

WIRED TO WRITE: TECHNICAL WRITING INSTRUCTIONAL MATERIAL

for Information Technology, Entertainment and Multimedia Computing, Automotive Technology, and Electronics Technology Students

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Lesson 2: Standards and Guidelines

Specific Learning Objectives:

Apply established standards and guidelines of the different technical writing genres to ensure accuracy and consistency.

Differentiate among various technical writing genres (e.g., user manuals, feasibility studies, lab reports, project proposals, and technical specifications) based on their structure.

INTO

Activity 1 Think-Pair-Share

Instructions: Students are asked to list down at least five examples of technical writing they have encountered in their daily lives. e.g., user manuals, feasibility studies, lab reports, project proposals, and technical specifications). After 5 minutes, students pair up and discuss their examples. Each pair selects one example and explains why it qualifies as technical writing.

Guiding Questions for Reflection:

- What do all these examples have in common?
- What makes technical writing different from other types of writing (e.g., creative writing, academic essays, etc)?
- Why is it essential for technical writing to follow specific standards and guidelines?

THROUGH

Activity 2: READING

Instructions: Read the discussion below on technical writing standards and guidelines. Take note of the differences in the structures of various genres.

The established standards and guidelines for different technical writing genres help ensure **accuracy**, **consistency**, **and clarity**. These standards vary depending on the audience, field, or purpose, but generally adhere to core principles. Although these genres rely on an organization's standard format, below is a summary of generic standards and guidelines across various genres:

1. User Manuals

A document that provides instructions for end-users on how to operate a product or system.

Structure: It contains Title Page, Table of Contents, Introduction/ Overview, Step-by-Step Instructions, Troubleshooting Section, FAQs, Index, and other relevant sections as required.

Purpose: To help users understand and use a product effectively and efficiently.

Audience: End-users, consumers, technicians.

Language: Clear, simple, and instructional language, avoiding technical jargon unless necessary.

Accuracy: Information must be accurate and align with the product's functions.

Consistency: Consistent formatting, terminology, and layout throughout. **Visual Aids**: Diagrams, screenshots, icons, and flowcharts to guide the user visually.

2. Technical Specifications

A document that describes the technical features, capabilities, and requirements of a product or system.

Structure: It contains Title, Overview, Product Description, Specifications (dimensions, materials, performance), Compatibility/ Limitations, and other relevant sections as required.

Purpose: To provide precise details that define the product's operation and capabilities.

Audience: Engineers, designers, product managers, and developers.

Language: Precise, formal, and technical language.

Accuracy: Must be exact and free of ambiguity to prevent errors. **Consistency**: Use consistent units, terminology, and formatting.

Visual Aids: Tables, charts, and graphs to display data and specifications.

3. Installation Guides

Instructions on how to properly install and set up a product or system.

Structure: It contains a Title Page, Requirements (hardware/software), Preinstallation Instructions, Installation Steps, Post-installation Instructions, Troubleshooting, and other relevant sections as required.

Purpose: To ensure that the product or system is installed correctly and functions as intended.

Audience: End-users, IT professionals, technicians.

Language: Clear, straightforward language; direct commands.

Accuracy: Highly accurate, as improper installation can lead to system failure.

Consistency: Consistent sequence of steps and formatting for ease of understanding.

Visual Aids: Diagrams, installation flowcharts, and screenshots of installation stages.

4. Troubleshooting Guides

A document that helps users identify and resolve common issues with a product or system.

Structure: It contains Problem Categories, Symptoms, Possible Causes, Solutions, Prevention Tips, and other relevant sections as required.

Purpose: To help users fix issues quickly without external help.

Audience: End-users, technical support staff.

Language: Problem-solving, clear, and concise.

Accuracy: Must provide accurate solutions to prevent further issues. **Consistency**: Consistent format for each problem category and solution.

Visual Aids: Flowcharts, diagnostic tools, screenshots showing error messages.

5. Service and Maintenance Manuals

A document providing instructions for maintaining and servicing a product or system.

Structure: It contains a Title Page, Product Overview, Maintenance Schedule,

Step-by-Step Maintenance Procedures, Safety Warnings, Troubleshooting, and other relevant sections as required.

Purpose: To help technicians keep systems running efficiently and extend

their lifespan. **Audience**: Technicians, maintenance personnel, service staff.

Language: Instructional and technical; precise but accessible for service personnel.

