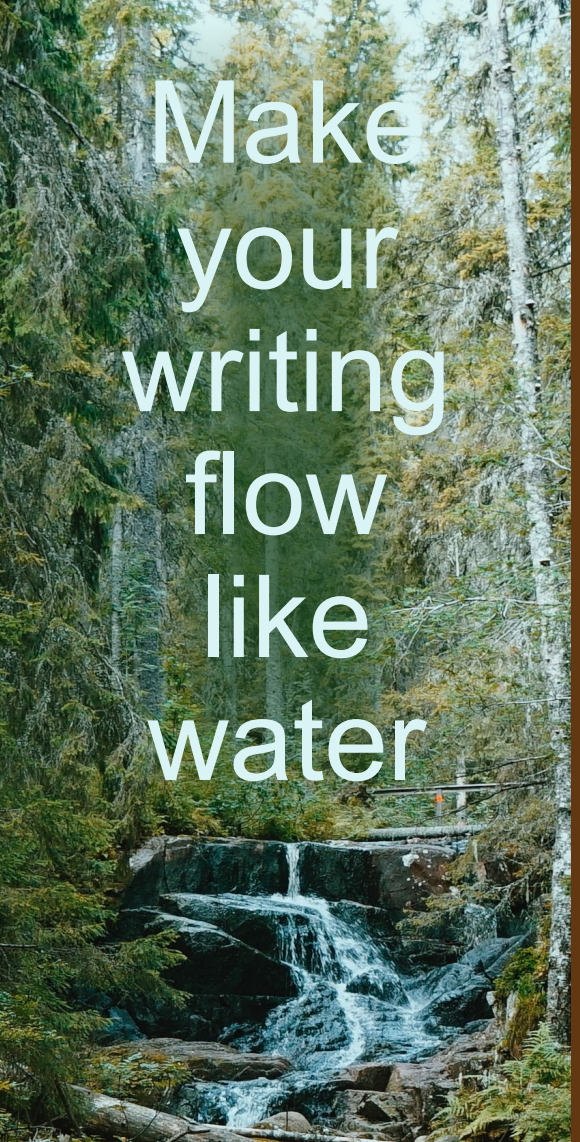
Photo from Unsplash

Make your writing flow like water

Learn how to recognize writing that doesn't flow, explain how to fix it, and write in a way that flows from the outset, using 5 writing techniques that promote flow.

Salis Institute
BUILDING INDEPENDENT RESEARCHERS



1 Use the 5 writing techniques that promote flow

- F1 Say what you're gonna say before you say it
- F2 Move from general information to specific information
- F3 Put 'old' concepts before 'new' concepts
- F4 Link to preceding text within the first 9 words of a sentence
- F5 Include subject and verb in the first 9 words of a sentence

2 Choose words that promote clarity

- 2.1 Use everyday words or annotated jargon
- 2.2 Use the same term (or an echo of the same term) when referring to the same thing
- 2.3 Use the same order of concepts throughout
- 2.4 Avoid the words 'including' and its variants – they are ambiguous

Photo from Unsplash

F1 Say what you're gonna* say before you say it

Akin to the adage from an anonymous speaker:
tell 'em what you're you're gonna tell 'em, tell 'em
(then tell 'em what you told 'em)

✓ *" There are three possible reasons for this observation.*
The first is that…, the second is that… "

Photo by Oscar Nilsson on Unsplash

F1 Say what you're gonna* say before you say it

Akin to the adage from an anonymous speaker:
tell 'em what you're you're gonna tell 'em, tell 'em
(then tell 'em what you told 'em)

✓ *"Anxiety and depression are common amongst people living with cancer. Anxiety affects X times as many people with cancer, while depression affects Y times as many people with cancer, compared to people from the general population."*

Photo by Oscar Nilsson on Unsplash

F1 Say what you're gonna* say before you say it

Akin to the adage from an anonymous speaker:
tell 'em what you're you're gonna tell 'em, tell 'em
(then tell 'em what you told 'em)

"Treatment involved the following multidisciplinary approach: lifestyle (diet and exercise) intervention and the addition of insulin therapy if BGL [blood glucose level] targets were not achieved with lifestyle modification alone."

From a middle paragraph of the Methods of Sweeting AN et al, Diabetes Care, 2016

Photo by Oscar Nilsson on Unsplash

F1 Say what you're gonna* say before you say it

" The steadily increasing use of assisted reproductive technology (ART) has allowed millions of infertile couples to have children. There are concerns regarding the potential consequences of ART on the long-term health of the offspring, but there is little information. Here, we show that healthy children and adolescents conceived by ART display marked vascular dysfunction of the systemic and pulmonary circulation. This problem does not appear to be related to parental factors or hormonal stimulation of ovulation in the mother but to the ART procedure itself. "

