A Beginner's Guide to Writing Instruction Manuals

Nathan Sidles

So you've decided to write an instruction manual. First of all, congratulations! You have joined the elite club of people who are responsible for maintaining civilization. You will soon be the peer of Prometheus, Aristotle, Bertrand Russell, plumbing journeymen, the first cavepeople, and your English professor.

You will be a teacher.

Writing an instruction manual is simple, and so is this manual. It is divided into seven sections that mirror the process of writing a manual: choosing your subject, researching that subject, organizing what you want to say, actually writing the manual, formatting it and creating its graphics, testing it out, and revising it.

You've actually already started: you've read this introduction, had an idea, lived, felt dawn, and seen sunset glow. The torch is yours now, so hold it high.

Let's go kindle some knowledge.

Section 1:
Requirements

You need two things to create an instruction manual:

- **1 subject.** You need something *about which* to write, or a "subject." Your subject needs to be something that can be acted upon: a task or an object. Some suitable subjects for instruction manuals are:

  - rewiring your house,
  - assembling a toy, and
  - operating an exosuit cargo-loader.

- **1 writing tool.** You need something *with which* to write. Your writing tool should be something stable, flexible, and easy to use. A computer with word processing software is ideal.

It is useful, *but not necessary*, to have two more things:

- **1 graphics creation tool.** You may want something with which to illustrate your instruction manual. A camera, a sketchpad, and computer drafting software are all useful.

- **1 instruction manual manual.** You may want a guide to writing instruction manuals if you are new to it. This manual is ideal; another choice is *Teaching Communication Today*, by Richard Johnson-Sheehan.

Check your inventory! Do you have all these things?

Then you're ready to begin!

Section 2:
Researching Your Subject

An instruction manual isn't really about the object or process being described; it's about how your reader will interact with it to create. Remember, you are a teacher.

Here is how to do it:

1. Research your audience.

2. Research your subject.

3. Organize your notes.

And you're done! You've researched your manual's audiences and its subject, and you've assembled your notes. Now it's time to organize this information!

Section 3:
Organizing Your Manual

Now you have to organize your manual. There are two parts to this organization: structure and content. You must structure the manual into its appropriate sections, and within those sections, you have to organize the content so that it is presented predictably.

Here's how to do it:

1. **Structure your information into its appropriate sections.**

   You must first put your information into the structure of your manual. Most instruction manuals have six sequential parts, divided by purpose:

   a. **The title.** The title states the purpose and nature of the instruction manual.
   b. **Introduction.** The introduction states the background of the manual, what it teaches, and how it is going to teach its material.
   c. **Requirements.** The requirements section states the requirements for following the steps section. These requirements can be materials, prior knowledge, and physical ability.
   d. **Steps.** The steps section details the actions that the reader needs to accomplish his goals, what those actions do, and what might go wrong with each action.
   e. **Conclusion.** The conclusion describes what the reader has done, what the result should be, and where the reader can go for more.
   f. **Troubleshooting.** The troubleshooting section tells the reader what to do in case something has gone wrong.

   Figure 1 illustrates this structure with the rough size of each section. Note that most of your manual's weight will be in the steps section.
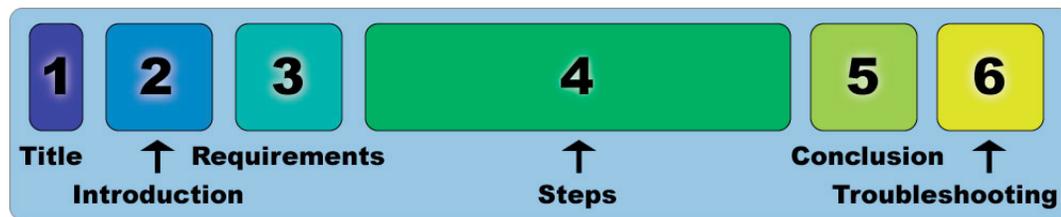
Figure 1. The outline of a manual, roughly to scale.

NOTE: Some sections, like the conclusion and the title, may not have any information placed in them. Do not panic.

2. **Organize the content within each section into its appropriate place.**

An instruction manual has many parts. Each part of your manual can be assigned to one of these parts:

- o **Titles.** Titles are used to announce each new part of your manual:
  - Manual title.
  - Section titles.
  - Subsection titles, etc.
- o **Text.** Text is used to introduce each part of your manual and provide information that doesn't fit anywhere else:
  - Paragraphs.
  - Footnotes.
- o **Text boxes.** Text boxes are used to make announcements that you want to emphasize, especially in the middle of the steps section:
  - Text box titles.
  - Text box paragraphs.
- o **Steps.** Steps are sequential instructions that you use to explain the actions you want the reader to do:
  - Step titles.
  - Step text.
  - Sequential sub-steps.
  - Non-sequential sub-steps.
  - Branching steps.
- o **Graphics.** Graphics illustrate what text, text boxes, and steps cannot explain in words:
  - Graphics.
  - Captions.

- o **Tables.** Tables provide information or instructions that are not sequential, yet with enough of a pattern that they fit into categories:
  - Table titles.
  - Table categories
  - Table text.

Look over the information you collected in the previous section, and assign every bit of it to one of these parts.

And you're done! You've organized your information into its sections, and organized your information within those sections into its proper place. Now it's time to write!

