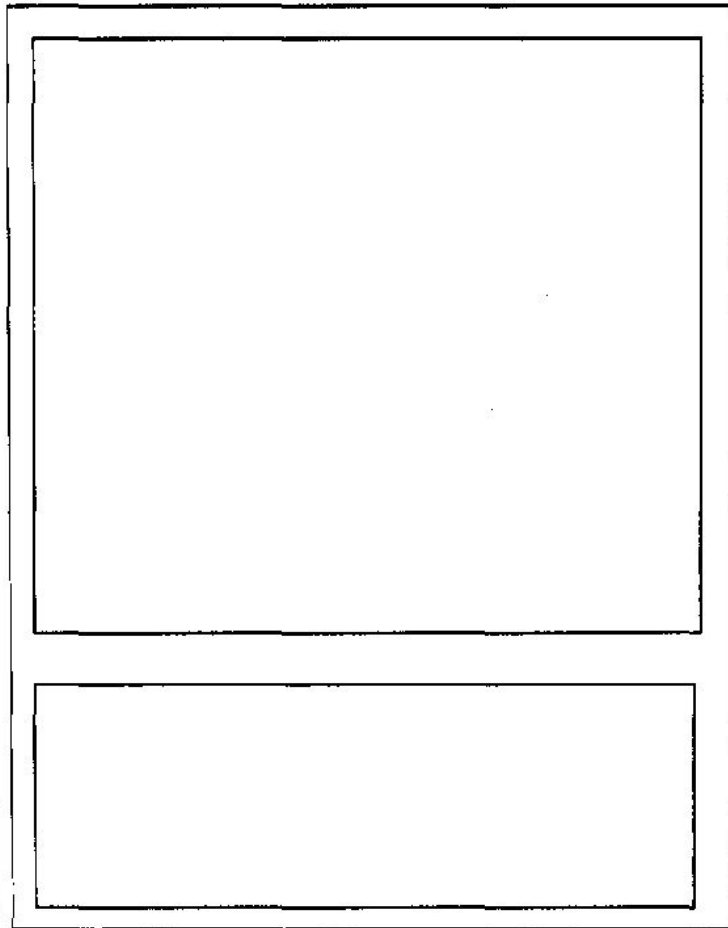
LENGTH

- Length or appearance is not a factor in determining whether a section in a paper is a paragraph.
- In fact, it is not the number of sentences that go to make up a paragraph, but it is the unity and coherence of ideas among those sentences that makes a paragraph a paragraph.
- For instance, in some styles of writing, particularly journalistic styles, a paragraph can be one sentence.
- As long as that sentence expresses the paper's central idea, that sentence can serve the function of a paragraph.
- Ultimately, strong paragraphs contain a sentence or sentences unified around one central, controlling idea.
- When the paragraph reaches completion it should serve to bring the reader into your paper and guide his/her understanding of what has been read.
- Whether that completion happens with one sentence or with twenty, the end result is still a paragraph.