Accuracy: Follow precise and accurate maintenance steps to prevent equipment damage.

Consistency: Consistent terminology and steps to ensure uniformity. **Visual Aids**: Diagrams, maintenance checklists, and images of parts.

6. Product Brochures

A marketing document that provides an overview of a product's features and benefits.

Structure: It contains an Eye-catching Header, a Brief Product Overview, Key

Features and Benefits, Images or Visuals of the Product, Contact/ Call-to-Action Information, and other relevant sections as required.

Purpose: To attract potential buyers by highlighting the product's value.

Audience: Consumers, potential clients, investors.

Language: Persuasive, clear, and concise; often promotional.

Accuracy: Accurate representations of product features and capabilities.

Consistency: Consistent messaging, layout, and visual style. **Visual Aids**: High-quality images, icons, and infographics.

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Features and Benefits, Images or Visuals of the Product,

Contact/Call-to-Action Information, and other relevant sections as

required.

Purpose: To attract potential buyers by highlighting the product's value.

Audience: Consumers, potential clients, investors.

Language: Persuasive, clear, and concise; often promotional.

Accuracy: Accurate representations of product features and capabilities.

Consistency: Consistent messaging, layout, and visual style. **Visual Aids:** High-quality images, icons, and infographics.

10. Product Brochures

A marketing document that provides an overview of a product's features and benefits.

Structure: It contains an Eye-Catching Header, a Brief Product Overview, Key

Features and Benefits, Images or Visuals of the Product, contact or call-to-action information, and other relevant sections as required.

Purpose: To attract potential buyers by highlighting the product's value.

Audience: Consumers, potential clients, investors.

Language: Persuasive, clear, and concise; often promotional.

Accuracy: Accurate representations of product features and capabilities.

Consistency: Consistent messaging, layout, and visual style. **Visual Aids**: High-quality images, icons, and infographics.

Activity 3: Peer-Review

Instructions: Using your learning on the different genres of technical writing in your field, select one that interests you. Then, use the provided topic to develop your report, or propose a related topic with the instructor's approval, ensuring that your writing adheres to the structure, purpose, language, accuracy, and use of visual aids as outlined in the lesson. Have a peer check and revise your output. Once revised, your teacher will check your second draft, using the same rubric. Refer also to the rubrics attached for further guidance.

A. User Manual

Topic: User Manual for Setting Up a Home Wi-Fi Router

Objective: To guide users through the setup of a home Wi-Fi router, including basic troubleshooting and configuration.

B. Technical Specifications

Topic: Technical Specifications for a Laptop

Objective: To describe the technical features of a laptop, such as processor, RAM, storage, and ports, in an easy-to-understand format.

C. Installation Guide

Topic: Installation Guide for a Basic Photo Editing Software Objective: To provide step-by-step instructions for installing photo editing software on a computer, ensuring compatibility and a smooth setup.

D. Troubleshooting Guide

Topic: Troubleshooting Guide for Smartphone Battery Draining Quickly Objective: To help users resolve issues with smartphone battery life through basic troubleshooting steps.

E. Product Brochure

Topic: Product Brochure for a New Smartphone Model

Rubric: Use this rubric for peer evaluation.

