Designing and Writing Procedures

Slides to support teaching from the chapter "Designing and Writing Procedures"

in

Teaching Professional and Technical Communication: A Practicum in a Book

edited by Tracy Bridgeford, University of Utah Press, 2018.

Procedures explain how to *do* something
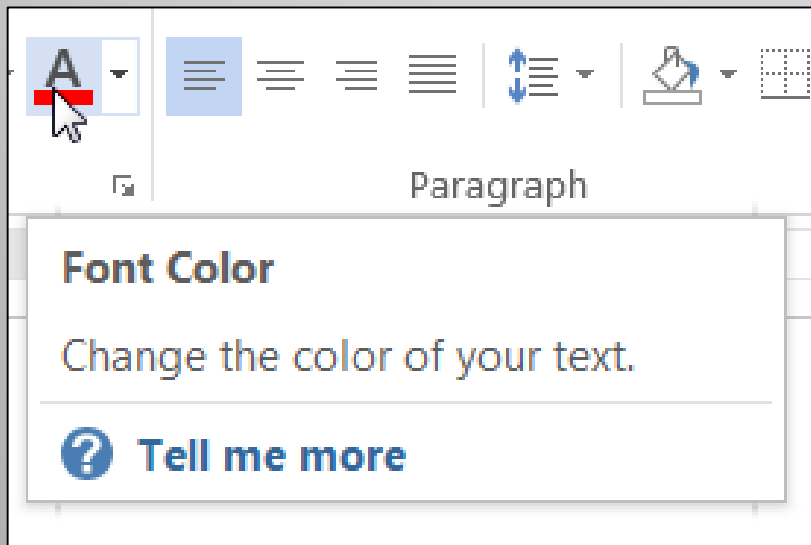
Also called "instructions"

Similar to procedures:

- Process descriptions
- Product demos
- Functional descriptions (for instance "tool tips")

Functional descriptions

Functional descriptions tell you what a UI element is for. But they don't explicitly tell you what to do.

Tool tip

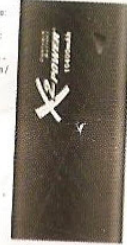Valve labeled "Pressure release"

Where do we find procedures?

How good are they?

What problems do we see?

Instructions for a digital consumer product

X2 POWER

User Manual
Manual del usuario
Mode d'emploi

PWR10175

3.7V 2600mAh 10Wh
Input - Voltaje de entrada - Entrée: 5V/1.0A
Output - Voltaje de salida - Sortie: 5V/1.0A
Chemistry - Composición química -
Composition chimique: Lithium Ion
/ Iones de Litio / Lithium Ion

PWR10176

3.7V 5200mAh 19Wh
Input - Voltaje de entrada - Entrée: 5V/1.8A
Output - Voltaje de salida - Sortie: 5V/1.0A
Chemistry - Composición química -
Composition chimique: Lithium Ion
/ Iones de Litio / Lithium Ion

USB CABLE
CABLE USB
CÂBLE USB

PWR10177

3.7V 7800mAh 29Wh
Input - Voltaje de entrada - Entrée: 5V/1.8A
Output - Voltaje de salida - Sortie: 5V/1.0A & 5V/1.8A
Chemistry - Composición química - Composition chimique:
Lithium Ion / Iones de Litio / Lithium Ion

2x

PWR10178

3.7V 10400mAh 38Wh
Input - Voltaje de entrada - Entrée:
5V/1.8A
Output - Voltaje de salida - Sortie:
5V/1.0A & 5V/1.8A
Chemistry - Composición química -
Composition chimique: Lithium Ion /
Iones de Litio / Lithium Ion

2x

POWER BUTTON
BOTÓN DE ENCENDIDO
BOUTON DE MISE EN MARCHE

LED INDICATORS
INDICADORES DE LED
VOYANTS LED

CHARGE PORT
PUERTO DE CARGA
BORNE DE RECHARGE

USB INPUT
ENTRADA USB
ENTRÉE USB

FLASHLIGHT
LINTERNA
LAMPE DE POCHE

Contents: Portable battery, USB to micro USB cable, User Manual. Features integrated lithium ion battery, LED flashlight and LED display to show remaining power.