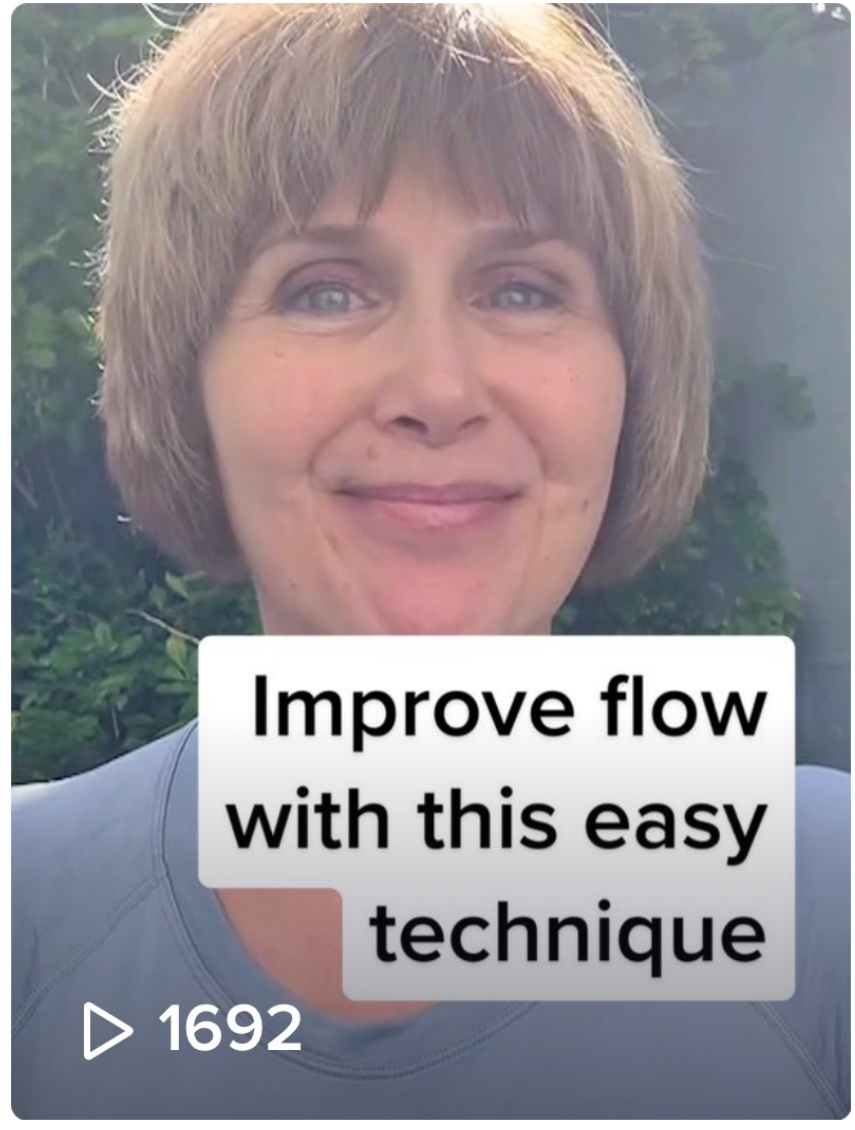
From the first paragraph of the Discussion of Scherrer U et al, Circulation, 2012

Photo by Oscar Nilsson on Unsplash

F1 Say what you're gonna* say before you say it

Watch another example in action
(scan the QR code or click the link below)

https://www.tiktok.com/@salis_institute/video/7087319959398894850?is_from_webapp=1&sender_device=pc&web_id=7063789275557922305



F1 Say what you're gonna* say before you say it

And another example to watch
(scan the QR code or click the link below)

https://www.tiktok.com/@salis_institute/video/7087527540457311489?is_from_webapp=1&sender_device=pc&web_id=7063789275557922305