Criteria	Excellent (5-4 points)	Very Good (3-2 points)	Good (2-1 points)	Needs Improvement (1-0 points)
Topic Selection and Relevance	Topic is clear, highly relevant, and perfectly aligned with the genre's purpose and audience. Demonstrates a deep understanding of the subject matter.	Topic is clearly stated and relevant to the genre, though there may be slight misalignment with audience or purpose.	Topic is relevant but lacks depth or clarity in aligning with the genre or audience.	Topic is unclear or irrelevant to the genre or audience, demonstrating little understanding of the subject matter.
Structure and Organization	Report follows prescribed structure flawlessly, with clear, logical organization that is easy to navigate. Sections are cohesive and well-structured.	Report follows prescribed structure flawlessly, with clear, logical organization that is easy to navigate. Sections are cohesive and well-structured.	Report follows prescribed structure flawlessly, with clear, logical organization that is easy to navigate. Sections are cohesive and well- structured.	Report follows prescribed structure flawlessly, with clear, logical organization that is easy to navigate. Sections are cohesive and well- structured.
Purpose Clarity	The purpose is clearly stated and expertly maintained throughout. The goal of the report is unmistakably evident to the reader.	The purpose is clearly stated and expertly maintained throughout. The goal of the report is unmistakably evident to the reader.	The purpose is clearly stated and expertly maintained throughout. The goal of the report is unmistakably evident to the reader.	The purpose is clearly stated and expertly maintained throughout. The goal of the report is unmistakably evident to the reader.
Language and Tone	Language is clear, concise, and highly appropriate to the technical genre. Tone is consistent, professional, and fits the intended audience perfectly.	Language is clear, concise, and highly appropriate to the technical genre. Tone is consistent, professional, and fits the intended audience perfectly.	Language is clear, concise, and highly appropriate to the technical genre. Tone is consistent, professional, and fits the intended audience perfectly.	Language is clear, concise, and highly appropriate to the technical genre. Tone is consistent, professional, and fits the intended audience perfectly.
Accuracy of Information	Information is precise, thoroughly researched, and linked to the methods used. All facts, data, and references are perfectly accurate and well-suppported.	Information is precise, thoroughly researched, and linked to the methods used. All facts, data, and references are perfectly accurate and well-supported.	Information is precise, thoroughly researched, and linked to the methods used. All facts, data, and references are perfectly accurate and well-supported.	Information is precise, thoroughly researched, and linked to the methods used. All facts, data, and references are perfectly accurate and well-supported.
Consistency and Formatting	Consistent use of units, terminology, and formatting throughout. Report adheres to standard formats of the genre flawlessly.	Consistent use of units, terminology, and formatting throughout. Report adheres to standard formats of the genre flawlessly.	Consistent use of units, terminology, and formatting throughout. Report adheres to standard formats of the genre flawlessly.	Consistent use of units, terminology, and formatting throughout. Report adheres to standard formats of the genre flawlessly.
Visual Aids (if applicable)	Visual aids are highly effective, well-chosen, and integrated into the	Visual aids are highly effective, well-chosen, and integrated into	Visual aids are highly effective, well-chosen, and	Visual aids are highly effective, well-chosen, and

Clarity and Objectivity	report. All visuals are appropriately labeled with clear titles and captions. Writing is highly clear, objective, and concise. Ideas are communicated in a straightforward and precise manner. Bias or unnecessary opinions	the report. All visuals are appropriately labeled with clear titles and captions. Writing is highly clear, objective, and concise. Ideas are communicated in a straightforward and precise manner. Bias	integrated into the report. All visuals are appropriately labeled with clear titles and captions. Writing is highly clear, objective, and concise. Ideas are communicated in a straightforward and precise manner. Bias	integrated into the report. All visuals are appropriately labeled with clear titles and captions. Writing is highly clear, objective, and concise. Ideas are communicated in a straightforward and precise manner. Bias
	are completely avoided.	or unnecessary opinions are completely avoided.	or unnecessary opinions are completely avoided.	or unnecessary opinions are completely avoided.
Grammar and Syntax	No grammatical, spelling, or syntactical errors. The report is polished, professional, and easy to read.	No grammatical, spelling, or syntactical errors. The report is polished, professional, and easy to read.	No grammatical, spelling, or syntactical errors. The report is polished, professional, and easy to read.	No grammatical, spelling, or syntactical errors. The report is polished, professional, and easy to read.
Conclusion and Recommendati ons	The conclusion is clear, concise, and highly effective in summarizing key points and providing well-reasoned recommendations or future steps.	The conclusion is clear, concise, and highly effective in summarizing key points and providing well-reasoned recommendations or future steps.	The conclusion is clear, concise, and highly effective in summarizing key points and providing well-reasoned recommendations or future steps.	The conclusion is clear, concise, and highly effective in summarizing key points and providing well-reasoned recommendations or future steps.
References and Citations	Sources are impeccably cited, using the correct format. References are credible, relevant, and meticulously documented.	Sources are impeccably cited, using the correct format. References are credible, relevant, and meticulously documented.	Sources are impeccably cited, using the correct format. References are credible, relevant, and meticulously documented.	Sources are impeccably cited, using the correct format. References are credible, relevant, and meticulously documented.

Second draft based on your peer's evaluation.				

Rubric: Use this rubric to grade the student's revised output.

