

Eliminate Nonessential Content

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*How can we know
if content is going
to be difficult to
understand?*

*Why shouldn't we
include **EVERYTHING** we
think people might want
to know?*

*What can we do with
extra content that
only some people
will need?*



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A roadmap for learning

The *Make it Learnable* series shows you how to apply key learning, writing, and information design principles to remove needless obstacles to learning and help people learn, retain, and apply needed information. This overview describes important points about the series, including the roadmap that the series follows.

Research shows that experts typically forget how hard it is to learn their area of expertise and may make incorrect assumptions about how to teach people about the topic. Many people who write instructional materials may not understand how adults learn, adding difficulty into the content.

We need all kinds of people to teach others in this world, and we need them to do a good job. The more capable and skilled people we have in the world, the better the world is for everyone.

These materials are geared towards building adult instructional content in organizational learning settings but, without much effort, they should also apply to other adult learning settings.

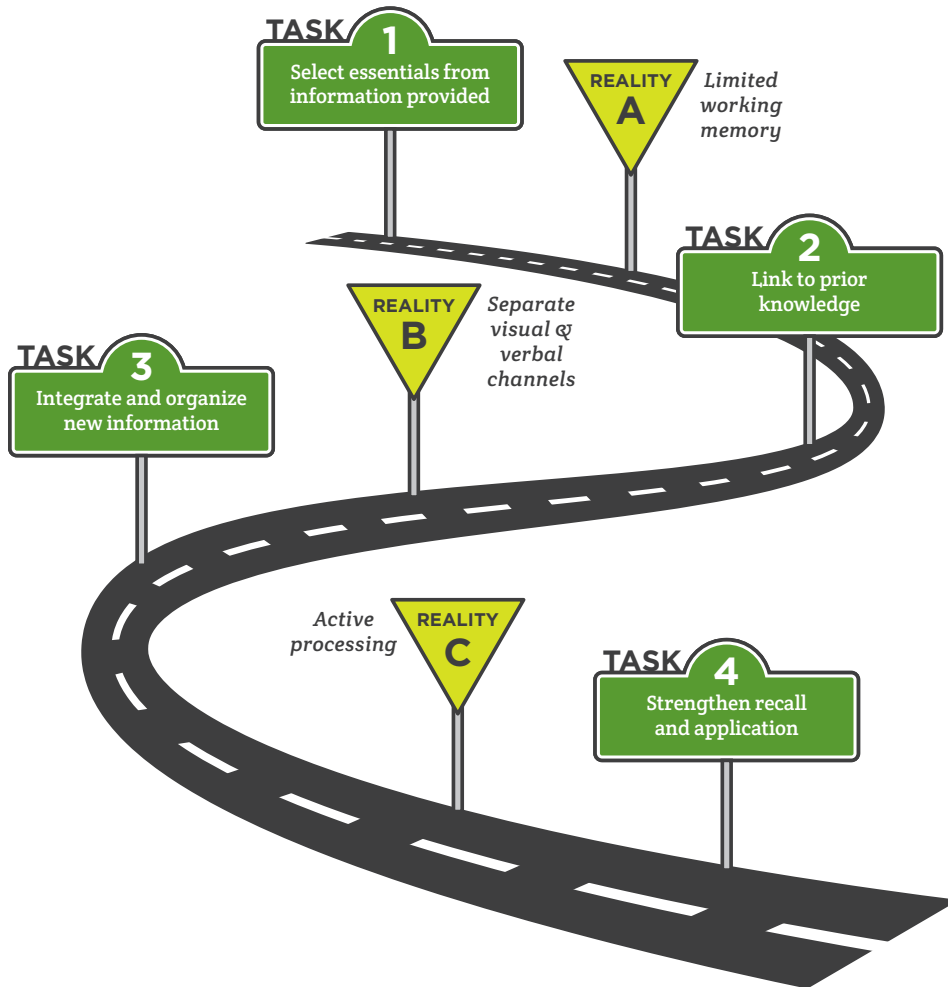
Traveling the learning road

The *Make it Learnable* series follows a roadmap of how adults learn deeply (rather than simply recalling facts) so that they can apply what they have learned to real life situations and solve real life problems.

Research shows that most work requires increasingly challenging information processing skills, and skills are more and more perishable. So, the ability to learn new skills is becoming more and more important. Our ability to help people learn is of increasing value.

I call this roadmap the *Tasks and Realities of Adult Learning Model (TRALM)* and it calls out four learning tasks (1-4) and three sensory realities (A-C) that are common as we learn (Figure 1).

Figure 1. **Tasks and Realities of Adult Learning Model (TRALM)**, adapted from concepts in Foshay, Silber, and Stelnicki's Cognitive Training Model and Mayer's Cognitive Theory of Multimedia Learning



The *numbered tasks* are what adults mentally do to travel the road to deep learning.

The *lettered realities* are sensory/perceptual issues that apply while learning that impact how well adults are able to learn. Our job is to build instruction that takes these sensory/perceptual issues into account.

Tasks and realities, an example

Let's consider what actually happens while adults travel this road and deal with these realities with a workplace learning example.

Sonia is beginning to have problems with the information on her networked computers in her consulting practice. They are also used by a bookkeeper, who comes in bi-weekly to do accounting work, and a part-time manager, who does administrative work out of Sonia's office and from her home. Sonia has recently experienced a situation where inappropriate information was given to a customer and another situation where backed-up information disappeared.

What these things have in common, she realizes, is information on her computers. After spending some time searching online, she finds information about a cybersecurity guide for small businesses (Figure 2) and she is immediately stuck at the first step of her learning road... **1. Select essentials from information provided** because, if you know very little about a topic, it's hard to know what you need to know.

In many instructional situations, we often make it hard to pick out what is essential and applicable.

Figure 2. **FCC Small Biz Cyber Planner 2.0**
(Source: <https://www.fcc.gov/cyberplanner>)

Create your custom planning guide now

Step 1: Provide cover sheet information for your planning guide*

Company Name

City

State

Step 2: Select topics to include in your custom cyber security planning guide
Choose a topic below to decide whether to include it in your plan.