Over to you
F1 Say what you're gonna* say before you say it

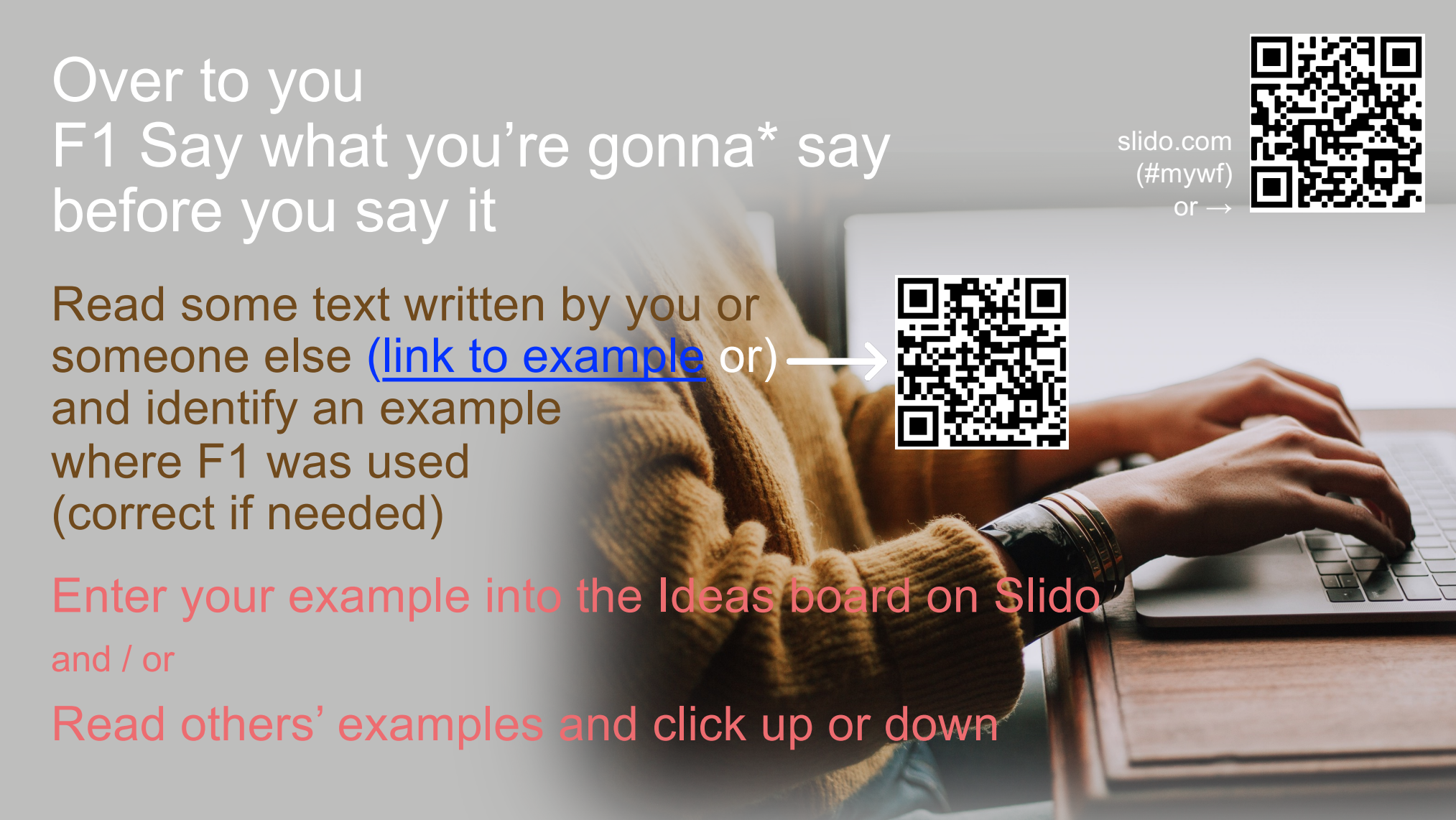
slido.com
(#mywf)
or →

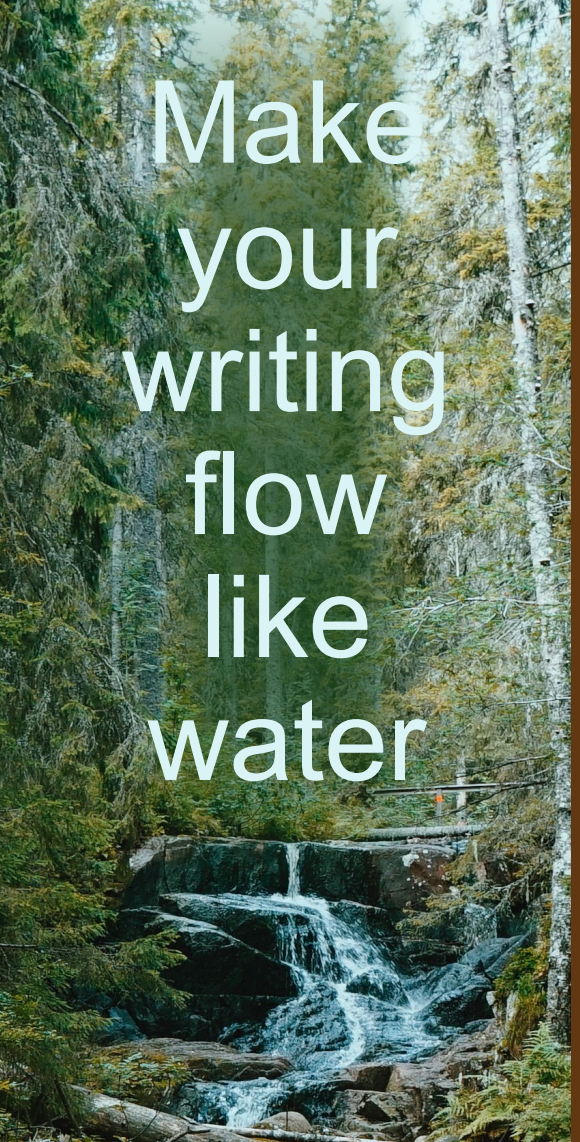
Read some text written by you or someone else (link to example or) → and identify an example where F1 was used (correct if needed)

Enter your example into the Ideas board on Slido

and / or

Read others' examples and click up or down





1 Use the 5 writing techniques that promote flow

- ✓ F1 Say what you're gonna say before you say it
- F2 Move from general information to specific information
- F3 Put 'old' concepts before 'new' concepts
- F4 Link to preceding text within the first 9 words of a sentence
- F5 Include subject and verb in the first 9 words of a sentence

2 Choose words that promote clarity

- 2.1 Use everyday words or annotated jargon
- 2.2 Use the same term (or an echo of the same term) when referring to the same thing
- 2.3 Use the same order of concepts throughout
- 2.4 Avoid the words 'including' and its variants – they are ambiguous

Photo from Unsplash

F2 Move from general information to specific information

slido.com
(#mywf)
or →

Does this paragraph consistently move from general to specific ?

Pleuropneumonia (APP) can present as a dramatic clinical disease or as a chronic, production limiting disease in pig herds. A sudden increase in the number of sick and coughing pigs and a sharp rise in mortalities among grower / finisher pigs may herald an outbreak of APP in a herd. On the other hand, signs may be limited to a drop in growth rate and an increase in grade two pleurisy lesions in slaughter pigs. The disease surfaced in the Australian pig population during the first half of the last decade and ten years on is regarded as one of the most costly and devastating diseases affecting the Australian pig industry.

From Cargill and O'Connor, Writing Scientific Research Articles: Strategies and Steps, Second Edition, 2013

F2 Move from general information to specific information

slido.com
(#mywf)
or →

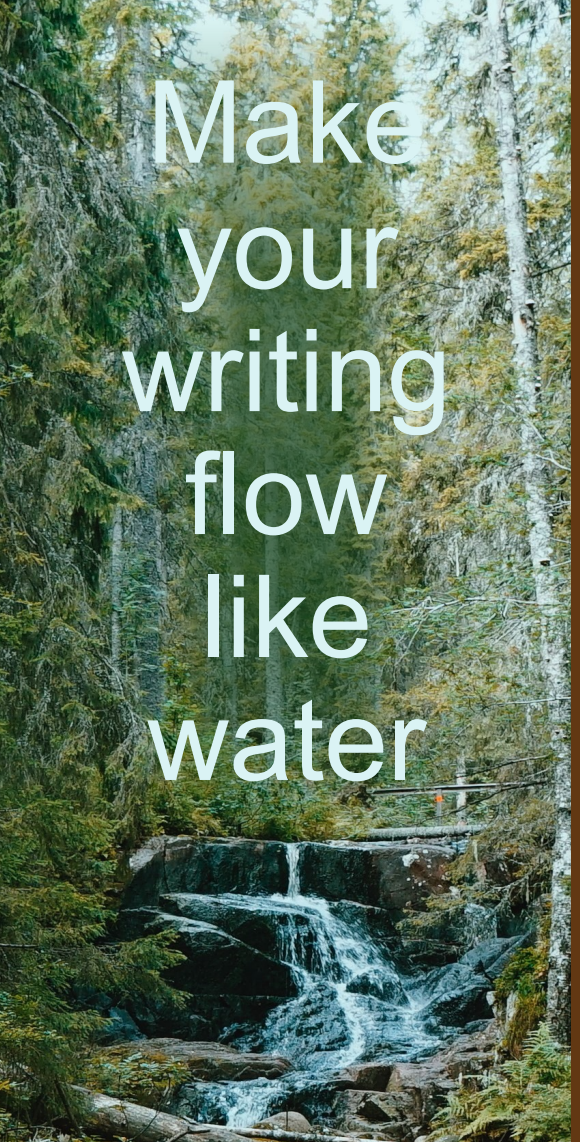
Let’s re-organize the text to make it flow better