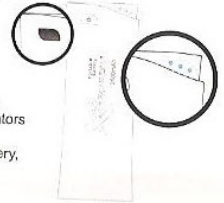**IMPORTANT SAFETY INSTRUCTIONS – SAVE THESE INSTRUCTIONS.**
Read all instructions and warning prior to using this product. Improper use of this product may result in product damage, excess heat, fire, or explosion.
SAVE THESE INSTRUCTIONS. DANGER - TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, CAREFULLY FOLLOW THESE INSTRUCTIONS.
Confirm the voltage of the device you intend to charge is 5V before charging it.
Do NOT store in high temperatures, including intense sunlight.
Do NOT operate the portable battery if it has been subjected to shock or damage. Contact the manufacturer or take to a qualified technician for repair.
Do NOT attempt to disassemble, repair, or modify the portable battery in any manner.
Do NOT attempt to replace any part of the portable battery.
Do NOT expose the portable battery to rain or moisture. For indoor use only.
This portable battery is not intended for use by children. Children should be supervised to ensure that they do not play with the portable battery.
This portable battery is not intended for use by children or persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge without supervision. Portable battery must be recycled or disposed of safely and in accordance with law.

Using the Portable Battery to Charge a Device

1. Using the original USB cord for the device you wish to charge, plug the portable battery into the device.
2. Press the power button and wait for the LED indicators to turn on. Charging should start automatically and the LED indicators will stay lit throughout the charging process until the portable battery is depleted. The portable battery will automatically turn off if it is not plugged into a device.
3. Charging will automatically stop when the portable battery has run out of battery.
4. To turn the portable battery off manually press the power button. The LED indicators should turn off once the portable battery is off.
5. If the device has finished charging before the portable battery has run out of battery, immediately turn the portable battery off and disconnect it from the device.

Charging the Portable Battery

1. Once the portable battery has been depleted, plug it into a USB charger using the USB to micro USB cable included.
2. During charging the LED that correlates to how charged the portable battery is will flicker with the previous LEDs staying solid. If the portable battery has been fully depleted then no LEDs will show solid until the portable battery has been charged. LEDs turn solid as the portable battery becomes fully charged.
3. Once fully charged, all LEDs will flicker.
4. The portable battery should be fully charged before first use and should be fully discharged and charged once every three months for maximum life.

Using the Power Pack Flashlight (PWR10175)

1. To turn the flashlight on, press and hold the power button for 3 seconds.
2. To turn the flashlight off, press and hold the power button for 3 seconds.

Power Indication

Press the power button to check remaining power.

Power Status:

If no LED indicator lights turn on the portable battery may need to be charged.

Preview: Components of procedures

Standard procedures consist of a

1. Title
2. Introduction (optional)
3. Steps
4. Feedback statements (optional)
5. Notes (optional)

Import Your Music

The Tuner Music Importer helps you add your personal music collection to your music library on the Tuner website, so you can play it from all of your connected Tuner Music devices.

1. Go to your music library from a web browser on the computer you want to import music from.
2. Click **Upload your music** in the left menu. If prompted to install the Tuner Music Importer, follow the on-screen instructions.
3. Once you've opened or installed the Tuner Music Importer, click **Start Scan** to automatically scan your iTunes and Windows Media Player libraries for songs to import. You can also click **Browse manually** to choose files on your computer to find music. This process may take some time to complete.
4. After the Tuner Music Importer has located your music, click **Import all** to add the entire selection to your music library. Or, click **Select Music** to choose which songs you'd like to add.

Note:

- You can import up to 250 songs to your music library for free. With a Tuner Music subscription, you can import up to 250,000 songs. To learn more, go to Change Your Tuner Music Subscription. Tuner Digital Music purchases do not count towards library limits.

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4. Notes (optional)

Import Your Music

(Topic title)

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(Introductory paragraph)

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Note: *(Note)*

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Domain ("subject matter")

The domain of a procedure matters a lot to writers

- Digital systems

- Mechanical/electrical systems

- Objects in physical world

- Intangible (e.g., leadership, running a meeting)

Which domain is likely to be the most difficult?