Privacy and Data Security »	
Scams and Fraud »	
Network Security »	
Website Security »	
Email »	
Mobile Devices »	
Employees »	
Facility Security »	
Operational Security »	
Payment Cards »	
Incident Response and Reporting »	
Policy Development, Management »	

Step 3: Click below to finish

[Generate Your Plan](#)

Or [click here to download all sections of guidance.](#)

This guide is not a substitute for consulting trained cyber security professionals.

*This information is used exclusively to populate the report cover sheet and is not retained by the FCC.

Then she notices the teeny tiny print at the bottom that says:

[Or click here to download all sections of guidance.](#)

“Sheesh! They put the most important text in a tiny link at the bottom!?!” she thinks. When she opens the link, the 51 page FCC Cyber Security Planning Guide PDF opens and she finds the Table of Contents (Figure 3).

Figure 3. **Table of contents for Cyber Security Planning Guide**

(Source: <https://transition.fcc.gov/cyber/cyberplanner.pdf>)

Section	Page #s
Privacy and Data Security	PDS-1 - PDS-5
Scams and Fraud	SF-1 - SF-3
Network Security	NS-1 - NS-3
Website Security	WS-1 - WS-5
Email	E-1 - E-2
Mobile Devices	MD-1 - MD-3
Employees	EMP-1 - EMP-3
Facility Security	FS-1 - FS-2
Operational Security	OS-1 - OS-3
Payment Cards	PC-1 - PC-2
Incident Response and Reporting	IRR-1 - IRR-2
Policy Development, Management	PDM-1 - PDM-3
Cyber Security Glossary	CSG-1 - CSG-10
Cyber Security Links	CSL-1 - CSL-3

Early in the document, Sonia notices this phrase...

Security experts are fond of saying that data is most at risk when it's on the move.

That makes total sense to Sonia, and she thinks of when her information gets moved; It's like the books she lends to others. They wouldn't get lost or stolen if they never moved! Neither would the wheelbarrow she lent to her neighbor and then had to ask to get back!

What Sonia is mentally doing is... **2. Linking to prior knowledge**. Since prior knowledge is the foundation for adding additional knowledge, it's very helpful if we help people connect what they are learning to what they already know. But too often, we don't. We just dump content on them as if they are a blank slate. They aren't.

Now what she needs to is... **3. Integrate and organize (the) new information** into what she already knows to make it usable to her. This requires her to *actively process* it by figuring out how it applies to her situation.

Research tells us that we can only handle a certain amount of new content at a time because of *limited working memory*. Overwhelming people is a common problem in instructional

content. As a result, quite a few of our Guides will help you select tactics to *not* do this, as it makes it harder to learn! Because the document is overwhelming to Sonia, it takes her quite a while to figure out what she needs and what doesn't apply.

Once she figures out what she needs, she will move on to... **4. Strengthen recall and application**, which means practicing and performing the tasks needed to get the work done. Sonia conducts the inventory suggested in the document. She learns a method to segregate her most sensitive data onto her own computer, which she doesn't share with anyone else. She decides to change her bookkeeping practices. This creates a problem that she doesn't anticipate so she needs to find additional help.

This condensed example showcases a situation where one person needs to train themselves. When we are training others, our job is to support people all along the road to learning and expertise! We can do this best by using high value learning, writing, and information design principles to remove needless obstacles to learning and help people use, retain, and apply the information they need. That's what these Guides are all about.

This Guide is about tactics that come from the principles in *What the Research Says*. Reading *What the Research Says* will help you understand where these tactics come from.

Writing for instruction

We build instruction (text, graphics, video, audio, etc.) with the purpose of *helping others learn*. Writing for instruction differs from other kinds of writing in its intention. People who write for instruction write for a very specific purpose: **learnability**.

The concept of learnability comes from two closely related ideas: readability and usability. Readability is the ease with which someone can read and comprehend a written text. It depends on vocabulary, sentence structure (such as the order of phrases, and the number of words per sentence or phrase, as well as the syllables per word), and other factors.

Guthrie's research shows that *readability* is a good stand-in for more complex learnability formulas. That means that we can use readability formulas to *approximate* whether what we've written is learnable. This is described in more detail in *What the Research Says*.

Usability evaluates how easily a user interface (UI) is to use in relation to how a user interacts with a device. Usability also refers to improving ease-of-use while designing new user interfaces. Usability considers learnability as the *most* important of all usability goals.

Here's what we know: Learnable content is easier to learn from and apply.

Series organization

The Guides are divided into three divisions: **Research**, **Getting started**, and **Tasks of learning**. Each Guide stands alone.

- **Research**

Describes the WHYS, the scholarly *research behind* the actionable tactics in all of the rest of the Guides.

- **Getting started**

Provides the tools for making your instructional projects most relevant to your audience.

- **Tasks of learning**

Shows how to support TRALM (Figure 1) *for each task of learning*. Each Guide presents 3-5 critical research-based tactics for making learning more effective and contains key tactics, examples, suggested resources, and a checklist to analyze your content.

Make it Learnable series

Research	<ul style="list-style-type: none"> • What the research says
Get started	How-to Guides <ul style="list-style-type: none"> • Identify audience needs • Map content to needs
Tasks of learning <ol style="list-style-type: none"> 1. Select essentials from information provided 2. Link to prior knowledge 3. Integrate and organize new information 4. Strengthen recall and application 	<ul style="list-style-type: none"> • Get learning off to the right start • Make importance and organization clear • Eliminate nonessential content • Use examples well • Visualize what is visual • Make media easier to learn from • Support use and remembering • Create productive practice • Assess learning and performance • Construct multiple choice questions • Create practice(al) scenarios
Evaluate and revise	<ul style="list-style-type: none"> • Evaluate training outcomes • Revise content as needed

Learning objectives

As a result of reading this Guide and doing the activities, you'll:

1. Use **five tactics** for removing excess words and content from your instruction.
2. Practice the **five tactics** in examples and your own content.

I know you will be tempted to skip over #2, but *practice is critical to learning*. I encourage you to practice beyond the Guide by using the tactics and checklist with your own content.

Introduction

As explained in *What the Research Says*, research shows that text complexity contributes to poor readability, and poor readability lowers learnability.