F2 Move from general information to specific information

An improved version

Pleuropneumonia (APP) surfaced in the Australian pig population during the first half of the last decade and ten years on is regarded as one of the most costly and devastating diseases affecting the Australian pig industry. It can present as a dramatic clinical disease or as a chronic, production limiting disease in pig herds. A sudden increase in the number of sick and coughing pigs and a sharp rise in mortalities among grower / finisher pigs may herald an outbreak of APP in a herd. On the other hand, signs may be limited to a drop in grown rate and an increase in grade two pleurisy lesions in slaughter pigs.

From Cargill and O'Connor, Writing Scientific Research Articles: Strategies and Steps, Second Edition, 2013



Make your writing flow like water

1 Use the 5 writing techniques that promote flow

- ✓ F1 Say what you're gonna say before you say it
- ✓ F2 Move from general information to specific information
- F3 Put 'old' concepts before 'new' concepts
- F4 Link to preceding text within the first 9 words of a sentence
- F5 Include subject and verb in the first 9 words of a sentence

2 Choose words that promote clarity

- 2.1 Use everyday words or annotated jargon
- 2.2 Use the same term (or an echo of the same term) when referring to the same thing
- 2.3 Use the same order of concepts throughout
- 2.4 Avoid the words 'including' and its variants – they are ambiguous

Photo from Unsplash

F3 Which version is clearer?

slido.com
(#mywf)
or →

Version A

Weight loss via dietary restriction increases measures of appetite such as hunger, desire to eat and estimates of prospective consumption. During weight loss via increased exercise, significant increases in appetite have also been measured.

Version B

Weight loss via dietary restriction increases measures of appetite such as hunger, desire to eat and estimates of prospective consumption. Significant increases in appetite have also been measured during weight loss via increased exercise.

Photo credit to the World Obesity Federation

F3 Put ‘old’ concepts before ‘new’ concepts

- The ‘old’ and ‘new’ concepts in Technique F3, do not refer to the chronological age of concepts, like old and new buildings
- ‘Old’ concepts refer to concepts that were mentioned earlier in the text (e.g., in a preceding sentence or paragraph)
- ‘New’ concepts refer to concepts that have not yet been mentioned in the preceding text
- Technique F3 can only be used in sentences that are linked (e.g., when a second sentence expands on concepts from the previous sentence)

Photo by Roman Fox on Unsplash

Here's a text that many people find difficult to understand. Have a read and see what you think.

Version A

Weight loss via dietary restriction increases measures of appetite such as hunger, desire to eat and estimates of prospective consumption. During weight loss via increased exercise, significant increases in appetite have also been measured.

The problem in this text stems from the second sentence, specifically the first concept in the second sentence (underlined).

Version A

Weight loss via dietary restriction increases measures of appetite such as hunger, desire to eat and estimates of prospective consumption. During weight loss via increased exercise, significant increases in appetite have also been measured.

This first concept in the second sentence is a ‘new’ concept. That is, it’s a concept that’s not been mentioned in the previous sentence. We’ve circled this concept in blue (for ‘new’).

Version A

Weight loss via dietary restriction increases measures of appetite such as hunger, desire to eat and estimates of prospective consumption. During weight loss via increased exercise, significant increases in appetite have also been measured.

Now look at the second concept in the second sentence (underlined). Is that concept a ‘new’ concept that hasn’t been mentioned in the previous sentence?

Version A

Weight loss via dietary restriction increases measures of appetite such as hunger, desire to eat and estimates of prospective consumption. During weight loss via increased exercise, significant increases in appetite have also been measured.

The underlined text in the second sentence is *not* a 'new' concept, because this concept was already mentioned in the previous sentence. Thus, this underlined concept in the second sentence is an 'old' concept.

Version A

Weight loss via dietary restriction increases measures of appetite such as hunger, desire to eat and estimates of prospective consumption. During weight loss via increased exercise, significant increases in appetite have also been measured.

We have circled the ‘old’ concept in the second sentence in gold. Now can you see that the second sentence fails to follow Technique F3 of putting ‘old’ concepts before ‘new’ concepts? Instead, it places the ‘new’ blue concept before the ‘old’ gold concept, and that’s why many found this text hard to read and understand.

Version A

Weight loss via dietary restriction increases measures of appetite such as hunger, desire to eat and estimates of prospective consumption. During weight loss via increased exercise, significant increases in appetite have also been measured.

Here's a modified version of the text from the previous slide. The 'old' concept in the second sentence (in gold) has been moved towards the start of the sentence, so it now appears *before* the 'new' concept (in blue). This text now follows Technique F3 of putting 'old' concepts before 'new' concepts, and that's why most found it easier to understand.

Version B

Weight loss via dietary restriction increases measures of appetite such as hunger, desire to eat and estimates of prospective consumption. Significant increases in appetite have also been measured during weight loss via increased exercise.

F3 Put ‘old’ concepts before ‘new’ concepts

old, gold
new, blue

DON’T say / write…

Weight loss via dietary restriction increases measures of appetite such as hunger, desire to eat and estimates of prospective consumption. During weight loss via increased exercise, significant increases in appetite have also been measured.