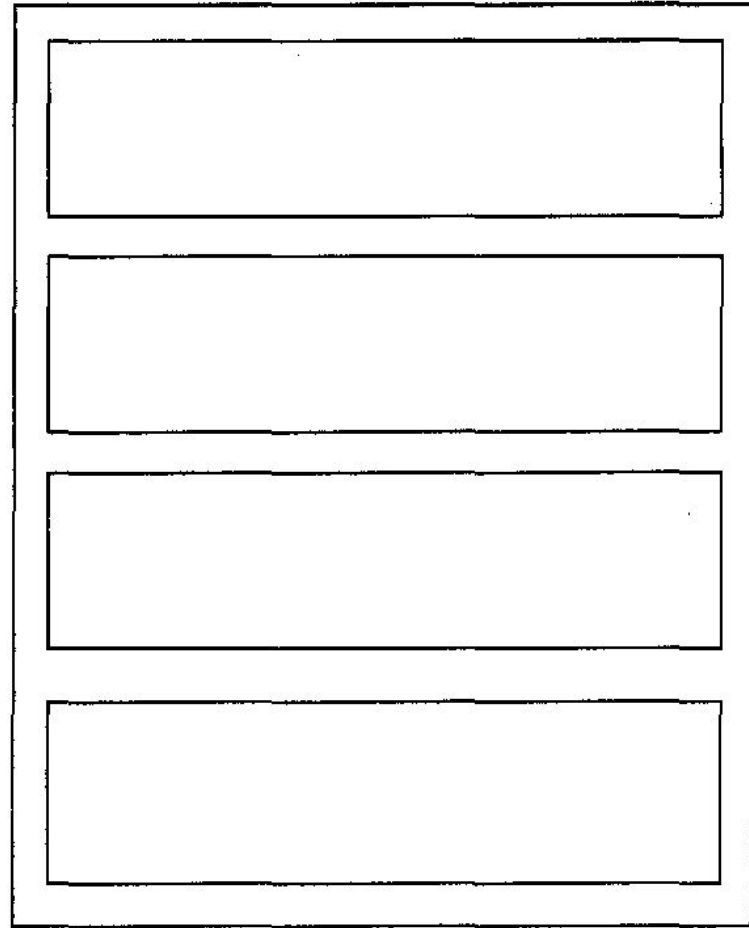
LENGTH

- But as a general rule, you should keep your paragraphs short.
- This suggestion overlaps the suggestion about unity, for if your paragraphs have unity, they will be short.
- In addition, writing marked by short paragraphs is inviting to the readers' eyes as they prefer to read texts with frequent paragraph breaks.
- When you look at the two types of texts given below you will find that the first one has paragraphs of unequal lengths while the second one is built up of paragraphs of almost equal length and of course with more number of paragraphs (Figure 10.1).

LENGTH



Dull and difficult



Well organized

Figure 10.1: LENGTH OF PARAGRAPHS

LENGTH

- The length of a paragraph generally depends on
 - its contents or what must be included to achieve unity and
 - the type of documents.
- Research on readability suggests an average length of eight lines for longer papers such as reports.
- Shorter paragraphs are appropriate for messages sent through letters, electronic mails, and other means.
- For example, a one-line paragraph may be all that is needed for a closing comment in most of the business letters:
 - “I appreciate your time and effort in writing this letter of recommendation for me and I will keep you informed of my progress”.

LENGTH

- In a nutshell, you can follow these rules regarding the length of your paragraphs:
 - Mark the paragraph divisions based on unity.
 - Question the unity of all long paragraphs, say, those longer than twelve lines. If they have unity, leave them as they are.
 - If you find more than one topic, put each topic into a separate paragraph.
 - Construct short paragraphs for memos, letters, circulars, notices, and similar documents.
 - As far as possible, try to maintain the same length for all the paragraphs. In other words, do not have too much variation in the lengths of your paragraphs in a text.

TECHNIQUES FOR PARAGRAPH DEVELOPMENT

- You can develop the central idea of your paragraph through various techniques.
- But the five most commonly used techniques are:
 - Illustration
 - Comparison or contrast
 - Cause and effect
 - Classification
 - Problem and solution

Your choice of technique depends on your topic, intended reader and purpose.

TECHNIQUES FOR PARAGRAPH DEVELOPMENT

Technique	Description	Example
Illustration	Providing examples to explain the main idea	Man's fascination with machinery that move under their own power and control is at least as old as recorded history. In Aristotle's Greece, plays of several acts are said to have been performed entirely by automatic puppets driven by weights hung on twisted cords. Much later, European royalties were enthralled by lifelike automata that could write, draw, and play musical instruments. In recent years, most of the magical aura surrounding mechanical automata has been dispelled. Today automatic machines and industrial robots are used in factories throughout the world to perform tasks that are too hazardous, too onerous, too boring, or simply too uneconomical for human beings to undertake.
Comparison and contrast	Bringing out similarities and differences to develop the idea	Although the interpretation of traffic signals may seem highly standardized, close observation reveals regional variations across this country, distinguishing the East Coast from Central Canada and the West as surely as dominant dialects or political inclinations. In Montreal, a flashing red traffic light instructs drivers to careen even more wildly through intersections heavily populated with pedestrians and oncoming vehicles. In startling contrast, an amber light in Calgary warns drivers to scream to a halt on the off chance that there might be a pedestrian within 500 meters who might consider crossing at some unspecified time within the current day. In my home town in New Brunswick, finally, traffic lights (along with painted lines and posted speed limits) do not apply to tractors, all terrain vehicles, or pickup trucks, which together account for most vehicles on the road. In fact, were any observant Canadian dropped from an alien space vessel at an unspecified intersection anywhere in this vast land, he or she could almost certainly orient him- or herself according to the surrounding traffic patterns.
Cause and effect	Explaining the reasons for the end result	In recent decades, cities have grown so large that now about 50% of the earth's population lives in urban areas. There are several reasons for this occurrence. First, the increasing industrialization of the nineteenth century resulted in the creation of many factory jobs, which tended to be