Wordiness and needlessly complex content make it *harder* to select essentials from information provided in a sea of words, paragraphs, and pages. This unnecessary content makes it harder to link new information to prior knowledge.

If there is unnecessary and less necessary information blended in with essential information, it's harder for readers to integrate and organize what is being learned. And when we are helping people strengthen recall of critical information and apply what they are learning, too much information serves to muddle the message, the recall, and the application... Not Good.

Research tells us something else about readers: The newer our readers are to the content, the more concise and simpler the content should be.

To remove unnecessary words and content in order to make it easier to learn, we will concentrate on five critical tactics.

Tactic 1: Prefer simpler words and phrases to complex words and phrases.

Tactic 2: Avoid phrases with no value.

Tactic 3: Use technical terms only when they are needed or expected.

Tactic 4: Use appropriate graphics to replace long descriptions.

Tactic 5: Move less essential content to non-prime space.

When should you apply these tactics?

This Guide applies to textual learning content, such as readings or words on screens or slides. It typically applies to wordiness in audio and video scripts, especially in descriptions.

This content may apply differently with instructional stories and scenarios. Other techniques (such as engaging and realistic dialogues and details) may sometimes take priority over conciseness in such areas.

TACTIC 1:

Prefer simpler words and phrases to complex words and phrases

People too often express ideas in complex words and phrases. This tactic regularly backfires because it reduces readability, which in turn makes the piece less learnable.

Example: National Marine Fisheries Service, National Oceanic and Atmosphere Administration, Quick-Reference Card

This example from the National Marine Fisheries Service, Plain Language Examples (Source: http://www.plainlanguage.gov/examples/before_after/regfisheries.cfm) shows the language before and after simplification.

Before: After notification of NMFS, this final rule requires all CA/OR DGN vessel operators to have attended one Skipper Education Workshop after all workshops have been convened by NMFS in September 1997. CA/OR DGN vessel operators are required to attend Skipper Education Workshops at annual intervals thereafter, unless that requirement is waived by NMFS. NMFS will provide sufficient advance notice to vessel operators by mail prior to convening workshops.

After: After notification from NMFS, vessel operators must attend a skipper education workshop before commencing fishing each fishing season.

This is a good example of how complex words and phrases can confuse a message. The **before** version has 68 words and the **after** version has 18 words. The **after** example could be made simpler still. Ask yourself if a person is likely to **say** *After notification from NMFS, vessel operators must attend a skipper education workshop before commencing fishing each fishing season* in everyday conversation?

An even better rewrite:

After NMFS notifies them, vessel operators must attend a skipper education workshop before they start fishing each season.

Use the conversation test. If you read it aloud and it sounds unnatural or pretentious, it's too complex.

Once you start looking for complex language, practice editing the language to simplify the words and wording.

Resource: Go simple!

The Plain Language site (www.plainlanguage.gov) provides a page that lists complex words and phrases along with simpler words and phrases to use instead. Figure 4 shows a section from their *Simpler Words and Phrases* section, and I recommend that you view the entire list.

They call out words and phrases that happen most regularly, including:

Instead of	Try
addressees	you
commence	begin, start
implement	carry out, start
in accordance with	by, following, per, under
in order that	for, so
in the amount of	for
in the event of	if
utilize	use

Plain Language was developed for United States federal government communications. *Your* top twelve (or fifteen or fifty) words or phrases might be different. Why not go through your communications and training, and see what complex words you use too often; then, make a plan to replace those words with simpler words?

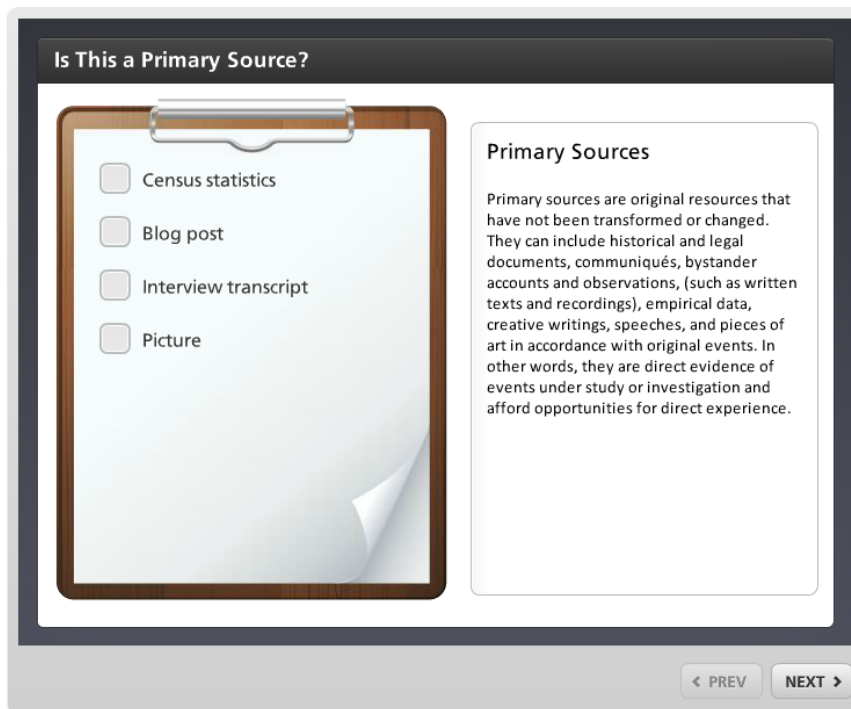
Figure 4. **Simpler words and phrases to use instead of complex words and phrases**
 (Source: <http://www.plainlanguage.gov/howto/wordsuggestions/simplewords.cfm>)

INSTEAD OF	TRY
has a requirement for	needs
herein	here
heretofore	until now
herewith	below, here
however	but
identical	same
identify	find, name, show
immediately	at once
impacted	affected, changed
implement	carry out, start
in accordance with	by, following, per, under
in addition	also, besides, too
in an effort to	to
inasmuch as	since
in a timely manner	on time, promptly
inception	start
incumbent upon	must
indicate	show, write down
indication	sign
initial	first
initiate	start
in lieu of	instead
in order that	for, so
in order to	to
in regard to	about, concerning, on
in relation to	about, with, to
inter alia	(omit)
interface	meet, work with
interpose no objection	don't object
in the amount of	for
in the event of	if

Try it

Figure 5 shows online course content on primary sources. The main objective of this content is for the reader to tell if a source is a primary source. When the reader clicks on each item on the checklist, an answer is revealed.