System state

Procedures vary a lot according to the initial state of the system and how the user wishes to change that state

- Assembly, installation, configuration
- Operation (routine and emergency)
- Troubleshooting
- Dismantling and recycling

Audiences differ

- Different backgrounds and abilities
- Different goals and information needs
  - How much do they want to know?
  - Do they want to retain the content?
- Different cultures

. . . But they also share important traits
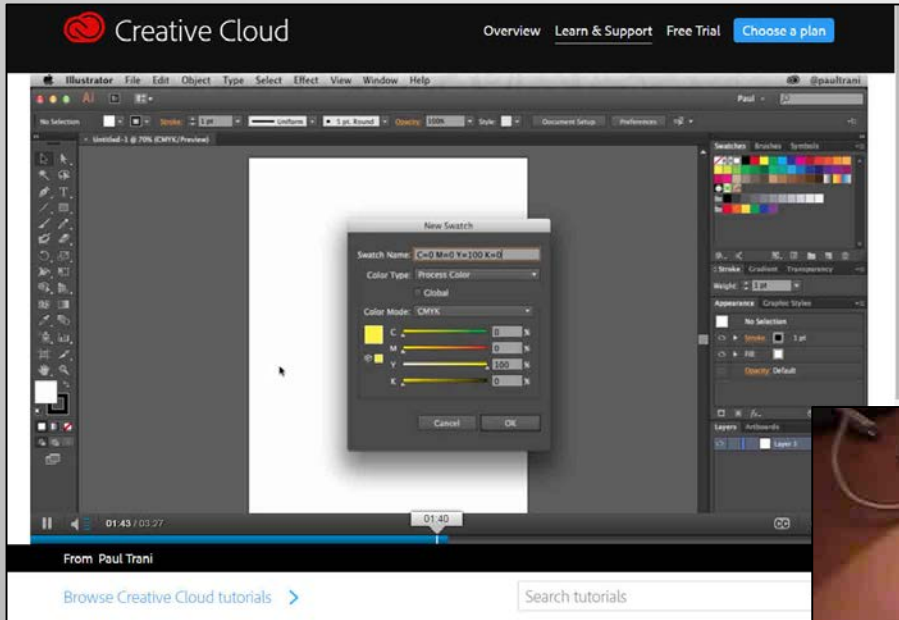
- Have limited short-term memory (minimize "cognitive load")

- Like examples

- Are impatient (want to do work, not read instructions)

Procedures communicate via the following (usually in combination):

- Text

- Images (diagrams, drawings, screen captures, photographs)

- Video

- Voice

Example: Video procedures

Easiest and Quickest Bowline EVER

Wildernessways

What about graphics? What about video?

Graphics show users what you're referring to—where something is and what it looks like.

How to identify knotweed

Resize corner Status bar

Video is especially good at showing actions and movement

How to remove knotweed by herbicide injection

Procedure exercise: Part 1
Writing a procedure for Lego construction

1. Keep your Lego brick object hidden from the other team in your group.

2. Spend 10 minutes writing a procedure that will enable your audience, the other team, to replicate your object. Visuals cannot be used.

3. Exchange procedures. Then, working for 10 minutes, try to replicate the other team's object.

4. Reveal the objects. Discuss the differences in the procedures and how well each procedure worked.

Tips for writing your procedure

- Think about the points of the compass, alignment, corners, and offsetting a Lego brick one position from the edge.

- Use techniques such as a limited amount of redundancy to prevent errors.

Procedure exercise: Part 2

Space invaders are attacking Earth. We can stop them with Legos!

The space invaders are afraid of *another* race of aliens who fly around in a wide variety of Lego-like space craft.

Our only hope is to create billions of small objects resembling these space craft. Each Earth dwelling needs one to ward off the invaders.

Revise your procedure

- Make clear that color doesn't matter. Any color Legos will do.
- Should the Legos be glued together?

Use whatever components you need.
1. Title
2. Introduction
3. Steps
4. Feedback
5. Notes

Title

Make it long enough to explain the purpose of the procedure. A good guideline is 5 to 8 words.