DO say / write…

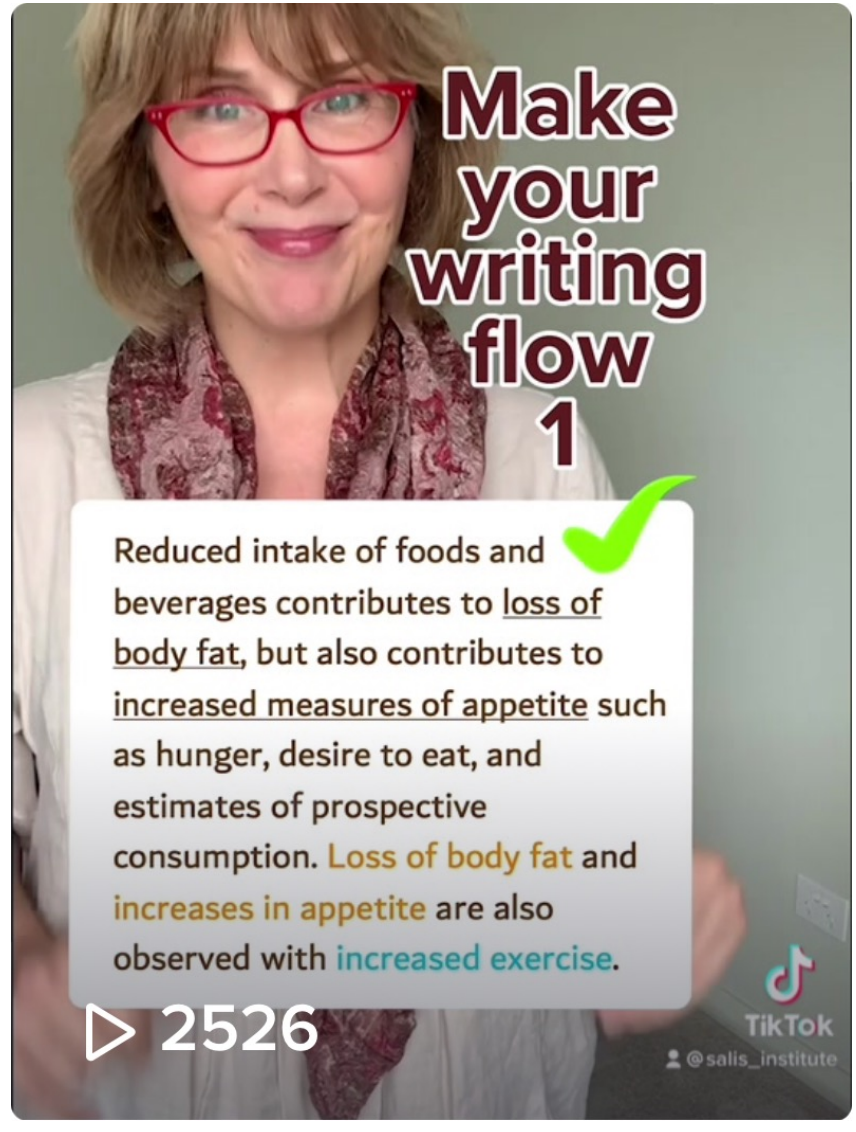
Weight loss via dietary restriction increases measures of appetite such as hunger, desire to eat and estimates of prospective consumption. Significant increases in appetite have also been measured during weight loss via increased exercise.

Photo credit to the World Obesity Federation

F3 Put ‘old’ concepts before ‘new’ concepts

Watch another example in action
(scan the QR code or click the link below)

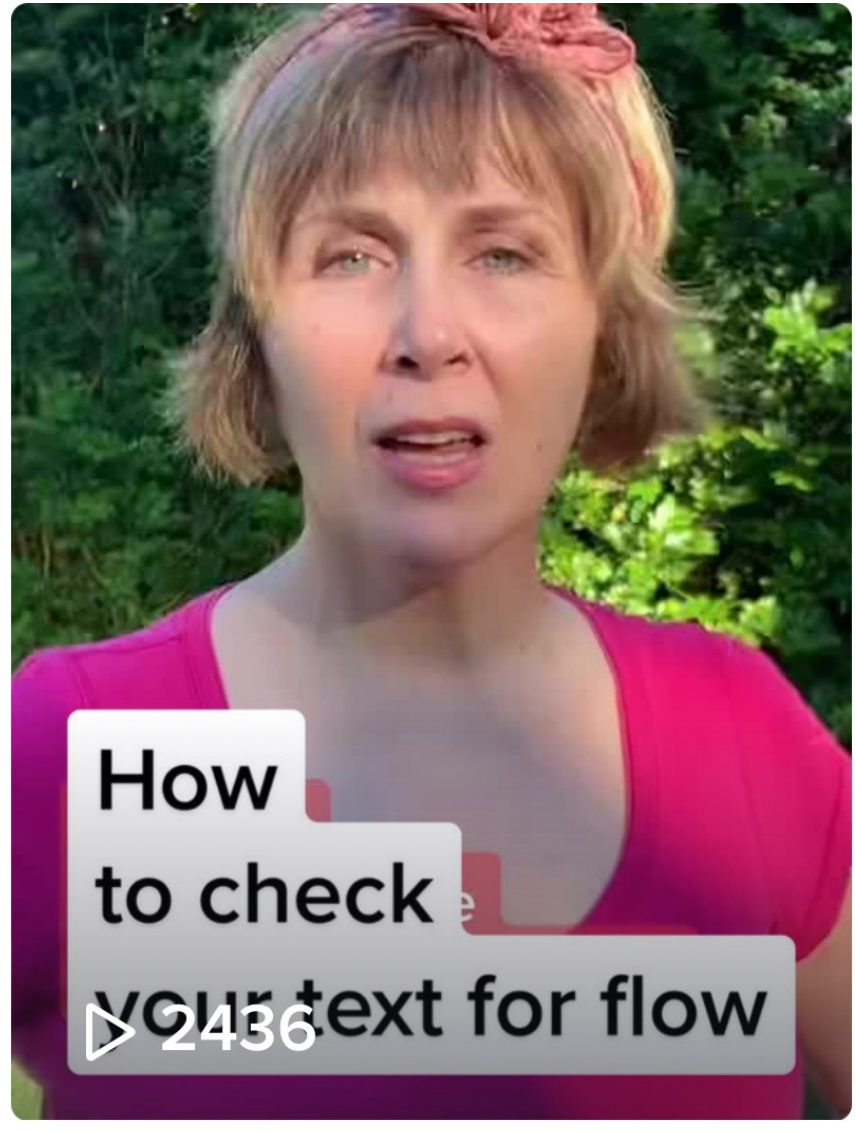
https://www.tiktok.com/@salis_institute/video/7084935983409466626?is_from_webapp=1&sender_device=pc&web_id=7063789275557922305