Section 4:
Writing Your Manual in a Proper Style

Fantastic! Your manual is going to be streets ahead, but there's a lot of hard work still to do. What you have so far is just information.

Surrender? Hah! You have not yet begun to write!

Your job is to turn this information into knowledge. To do this, you must create something that is easy to read and easy to know. Your writing must not stand between your reader and his goal.

Here's how to do it:

1. **Know the professional level of your audience.**

   Write to your audience and you will hold their attention. If your manual is primarily designed for specialists, you will be able to use many technical words, which saves on explanation. If your manual is primarily designed for beginners, you will need to define more words or use simpler ones.

2. **Choose your style of writing.**

   Use the most natural words and the simplest possible sentences in every situation. Your style will come through despite this restriction, and your ideas will come through because of it.

   Humor and asides have their place. They can spark the interest of your audience and they can make a manual more accessible. Use them very sparingly in the best of times. The more advanced your audience, the drier your writing should be. Nuclear meltdown contingency instructions are not the place for a Homer Simpson quote.

3. **Create a model for each part of your manual.**

   Consistency is the key to comprehensibility. Create a model for each part of your manual. For example, your model of a step might go:

   "[Number.] **Instruction sentence in imperative mood.**

   "Explanatory or justification sentence(s). Example."

4. **Choose specific words to describe specific actions.**

   Consistency is the key to comprehensibility. Choose specific words to describe specific actions and never use others. For example, if you are writing a software manual, choose between "click on" and "select" to describe the action of clicking on something.

5. **Turn your organized information into prose.**

   You organized your information in the previous sections. Turn this collected information into complete prose consonant with the previous steps in this section.

   This is usually considered the most difficult step.

6. **Review your prose.**

   Read what you've written and see if it makes sense to you, then try to read it from your primary audience's perspective and see if it still makes sense. If necessary, revise it for clarity.

7. **Select a title.**

   Your title must describe both the manual's purpose and its nature: about what the manual instructs, and to whom it is instructing. Its selection comes last because sometimes the nature and purpose of a manual changes after its creation.

Some titles that describe purpose and nature elegantly are:
- o A Beginner's Guide to Writing Instruction Manuals,
- o Honda Odyssey: Owner's Manual, and
- o How to Succeed at Business Without Really Trying.

Each of these titles describes what the manual is and the audience to whom it is directed – beginning instruction manual writers, owners of Honda Odysseys, and indolent businesspeople.

Writing a title is like poetry: it's short, it should follow strict rules, and it doesn't have to rhyme.

And you're done! You've written your manual in an appropriate style. Now it's time to format it and add graphics.

Section 5:
Formatting and Graphics

Now you have to format what you've written and create graphics.

Proper formatting will help your audience follow your manual more easily. Important text should be highlighted, sections should be clearly divided, different kinds of information should be formatted self-consistently, and white space, graphics, and text should mingle freely within a pattern.

Graphics also help your audience follow your manual more easily. Graphics should supplement textual explanation and instructions while fitting in with the overall design of your manual.

Here's how to do it all:

1. **Specify your manual's document-wide properties.**

   Consistency is the key to comprehensibility. Your manual has certain properties that should hold throughout its length. These are:

   o page size,
   o page margins,
   o background color,
   o text (intra-paragraph) spacing,
   o (inter-) paragraph spacing,
   o list item spacing, and
   o a common font.

   Set these properties in whatever manner you think will best appeal to your audience. Remember to include enough white space that your audience can write notes in the margin.

2. **Specify the properties of each your manual's parts.**

In step 3.2, you divided your manual's information into parts. Each part needs to have its own identity to distinguish it:

- **Titles.** Choose a color, a font and a font size for each of these:
  - Manual title.
  - Section titles.
  - Subsection titles, etc.
- **Text.** Choose a color, a font and a font size for each of these:
  - Paragraphs.
  - Footnotes.
- **Text boxes.** Choose a border and shading for text boxes, and a color, a font, and a font size for each of these:
  - Text box titles.
  - Text box paragraphs.
- **Steps.** Choose a color, a font, and a font size for each of these:
  - Step titles.
  - Step text.
  - Sequential sub-steps.
  - Non-sequential sub-steps.
  - Branching steps.
- **Graphics.** Choose a design aesthetic for illustrations, and a border and placement scheme for both of these:
  - Graphics.
  - Captions.
- **Tables.** Choose a border and shading for tables, and a color, a font, and a font size for each of these:
  - Table titles.
  - Table categories
  - Table text.

Each part should be differently formatted, but it should harmonize with the others. For example, the text box title should be distinguished by being bolded and slightly larger, not by being of grossly different font and size.

3. **Create graphics for your manuals.**

And you're done!

Section 6:
Testing Your Manual

Now you have to test your manual.

Here's how to do it:

1. Find a test audience.

2. Make your test audience follow the manual.

3. Listen to their feedback.

4. Revise accordingly.

5. Repeat step 6.1. until no further changes are suggested.

And you're done! You've tested your manual on a real-world audience, considered your test audience's reactions, and revised accordingly! You're pretty much done. The only remaining section is if you ran into problems you couldn't resolve. So if there haven't been any problems, you really are done.

Section 7:

Troubleshooting Your Manual