Automating your work

Using macros

Automate your work with macros

How to use our built-in macros

How to save time by automating your work with our built-in macros

Introduction (if needed)

One or two paragraphs that elaborate on the title

"Is this really what I want to do?"

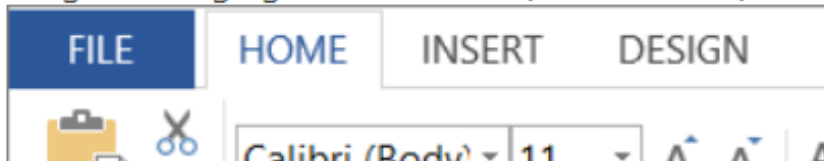State anything the user should know before starting to carry out the procedure (or deciding not to)

A further explanation of the purpose

A graphic would be helpful

Create a hanging indent

With a hanging indent, the second and all the following lines of a paragraph are indented more than the first. The fastest way to add a hanging indent is to use the ruler.

1. Select the text where you want to add a hanging indent.

2. Click **View** and then select the **Ruler** checkbox to Show rulers.

3. Drag the hanging indent marker (shown below) to the right. It's the lower triangle on the ruler.

FILE	HOME	INSERT	DESIGN

Calibri (Body) ▾ 11 ▾ A˄ A˅ A

Pointing out consequences

Saving as text (.txt)
When you save a file in text format, the file size decreases greatly, and you will be able to open the file in a wide range of applications. **Caution:** All your formatting will be lost.

Pointing out pre-requisites

Sealing a case

When you seal a case, the contents of the file can no longer be changed in any way. A case can only be sealed if the Enable Sealing option was chosen when the case was created.

Steps

Steps are the central component of procedures. They tell the user to do something—and how.

Press the **On** button.

On the **Home** tab, in the **Styles** group, click . . . .

Do-it steps

Express a simple action :

Press the **On** button.

Can also show location:

On the **Home** tab, in the **Styles** group, click . . . .

Can also explain how to carry out the action:

Release the catch mechanism by pushing firmly on the ends of both latches.

Feedback statements

Feedback statements are sometimes added to Do it steps and other steps as well. They describe explicitly the result of carrying out a step. They can give the user confidence and help prevent errors.

Tap any note in your document. Blue boxes appear around all the notes.

User option steps

Offer an opportunity to achieve a variation on the main goal

If you prefer a crispy-crust pizza, do not use a baking sheet and bake the pizza at 375 degrees.

Click the files you wish to archive. To select multiple adjacent files, drag the mouse pointer over these files.

Conditional steps

Explain how to identify and address an unwanted condition. These are not presented as options.

If you are in the Transactions view, switch to the Report view.

If the System Load indicator shows high activity, launch a subsystem before proceeding further.

This one is different. What's going on here?

Rap periodically on the filter housing to ensure maximum suction.

Click **Bottom** to complete the first box.

- Is this just a simple "Do it step?
- Is this a user option?
- Is this conditional?

Local purpose steps

Often added to a Do It step. They add extra words explaining why this step is necessary.

During prolonged use on very dusty surfaces, rap periodically on the filter housing to clear it of dust and ensure maximum suction.

May also serve as milestones in a long procedure:

Click **Bottom** to complete the box.

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Feedback statements are sometimes added to steps. They describe explicitly the result of carrying out a step. They can give the user confidence and help prevent errors.

Tap any note in your document. Blue boxes appear around all the notes.

Notes and tips

Notes and tips include all kinds of useful information. They can appear anywhere in a procedure. Use sparingly.

Tip: Make sure you click on the tip of the triangle.

Notes, warnings, tips

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Tip: Make sure you click on the tip of the triangle.

Cautions and warnings must be highly visible and appear before the place in the procedure where the user can get into trouble

Sports video exercise

- A celebrity athlete who demonstrates how to serve a tennis ball, hit a golf ball, etc.

- On-screen host for the intro and conclusion

- Off-screen narrator who explains action in detail

- Videographer
  - Fingers simulate a camera lens. Moves toward action for close-ups. Stiffens fingers for "freeze." Rolls fingers slowly for slow motion.

- Director

Everyone contributes to the script