F3 Put ‘old’ concepts before ‘new’ concepts

And another example to watch
(scan the QR code or click the link below)

https://www.tiktok.com/@salis_institute/video/7086785705917041921?is_from_webapp=1&sender_device=pc&web_id=7063789275557922305



Over to you
F3 Put ‘old’ concepts before ‘new’ concepts

slido.com
(#mywf)
or →

Read some text written by you or someone else, and identify an example where F3 was used (correct if needed)

Enter your example in the Ideas on Slido

and / or

Read others’ examples and upvote / downvote

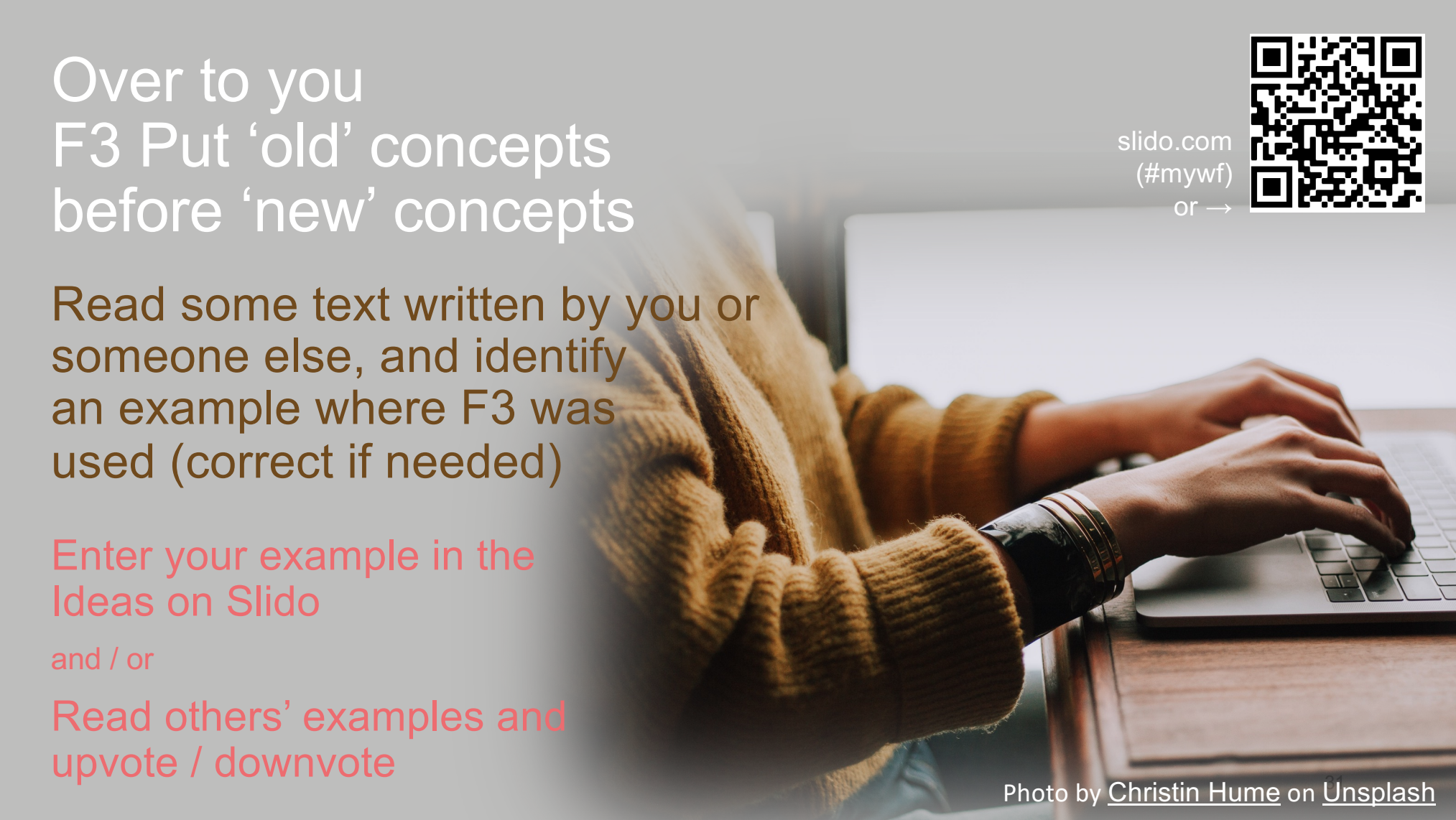
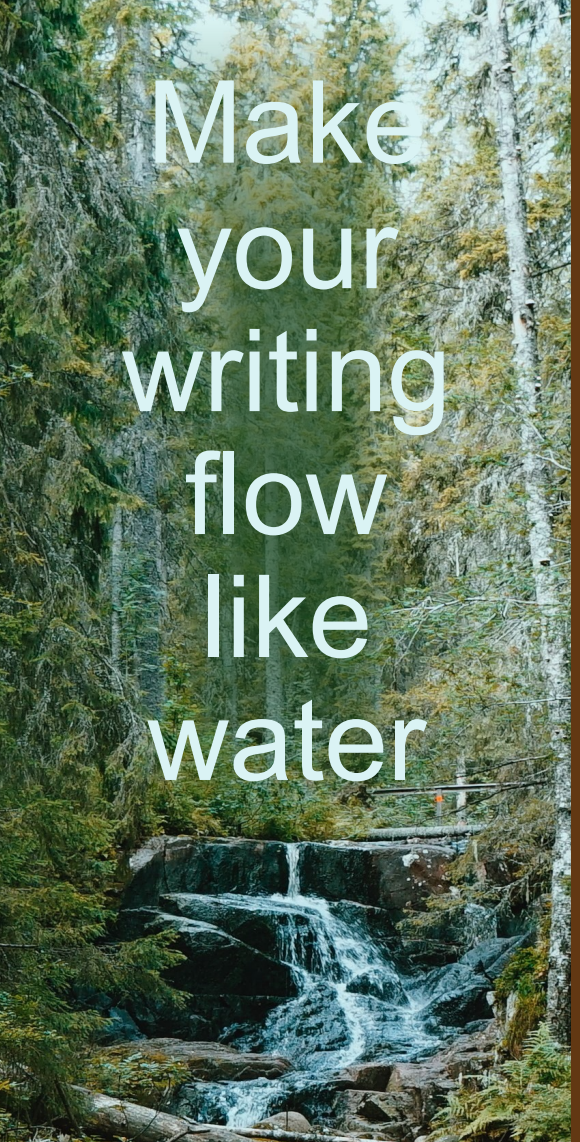