Figure 5. **Complex version of *Is This a Primary Source?***



I think the content could be much simpler and shorter. Can *you* make it simpler and shorter?

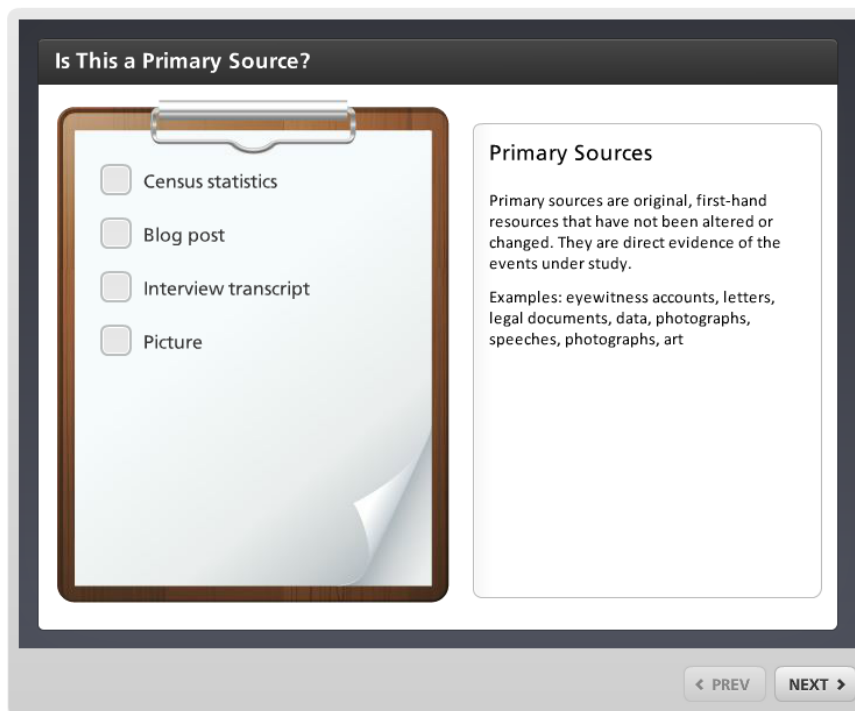
EXERCISE:

Rewrite the content on the screen in Figure 5 (**Is This a Primary Source?**) with simpler words *and* so that you have only the content needed to determine whether the items on the left checklist are primary sources.

My take

In Figure 6, you see how I rewrote this screen with simpler words and with only the words needed to do this exercise. How did what you wrote compare to my version?

Figure 6. **Simpler, shorter version of of *Is This a Primary Source?***



TACTIC 2:

Avoid phrases with no value

Nutritionists want people to avoid soft drinks because they contain empty calories without providing nutritional value. Similarly, some words and phrases have no value, but take up space on a page and in a reader's head. They make it hard for readers to *select essentials from information provided* (from the TRALM model, Figure 1).

Resource: Wordiness List

Dr. Blank from the Department of English at the University of Victoria, Canada (Remember that Canada, Great Britain, Australia, the U.S.A., and other English speaking countries have differences in English usage) keeps a Wordiness List (<http://web.uvic.ca/~gkblank/wordiness.html>), and recommends avoiding these phrases:

- it is/was
- there is/are/was/were
- that is/are/was/were
- which is/are/was/were
- who is/are/was/were

She also recommends getting rid of what she calls “fuzzy words” such as: entirely, extremely, literally, overall, perfectly, ultimately, and others.

Dr. Blank provides an A through Z list of words and phrases that can be simplified or avoided, and which is more comprehensive than the Plain Language *Simple Words and Phrases* list. This is a terrific resource that you will find invaluable!

Passive voice vs. active voice

If you know much about the English language, you may realize that some of the phrases in the bulleted list on the previous page are examples of passive voice.

In active voice, the subject (noun) of the sentence does the action of the sentence. In passive voice, the action is performed by someone or something other than the subject of the sentence. Active voice is more interesting and clearer, so you should use it in most cases. That's another reason for not starting sentences with *there is*, *there are*, *it is*, *it was*, and so on.

Look at the following examples to see whether the passive or active version is clearer and how many words it takes to communicate the point. The first three show *there is*, *it is*, *there are* examples.

Passive voice:

1. ***There is a safety video that must be viewed by every staff member every year.*** (16 words)
2. ***It is better to notify your supervisor about vacation time as far in advance as you can.*** (17 words)
3. ***There are still some situations where you will be asked for refunds.*** (13 words)
4. ***The policies were put into place after gathering input from departments.*** (12 words)
5. ***The phrase can be made into a heading by first selecting it and then picking the heading type.*** (19 words)

Active voice:

1. ***Staff must view a safety video each year.*** (8 words)
2. ***You should notify your supervisor about vacation time as far in advance as possible.*** (14 words)
3. ***You may be asked for refunds in some situations.*** (9 words)
4. ***We gathered departmental input before implementing the policies.*** (8 words)
5. ***You can make the phrase into a heading by selecting it; Then pick a heading type.*** (16 words)

Sometimes using the passive voice is desirable. Passive voice makes sense when you don't know who is responsible or when you don't want to reveal who is responsible, as when you are telling a story.

Resource: Microsoft Word Passive Sentences Finder

Microsoft Word can help you find passive sentences while you are writing. If your version of Word has it, you'll find the option to turn it on (click the checkbox) is in the same place as where you set your spelling and grammar options (under Proofing).

Try it

Pick a segment of your own writing for instruction and copy it so that you can compare it to the original at the end of the exercise.