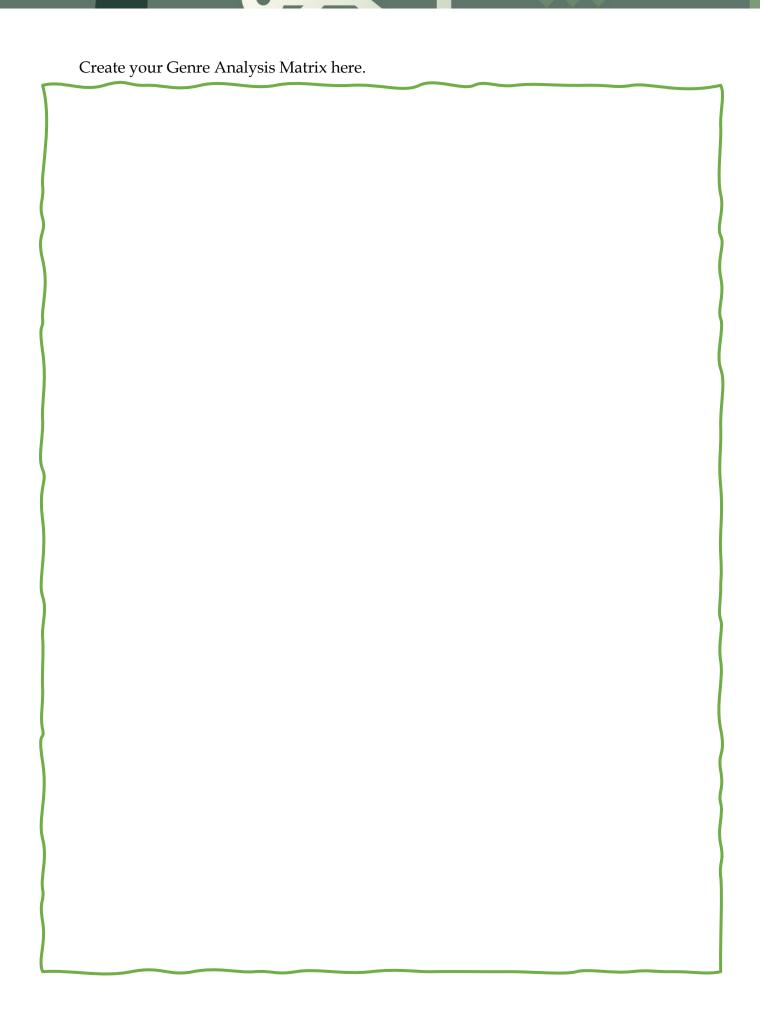
Criteria	Excellent (5-4 points)	Very Good (3-2 points)	Good (2-1 points)	Needs Improvement (1-0 points)
Topic	Topic is clear, highly	Topic is clearly stated	Topic is relevant but	Topic is unclear or
Selection and Relevance	relevant, and perfectly aligned with the genre's purpose and audience. Demonstrates a deep understanding of the subject matter.	and relevant to the genre, though there may be slight misalignment with audience or purpose.	lacks depth or clarity in aligning with the genre or audience.	irrelevant to the genre or audience, demonstrating little understanding of the subject matter.
Structure and Organization	Report follows prescribed structure flawlessly, with clear, logical organization that is easy to navigate. Sections are cohesive and well-structured.	Report follows prescribed structure flawlessly, with clear, logical organization that is easy to navigate. Sections are cohesive and well-structured.	Report follows prescribed structure flawlessly, with clear, logical organization that is easy to navigate. Sections are cohesive and well- structured.	Report follows prescribed structure flawlessly, with clear, logical organization that is easy to navigate. Sections are cohesive and well- structured.
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Accuracy of Information	Information is precise, thoroughly researched, and linked to the methods used. All facts, data, and references are perfectly accurate and well-supported.	Information is precise, thoroughly researched, and linked to the methods used. All facts, data, and references are perfectly accurate and well-supported.	Information is precise, thoroughly researched, and linked to the methods used. All facts, data, and references are perfectly accurate and well-supported.	Information is precise, thoroughly researched, and linked to the methods used. All facts, data, and references are perfectly accurate and well-supported.
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	report. All visuals are	the report. All visuals	integrated into the	integrated into the
	appropriately labeled	are appropriately	report. All visuals	report. All visuals
	with clear titles and	labeled with clear	are appropriately	are appropriately
	captions.	titles and captions.	labeled with clear	labeled with clear
			titles and captions.	titles and captions.
Clarity and	Writing is highly clear,	Writing is highly	Writing is highly	Writing is highly
Objectivity	objective, and concise.	clear, objective, and	clear, objective, and	clear, objective, and
	Ideas are communicated	concise. Ideas are	concise. Ideas are	concise. Ideas are
	in a straightforward and	communicated in a	communicated in a	communicated in a
	precise manner. Bias or	straightforward and	straightforward and	straightforward and
	unnecessary opinions	precise manner. Bias	precise manner. Bias	precise manner. Bias
	are completely avoided.	or unnecessary	or unnecessary	or unnecessary
		opinions are	opinions are	opinions are
		completely avoided.	completely avoided.	completely avoided.
Grammar and	No grammatical,	No grammatical,	No grammatical,	No grammatical,
Syntax	spelling, or syntactical	spelling, or	spelling, or	spelling, or
•	errors. The report is	syntactical errors. The	syntactical errors.	syntactical errors.
	polished, professional,	report is polished,	The report is	The report is
	and easy to read.	professional, and easy	polished,	polished,
		to read.	professional, and	professional, and
			easy to read.	easy to read.
Conclusion	The conclusion is clear,	The conclusion is	The conclusion is	The conclusion is
and	concise, and highly	clear, concise, and	clear, concise, and	clear, concise, and
Recommendati	effective in	highly effective in	highly effective in	highly effective in
ons	summarizing key points	summarizing key	summarizing key	summarizing key
	and providing well-	points and providing	points and	points and
	reasoned	well-reasoned	providing well-	providing well-
	recommendations or	recommendations or	reasoned	reasoned
	future steps.	future steps.	recommendations or	recommendations or
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References	Sources are impeccably	Sources are	Sources are	Sources are
and Citations	cited, using the correct	impeccably cited,	impeccably cited,	impeccably cited,
	format. References are	using the correct	using the correct	using the correct
	credible, relevant, and	format. References	format. References	format. References
	meticulously	are credible, relevant,	are credible,	are credible,
	documented.	and meticulously	relevant, and	relevant, and
	documenta.	documented.	meticulously	meticulously
		documenta.	documented.	documented.
Total:			documented.	aocumenta.