Photo by Christin Hume on Unsplash



Make your writing flow like water

1 Use the 5 writing techniques that promote flow

- ✓ F1 Say what you're gonna say before you say it
- ✓ F2 Move from general information to specific information
- ✓ F3 Put 'old' concepts before 'new' concepts
- F4 Link to preceding text within the first 9 words of a sentence
- F5 Include subject and verb in the first 9 words of a sentence

2 Choose words that promote clarity

- 2.1 Use everyday words or annotated jargon
- 2.2 Use the same term (or an echo of the same term) when referring to the same thing
- 2.3 Use the same order of concepts throughout
- 2.4 Avoid the words 'including' and its variants – they are ambiguous

Photo from Unsplash

F4 Which version is clearer?

slido.com
(#mywf)
or →

Version A

The number of deaths directly attributed to smoking has fallen in most countries since the 1990's. However, it must be pointed out that the number of smoking-related deaths is still on an upward trajectory in most low-to-middle income countries.

Version B

The number of deaths directly attributed to smoking has fallen in most countries since the 1990's. However, the number of smoking-related deaths is still on an upward trajectory in most low-to-middle income countries.

Photo by Victor Garcia on Unsplash

Here's a text that most people find difficult to read and understand. They find that it doesn't flow well. What do you think?

Version A

The number of deaths directly attributed to smoking has fallen in most countries since the 1990's. However, it must be pointed out that the number of smoking-related deaths is still on an upward trajectory in most low-to-middle income countries.

The problem with this text – as with most texts that don't flow well – stems from the first concept in the second sentence (underlined).

Version A

The number of deaths directly attributed to smoking has fallen in most countries since the 1990's. However, it must be pointed out that the number of smoking-related deaths is still on an upward trajectory in most low-to-middle income countries.

In looking at the overall text, can you see that the first concept in the second sentence (underlined) has already been mentioned in the previous sentence (circled in gold here)?

Version A

The number of deaths directly attributed to smoking has fallen in most countries since the 1990's. However, it must be pointed out that the number of smoking-related deaths is still on an upward trajectory in most low-to-middle income countries.

Here, we have circled the first concept in the second sentence in gold, because that concept is an ‘old’ concept that has previously been mentioned in the text.

Version A

The number of deaths directly attributed to smoking has fallen in most countries since the 1990’s. However, it must be pointed out that the number of smoking-related deaths is still on an upward trajectory in most low-to-middle income countries.

In these pages we're dissecting Technique F4, but Technique F4 builds on Technique F3 of putting 'old' concepts before 'new' concepts, so let's first see if this text follows Technique F3. Here, we have underlined the second concept in the second sentence. Is that concept an 'old' or a 'new' concept?

Version A

The number of deaths directly attributed to smoking has fallen in most countries since the 1990's. However, it must be pointed out that the number of smoking-related deaths is still on an upward trajectory in most low-to-middle income countries.

The second concept in the second sentence is a ‘new’ concept, because it hasn’t been mentioned in the previous sentence. We have thus circled that ‘new’ concept in blue.

Version A

The number of deaths directly attributed to smoking has fallen in most countries since the 1990’s. However, it must be pointed out that the number of smoking-related deaths is still on an upward trajectory in most low-to-middle income countries.

What about the third and final concept in the second sentence (underlined)? Is that concept an ‘old’ concept that was mentioned in the previous sentence, or a ’new’ concept that wasn’t mentioned in the previous sentence?

Version A

The number of deaths directly attributed to smoking has fallen in most countries since the 1990’s. However, it must be pointed out that the number of smoking-related deaths is still on an upward trajectory in most low-to-middle income countries.

The third concept in the second sentence is a ‘new’ concept, because it wasn’t mentioned in the previous sentence. We have thus circled that concept in blue, for ‘new’.

Version A

The number of deaths directly attributed to smoking has fallen in most countries since the 1990’s. However, it must be pointed out that the number of smoking-related deaths is still on an upward trajectory in most low-to-middle income countries.

This text follows Technique F3 of putting ‘old’ concepts before ‘new’ concepts, but most people still find it difficult to read and understand. Why? The problem lies in the number of words it takes to link to the old concept in the second sentence. Let’s count.

Version A

The number of deaths directly attributed to smoking has fallen in most countries since the 1990’s. However, it must be pointed out that the number of smoking-related deaths is still on an upward trajectory in most low-to-middle income countries.