1. Turn on the Microsoft Word Passive Sentences finder.
2. Decide which passive sentences should be active (you know who did the action and it would make sense to say so). Change those sentences to active.
3. Change all instances of *it is/was*, *there is/are/was/were* if they were not already changed earlier (in 1. and 2.).
4. Choose either the Plain Language *Simple Words and Phrases* list or Dr. Blank's *Wordiness List* and select five words or phrases you want to simplify or avoid in your writing.
5. Replace or delete those five words and phrases in your writing segment.
6. Compare it to the original segment. What do you notice? Better?

TACTIC 3:

Use technical terms only when they are needed or expected

Technical terms can create confusion when people don't understand them. Consider this scenario.

Your local fire department offers a fire fighting seminar for the community and you attend.

The presenter begins the portion of the seminar about the types of "combustibles" normally found in homes, and says, "We typically find four different types of combustibles in homes: ordinary combustibles, which are Class A fires; flammable liquids, which are Class B fires; electrical fires, which are Class C fires; and combustible cooking, which are Class K fires."

Wha? Combustible means flammable, right? You think you understand electrical fires. But what is the difference between flammable liquids and combustible cooking? Aren't both involving liquids? And what's an ordinary combustible?

What would help is a visible translation between technical terms and regular terms:

Ordinary combustible: trash, wood, paper, cloth	Class A
Flammable liquids: oils, grease, tar, gasoline, paints, thinners	Class B
Electric: live electrical equipment	Class C
Combustible cooking: cooking oil, animal fat	Class K

For fire professionals, technical terms have very specific meanings and say a lot in a very short amount of words. Among professionals in the same field, technical terms are expected and save time. To nonprofessionals, technical terms may be gobbledygook until they are explained.

The solution? Use technical terms to be precise, but don't pile technical terms on top of each other for less expert audiences. Define them as you use them and, when using them, make sure the sentences are simple. If there are a lot of technical terms, consider providing a glossary—especially if there are long or complex definitions.

! *A lot of instructional content is online and hyperlinked these days. When using online glossaries, I prefer those that don't take people away from the content, as many people will skip looking up words otherwise, and that can lead to misunderstandings.*

There is often an additional problem with content written by experts, and it can be an overwhelming problem, depending on the writer. Experts tend to focus too much on what *they* know and too little on what the audience needs to know or do. If you are an expert, concentrate on audience questions, problems, and job issues, and focus on giving your audience the information they need for what *they* need to be able to do.

The *Identify Audience Needs* Guide will provide clear tactics for better understanding your audience and what their real needs are. Then the *Map Content to Needs* Guide will provide tactics for clarifying the content for those specific needs.

Here are some **dos** and **don'ts** for using technical terms.

DO

- ✓ *Use Tactics 1* and 3** to reduce overwhelming less expert audiences.*
- ✓ *Define technical terms as you come to them when writing for less expert audiences.*
- ✓ *Tailor technical content to the specific audience.*
- ✓ *Remember that a big picture view, especially with less expert audiences (see Figure 5), can help less expert audiences feel like they can “get it.”*

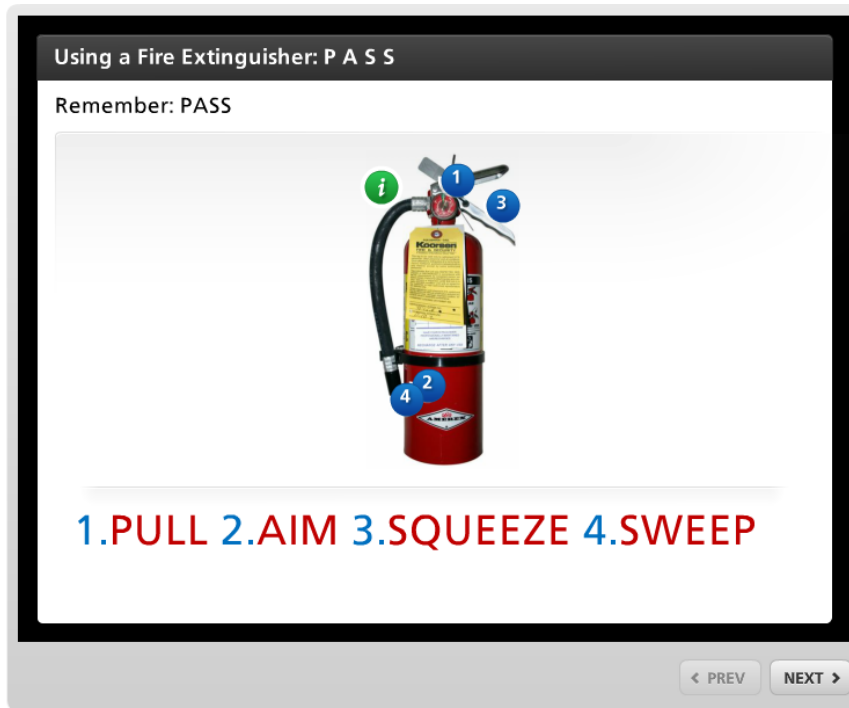
DON'T

- ✗ *Don't use overpowering technical language for a nonprofessional or less expert audience.*
- ✗ *Don't allow experts' love of technical details to overwhelm less technical or less expert audiences.*

* Tactic 1: Prefer simpler words and phrases to complex words and phrases.

** Tactic 3: Use technical terms only when they are needed or expected.

Figure 7. **The basics of using a portable fire extinguisher**



When learning about using fire extinguishers, for example, there's quite a bit of technical information about the different classes of fire extinguishers. It can feel overwhelming. It's comforting to start with a big picture view, like the information in Figure 7, which shows that using a fire extinguisher has only four steps that can be remembered with the memory aid of P-A-S-S.

TACTIC 4:

Replace long descriptions with graphics

Figure 7, the big picture view of using a portable fire extinguisher, shows an example of using graphics *instead* of long descriptions in text. Using graphics rather than text fits a lot of content into a small amount of space.

Instead of *telling* a reader what to do with a long description, it *shows* a portable fire extinguisher and a little text as an overview of what to do with a personal fire extinguisher. The reader can then click on the numbers 1-2-3-4 to get additional information (these pop-ups each have a small amount of text).

According to research by Paivo and by Nelson, we more easily remember graphics/images than text. This is commonly referred to as the Picture Superiority Effect. Pictures are perceptually more distinctive than words and are easier to retrieve. That makes them good for learning content!