TECHNIQUES FOR PARAGRAPH DEVELOPMENT

Technique	Description	Example
Classification	Breaking the main idea into specific categories	<p>located in cities. These jobs, with their promise of a better material life, attracted many people from rural areas. Second, there were many schools established to educate the children of the new factory labourers. The promise of a better education persuaded many families to leave farming communities and move to the cities. Finally, as the cities grew, people established places of leisure, entertainment, and culture, such as sports stadiums, theaters, and museums. For many people, these facilities made city life appear more interesting than life on the farm, and therefore drew them away from rural communities.</p> <p>Our main concern was to empirically test the theory that forms the background for this work. To a great extent, we have succeeded in showing our theory is valid. Chapter Two reports a study which shows that the rate of perceiving variations in length relates directly to the number of connectives in the base structure of the test. In Chapter Three, we report a study that found that subjects perceive as variable units only what the theory claims is a unit. Another series of crucial studies is the comparison and contrast experiments reported in Chapter Four, which show that we do not distinguish complex concepts of different lengths as some current theories do.</p>
Problem and solution	Discussing the solutions to the problem posed	<p>Getting more cornea for the blind is a difficult choice. Two types of solutions have been proposed for getting more cornea. One answer is to impose compulsory eye donation on patients dying in hospitals. The other answer is to educate the masses through vigorous campaigns for voluntary post-death eye donations.</p>

TECHNIQUES FOR PARAGRAPH DEVELOPMENT

- Of course, you may find that you can use a combination of any two or three of these techniques in a single paragraph.
- As shown in the example given below, you may begin your paragraph with illustrating details and then use the classification technique to further explain the main idea:
 - “The United States is at present the world’s largest exporter of agricultural products. Its agricultural net balance of payments in recent years has exceeded \$10 billion a year. As rising costs of imported petroleum and other goods have increased the US trade deficit, this agricultural surplus has taken on great financial importance in both the domestic and international markets. First, agricultural exports maintain profitable market prices for the American farmer and bolster the national economy by providing over one million jobs. The income from farm exports alone is used to purchase \$9 billion worth of domestic farm machinery and equipment annually. Exports of US agricultural products also reduce price-depressing surpluses. Without exports, the government would be subsidizing American farmers more than \$10 billion a year over the current rate. Finally, agricultural exports provide an entry to foreign markets that can be exploited by other industries”.

Conclusion

- Paragraph development is more than just a few sentences that occupy the same space in a paper.
- It is an organic process that makes intricate links between various ideas.
- These links, ultimately, create one single idea that runs throughout the paper.
- There are many different components of the paragraph development model.
- All of your paragraphs should have one central idea, the idea should have a discussion of how it works, the explanation should be shown in an example, the example should be explained, and the final idea should be reiterated while preparing the reader for the development to come.
- Using any technique which suits the topic of your paragraphs, you can develop them adequately and appropriately.
- Awareness and utilization of all of the essential components and techniques discussed in this chapter will help to make your paragraphs more unified, more coherent, and most importantly, better developed.
- Once you master the technique of writing effective paragraphs, your technical document, even if very long, will be easily comprehended by your intended readers.

Assignment

(i) Arrange the following sentences in the *correct order* to construct a unified and coherent paragraph.

- (A)
1. By passing the steam through specially designed turbines geared to the generator to be rotated, electrical power can be produced.
 2. In some countries an alternative source of heat energy is provided by the controlled nuclear fission of uranium and other fissile elements.
 3. By the combination of such fuels in the boiler, high-pressure steam can be generated.
 4. Coal, oil, and natural gas are the commonest prime sources of energy.
 5. The electrical power thus produced is fed into the distribution network of power lines and cables radiating from the generating station.
 6. The energy released by the nuclear reaction heats a stream of gas which is used to raise steam for driving the turbines and generators.
 7. It is from here that the electric power is transmitted to its industrial consumers.
- (B)
1. As it cooled down, the inorganic molecules combined to form organic ones, making life on earth possible.
 2. It is common knowledge that organic molecules are the basis of life.
 3. Therefore, any place in the universe that harbours organic molecules can be a possible source of life.

4. When the earth was in its infancy, it only had inorganic molecules.

(ii) Provide appropriate *transitional words/phrases* so as to make the following paragraphs coherent.

- (A) For years there was a serious misunderstanding between the two countries over a question of boundaries. Recent reports indicated that the difficulty had been settled, at least for a time. It was a surprise to read in the papers this morning that war had been declared and that actual fighting had begun.
- (B) Sunbathing is recommended by physicians as an excellent way to improve one's physical condition. When wisely engaged in, it builds up resistance to infections and tones up the whole system. Too much exposure may be injurious to health. Calcium in the bone structure may be depleted. A painful overdose of sunburn may develop into something really serious. Other dangers lurk in the blazing rays of the midsummer sun. Caution should be exercised when one is taking a sunbath, especially if he is not accustomed to it.
- (C) To combat the problem of greenhouse gases, several fronts are being attacked simultaneously. Research and development needs to be intensified to find renewable sources of energy, like solar and wind power. Fuel efficiency for popular vehicles