BEYOND

Activity 4: Genre Analysis Matrix

Instructions: Create a matrix comparing and contrasting different technical writing genres based on their structure, purpose, audience, and style. Be guided by the rubric provided.



Genre Analysis Matrix

Criteria	Excellent (10-9 points)	Very Good (8-7 points)	Fair (6-5 points)	Needs Improvement (4-0 points)
Structure	Provides a detailed and thorough comparison of the structure of each genre. Clear and distinct breakdowns for each genre's structure.	Clear comparison with some detail but lacks in-depth analysis of structure or some structures are not clearly defined.	General comparison with minimal structure breakdown. Missing some important details.	Incomplete or unclear comparison of structures, major gaps in understanding.
Purpose	Thoroughly compares and contrasts the purpose of each genre, explaining why and when each is used with clarity.	Clear comparison of purposes but missing some nuances or a full explanation of context.	General comparison with minimal focus on how the purposes differ. Lacks specificity.	Vague or incomplete explanation of purposes lacks clarity or depth.
Audience	Clearly identifies and compares the target audience for each genre, showing how the audience shapes writing style.	Accurate identification of audiences, but lacks full detail in how audience impacts style.	General identification of audiences, lacks depth or clear connection to writing style.	Fails to identify or compare audiences adequately. Missing significant points.
Style	Provides a comprehensive and insightful comparison of the writing style in each genre, highlighting tone, language, and formality with examples.	Adequate comparison of styles with some relevant details but lacks clarity in places.	General comparison of style with some gaps or lack of specificity in the differences.	Comparison is missing, overly simplistic, or incomplete.
Depth of Analysis	Demonstrates deep understanding with specific, relevant examples where appropriate to support analysis.	Good analysis with some relevant examples but lacking depth or comprehensive insight.	Basic analysis, minimal or no examples, missing significant exploration.	Superficial or incomplete analysis, lacking examples or insight.
Clarity and Organization	Information is presented clearly with strong organization, making it very easy to follow the comparisons.	Clear organization, but some sections may lack clarity or minor disorganization.	Somewhat disorganized or unclear, making it harder to follow the comparison matrix.	Disorganized or unclear presentation, hard to follow or understand.