It also makes them far more persuasive for advertising, which is why wireless vendors use coverage maps to sell you on their service. (They know the map sticks in your mind.)

When should you use graphics? When what you are describing is *naturally visual*. For example, illustrations that show the usb ports on your laptop and graphs showing changes to birth rates over time. And when you want content to be more easily remembered/memorable. This is why infographics have become so popular.

If a visual is self-explanatory, don't *add* an explanation. Simply add a caption underneath and alt text for those with impaired sight or hearing.

The following are important learning principles for using graphics.

DO

- ✓ *When a graphic requires explanation, explain the graphic using audio narration. You may need captioning for those with impaired sight or hearing.*
- ✓ *If a graphic needs an explanation, place the explanation so that it's adjoining graphic and present narration at the same time as the graphic.*

DON'T

- ✗ *Don't use/add graphics for the sake of adding graphics. Pointless graphics add needless mental effort.*

Richard Mayer's book *Multimedia Learning* explains the research behind these and other multimedia principles. This is a worthwhile read for anyone who wants a deep dive into learning with media.

Try it

A U.S. Government brochure about using portable fire extinguishers is available here: <http://www.hanford.gov/files.cfm/extbrochure.pdf>. The second page is a good example of how graphics can stand in for a great deal of text.

EXERCISE:

Do you think graphics could be used on the last page of this PDF document to stand in for what looks like a *great deal of text*? Any idea what the graphic might look like? (Feel free to sketch it out.)

My take

Another U.S. government agency, the Occupational Health and Safety Administration, built a graphic (Figure 8) to *show* the different types of fire extinguishers and explain what types of fires they are designed to fight. *This content is naturally visual.*

I think a graphic is *much* easier to understand than the text on page 3 of the previously discussed PDF document. That portion of text also seems geared towards a specialized reader, but the rest of the document is for a generalized reader. This is confusing.










Suppose you wanted readers to be able to answer the following questions. Would page 3 of the previously discussed PDF document or the graphic below provide a quicker answer?

1. Which fire extinguisher would be best for a large cooking area?
2. Which fire extinguisher would be best for an area with computers, a kitchen, and papers (files, documents)?

The graphic in Figure 8 would be far quicker and easier for use in answering these questions.

Figure 8. **Types of fire extinguishers**

(Source: https://www.osha.gov/SLTC/etools/evacuation/portable_about.html)

TYPES OF FIRE EXTINGUISHERS			
Different types of fire extinguishers are designed to fight different types of fire. The three most common types of fire extinguishers are: air pressurized water, CO ₂ (carbon dioxide), and dry chemical. The following table provides information regarding the type of fire and which fire extinguisher should be used.			
Extinguisher Type	Type of Fire	Extinguisher Type	Type of Fire
 Water	Ordinary Combustibles Fires in paper, cloth, wood, rubber, and many plastics require a water type extinguisher labeled A. 	 Multi-Purpose	Ordinary Combustibles, Flammable Liquids, or Electrical Equipment Multi-purpose dry chemical is suitable for use on class A, B, and C. 
 CO₂ OR	Flammable Liquids Fires in oils, gasoline, some paints, lacquers, grease, solvents, and other flammable liquids require an extinguisher labeled B. 	Class D	Metals Fires involving powders, flakes or shavings of combustible metals such as magnesium, titanium, potassium, and sodium require special extinguishers labeled D.
 Dry Chemical	Electrical Equipment Fires in wiring, fuse boxes, energized electrical equipment, computers, and other electrical sources require an extinguisher labeled C. 	Class K	Kitchen Fires Fires involving combustible cooking fluids such as oils and fats.  NOTE: Your present fire extinguishing equipment may not put out a fire involving vegetable oil in your deep fat fryer.

Resource: Diagnostic testing

To check your own writing for problems, use the online Writers Diet Test: <http://www.writersdiet.com>. Figure 9 shows an analysis for an excerpt of text in another module.

Figure 9. **Writer’s Diet analysis of a passage from another module**



The WritersDiet Test was designed by Dr. Sword, Professor and Director of the Centre for Learning and Research in Higher Education at the University of Auckland to improve the quality of academic writing, which tends to be filled with complex words and hard to decipher sentences. The WritersDiet Test, in its own words, “identifies some of the sentence-level grammatical features that most frequently weigh down stodgy prose.”

This passage tested as “fit and trim.” “Flabby” means that editing or revision may be needed.

What about using grammar checkers (and spell-check, for that matter)?

If you use a search engine and search *problems with grammar checkers*, you'll find that grammar checkers are just as limited as spell checkers.

Some of the problems noted in numerous articles include seeing acceptable grammar as bad and not finding problems in unacceptable grammar. This is true in MS Word's grammar checks, as well, as noted by Daniel Kies of the Department of English, College of DuPage, who analyzed MS Word's and other grammar checkers on 20 of the most common grammatical problems from college papers (<http://papyr.com/hypertextbooks/grammar/gramchek.htm>).

While you might use them, *don't count on them*. What do I do? I hire an editor. I may use grammar checkers, but I know they have serious flaws and I know I will not find errors in my own work. Plus, almost all writers have an additional flaw; we fall in love with our words, and that's unacceptable.

My editor told me that the more complex the sentences, the more likely grammar checkers are to make mistakes. She said that they are notoriously wrong with dialogue, quotes or citations, and non-traditionally formatted work. It should be obvious that neither grammar checkers or spell check have any ability to tell if what you wrote makes sense.

I write for a living and know I need help. Improve your craft but if you are creating manuscripts for others, count on (good) editors.

TACTIC 5:

Move less essential content to non-prime space

Space in learning content, especially on electronic screens, is limited—and cramming content into the spread of a screen often looks bad, makes it hard to find the essential information, and may even make it hard to read.

And yet, there's usually a need to include at least *some* less essential content because that same material may be useful for some questions that people have that you haven't anticipated. And there may be some content we want or need to provide that doesn't flow well with the rest of the content.

One good approach, when less essential content has to be included, is to go ahead and include it, but move it to non-prime space such as glossaries, appendices, downloadable documents, links, or other supplementary spots.

Here are some **dos** and **don'ts** for moving less essential content.

DO

- ✓ *Move content that answers likely follow-on questions about essential content.*
- ✓ *Determine which type of non-prime space (glossary, appendices, downloadable documents, links, other) makes the most sense based on frequency and type of use.*
- ✓ *Use the same type of non-prime space for the same type of content. For example, definitions are in glossaries, documents are in a resource section, etc.*
- ✓ *Make sure that moving the content doesn't create any confusion or gaps.*
- ✓ *When using links, create a maintenance schedule for checking that links work.*

DON'T

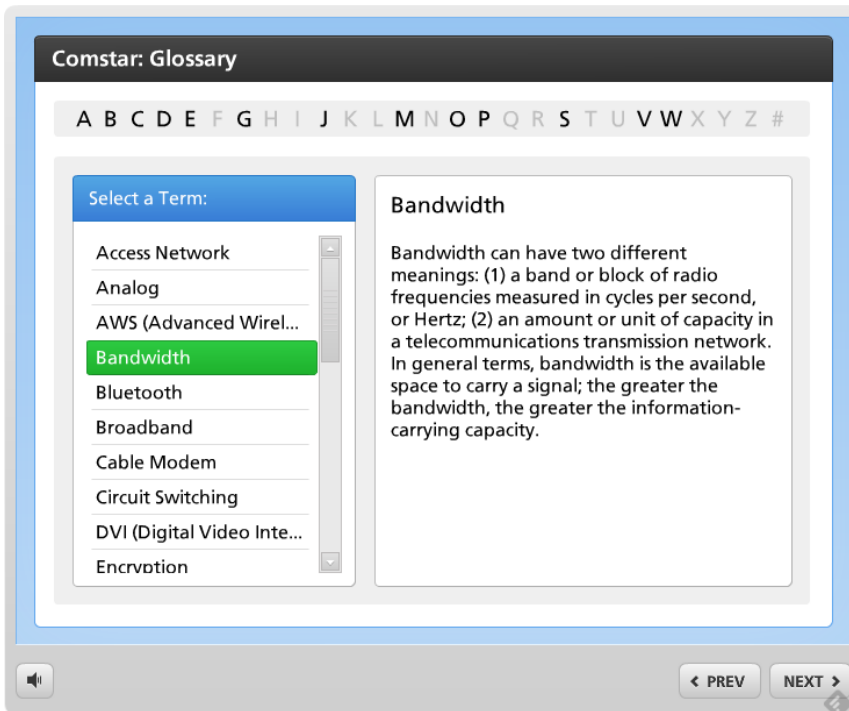
- ✗ *Don't keep nice-to-know content, especially for less expert audiences. Experts can handle extraneous content easier than less expert audiences.*
- ✗ *Don't provide a long list of links, especially for people who are new to the topic. Curate them to the very best ones.*

Caution! People are far less likely to read content that you move to non-prime space. Be sure that there are no legal or other ramifications for having this content “out of the way.”

Tip

Articulate Engage (<https://www.articulate.com/products/engage.php>) makes it easy for anyone to create electronic glossaries. Figure 10 shows an example of a glossary made with Articulate Engage from the Engage demo files.

Figure 10. **Articulate Engage glossary interaction (used with permission)**



Try it

For each of the following topics for a typical *Introduction to Supervision* course, place a checkmark in the column to determine if you would keep it in the course or move it to non-prime space.

Topic	Essential: Keep in the course	Non-Essential: Move to Non-prime space
CEO's welcome to the course		
History of supervision		
Legal obligations of supervisors		
Listing of company departments and supervisors		

My take

For each of the following topics for a typical *Introduction to Supervision* course, here's where I determined each topic should go: in the course or to non-prime space.

Topic	Essential: Keep in the course	Non-Essential: Move to Non-prime space
CEO's welcome to the course	✓	
History of supervision	✗	✗
Legal obligations of supervisors	✓	
Listing of company departments and supervisors		✓

How well did yours and mine match? Here are some of the reasons why I put my topics in the categories I did.

The CEO's welcome is staying because the CEO wants it there. 'Nuff said. The history of supervision is **non-essential** and needs to be taken out of the course. (This was thrown in to see if you were awake!) Legal obligations content is truly essential. Listing of company locations and departments is information for new supervisors, so it can be seen as supplementary material that should be moved to non-prime space.

This isn't all the content of a course, but just a smattering for practice.

Try it

Select a sample of *your* learning content. Determine which elements are less essential. For less essential elements, determine where you can best place them:

- Glossary
- Appendices
- Resources/Downloadable documents (such as PDFs)
- Links
- Other

Try it

What are the **five** tactics this Guide described to remove unnecessary words and content so it can be more learnable? (Try to do this exercise without looking through the Guide.)

- **Tactic 1:**
Hint: Simplicity is a virtue.
- **Tactic 2:**
Hint: Who wants things with no value?
- **Tactic 3:**
Hint: These terms can trip novices up.
- **Tactic 4:**
Hint: A picture is worth a thousand words.
- **Tactic 5:**
Hint: Move it.

In the next section, I provide a checklist for analyzing your own content for wordiness.

Eliminate words and content checklist

Instructions: Use the checklist below to analyze your content. List the fixes needed and then complete them.

Questions	Yes	No	Fixes needed
Did you do the Guide exercises so you can better learn this content?			
Are you writing for less expert audiences or expert audiences?			
Are there any words or phrases you selected from the Plain Language or Plain Language <i>Simple Words and Phrases</i> list or from Dr. Blank's <i>Wordiness List</i> which you want to simplify or avoid?			
Do you need to replace any other complex or obscure words?			
Read your content aloud. Does it pass the conversation test?			
Did you remove: <ul style="list-style-type: none"> • it is/was • there is/are/was/were • that is/are/was/were • which is/are/was/were • who is/are/was/were 			

Questions	Yes	No	Fixes needed
Did the Writer's Diet call attention to specific problems?			
Do you need to eliminate any other words that are of no value?			
Do you need to define, eliminate, or simplify any technical terms?			
Should you replace any long descriptions with graphics?			
If using graphics instead of text, do they <i>need</i> descriptions?			
If using graphics instead of text, are descriptions in the right place?			
Should less essential content be moved to non-prime space?			
Are there audience members who should review your content prior to its wide-spread use?			

Wrap-up

To wrap up the Guide, I'll list the top takeaways from this Guide.

Top ten takeaways

1. Text complexity contributes to poor readability, and poor readability lowers learnability.
2. Wordiness and needlessly complex content make it harder to select essentials from information provided. And unnecessary content makes it harder to link new information to prior knowledge.
3. The newer readers are to the content, the more concise and simple the content should be.
4. Use the Plain Language *Simple Words and Phrases* list or Dr. Blank's *Wordiness List* to find words and phrases you want to eliminate and avoid.
5. Eliminate valueless words and phrases. Conciseness is harder than wordiness for the writer, but makes your content easier for the reader.
6. Read your content aloud (the conversation test) to determine if the content should be simplified.
7. Technical terms can create confusion when people don't understand them. Use technical terms to be precise, but don't pile technical terms on top of each other for less expert audiences. Define them as you use them and, when using them, make sure the surrounding sentences are simple.

8. Content written by experts can focus too much on what *they* know and too little on what the audience needs to know or do. If you are an expert, concentrate on audience questions, problems, and job issues, and focus on giving your audience the information *they* require for what they need to be able to do.
9. Consider using graphics rather than text to fit a lot of content into a small amount of space. This works best when what you are describing is *naturally visual*.
10. When less essential content must be included, move it to non-prime space such as glossaries, appendices, downloadable documents, links, or other supplementary spots.

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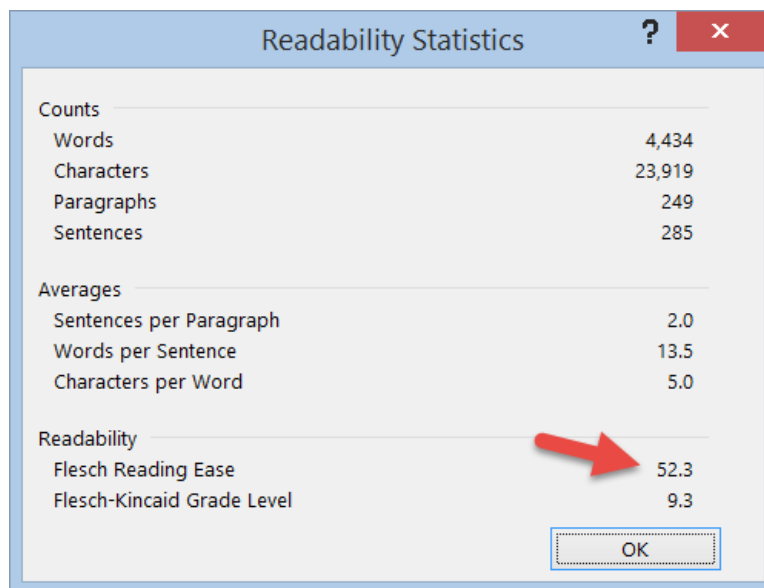
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Notes

1. This work is independent of Articulate Global, Inc., and is not authorized by, endorsed by, sponsored by, affiliated with, or otherwise approved by Articulate Global, Inc.
2. The readability of this Guide, according to MS Word's Flesch Reading Ease readability statistics is 52.3 (Figure 11). I discuss the importance of readability to learnability in the *What the Research Says* Guide. I recommend that you also do readability statistics on your content and make sure that it falls in the proper range for the people using your content.

Later versions of Microsoft Word (usually under Word Options) include readability statistics, based on Flesch Reading Ease. This readability scale uses scores from 0 to 100. The *higher* the number, the *easier* the text is to read. I wanted readability to be in the 50-70 range because I didn't want readability to be an issue for *anyone*.

Figure 11. **Readability statistics of the *Remove Unneeded Words and Content* Guide**



About the author



Thank you for choosing *Make It Learnable* for your professional development. Patti Shank began this venture as a well-known, late career learning expert who wanted to make a difference. She wanted to make it easier for *anyone* who writes learning content (including content experts, instructional designers, teachers, and instructors) to know the most important tactics for building learnable instruction. Just. That. Simple.

Patti Shank is an internationally recognized learning analyst, researcher, and author, who is cited as one of the top 10 international eLearning experts.

She speaks frequently at training and instructional technology conferences, is regularly quoted in training publications and is the co-author of *Making Sense of Online Learning*, editor of *The Online Learning Idea Book*, Vol. 1 and 2, co-editor of *The E-Learning Handbook*, co-author of *Essential Articulate Studio '09*, and author of *Be the (Best) Boss of You*.

Patti was the research director for the eLearning Guild and an award-winning contributing editor for *Online Learning Magazine*. More articles and research are found in eLearning Guild publications, Adobe's *Resource Center*, Magna Publication's *Online Classroom*, and ATD's *Science of Learning Blog*.

Patti completed her Ph.D. at the University of Colorado, Denver. You can find learning resources and learn more about her and her outrageously varied interests at her website, pattishank.com.

We need all kinds of people to teach others in this world, and we need them to do a good job. The more capable and skilled people we have in the world, the better the world is for everyone.

The easier your instructional materials are to use, the better they'll be for the person using them. Research shows that experts typically don't remember how hard it is to learn their area of expertise and, as a result, often make incorrect assumptions about how to teach people who are new to the topic. Many people who write instructional materials may not understand learning, or how to best write for learning, which introduces more difficulty into the content.

Patti wrote the ***Make it Learnable*** series to assist experts, teachers, instructional designers, and others so they reduce the most prevalent problems found in learning content for adults and make learning content easier to learn from and use.

Each Guide is based on instructional, writing, and information design principles. She walks the talk with short Guides with *just what you need*. Lots of examples. Checklists. Practical, hands-on activities.

Praise for the ***Make it Learnable*** series:

"Patti breaks down regularly overlooked learning concepts and makes them relatable both inside and outside of L&D."

~ JD Dillon,
Principal Learning Strategist, Axonify

"I found these to be full of insightful and practical information and especially liked the great tools that Patti has included to enrich presentations and written content."

~ Wendy Hauser, DVM,
President, Peak Veterinary Consulting