This text follows Technique F3 of putting ‘old’ concepts before ‘new’ concepts, but most people still found this text difficult to read and understand. That’s because the text fails to utilize Technique F4 of linking to preceding text within the first 9 words of a sentence. You can see here that it takes 13 words before the ‘old’ concept in the second sentence is revealed.

Version A

The number of deaths directly attributed to smoking has fallen in most countries since the 1990’s. However, it must be pointed out that the number of smoking-related deaths is still on an upward trajectory in most low-to-middle income countries.

1 2 3 4 5 6 7 8 9 10 11 12 13

If we delete text before the ‘old’ concept in the second sentence, we’re able to follow not only Technique F3 of putting ‘old’ concepts before ‘new’ concepts, but also Technique F4 of linking to preceding text within the first 9 words of a sentence. Here, we’ve done it in 7 words. Most people found this text easier to read and understand than Version A.

Version B

The number of deaths directly attributed to smoking has fallen in most countries since the 1990’s. However, ~~it must be pointed out that~~ the number of smoking-related deaths is still on an upward trajectory in most low-to-middle income countries.

1 2 3 4 5 6 7

F4 Link to preceding text in first 9 words of sentence

old, gold
new, blue

DO say / write…

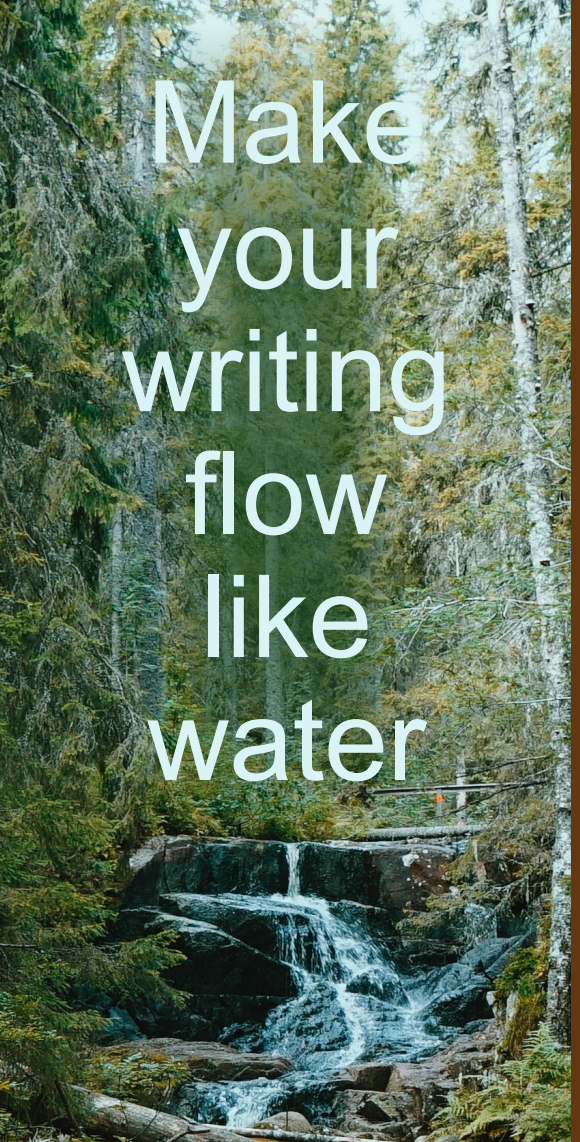
The number of deaths directly attributed to smoking has fallen in most countries since the 1990's. However, the number of smoking-related deaths is still on an upward trajectory in most low-to-middle income countries.

old, gold
new, blue

DON'T say / write…

The number of deaths directly attributed to smoking has fallen in most countries since the 1990's. However, it must be pointed out that the number of smoking-related deaths is still on an upward trajectory in most low-to-middle income countries.

Photo by Victor Garcia on Unsplash



Make your writing flow like water

1 Use the 5 writing techniques that promote flow

- F1 Say what you're gonna say before you say it
- F2 Move from general information to specific information
- F3 Put 'old' concepts before 'new' concepts
- F4 Link to preceding text within the first 9 words of a sentence
- F5 Include subject and verb in the first 9 words of a sentence

2 Choose words that promote clarity

- 2.1 Use everyday words or annotated jargon
- 2.2 Use the same term (or an echo of the same term) when referring to the same thing
- 2.3 Use the same order of concepts throughout
- 2.4 Avoid the words 'including' and its variants – they are ambiguous

Photo from Unsplash

F5 Which version is clearer?

slido.com
(#mywf)
or →

Version A

The image of scientists as objective seekers of truth is periodically jeopardized by the discovery of a major scientific fraud. Recent scandals like Hwang Woo-Suk's fake stem-cell lines or Jan Hendrik Schön's duplicated graphs showed how easy it can be for a scientist to publish fabricated data in the most prestigious journals, and how this can cause a waste of financial and human resources and might pose a risk to human health.

Version B

The image of scientists as objective seekers of truth is periodically jeopardized by the discovery of a major scientific fraud. Recent scandals showed how easy it can be for a scientist to publish fabricated data in the most prestigious journals, and how this can cause a waste of financial and human resources and might pose a risk to human health. Example scandals are Hwang Woo-Suk's fake stem-cell lines or Jan Hendrik Schön's duplicated graphs.

Fanelli D PLOS One 2009

verb

The cat sat on the mat

subject

Verbs are words that show one of the following three things

- An action
  - to sit
  - to investigate
  - to show
  - to prove
  - to hypothesize
- An occurrence
  - to develop
  - to happen
  - to become
- A state of being
  - to be
  - to seem
  - to appear

Every verb in a sentence must have a subject

The subject is usually the Who or What that is doing or being the verb

Photo by Cyrus Chew on Unsplash

F5 Include subject and verb in first 9 words of sentence

old, gold
new, blue

DO say / write…

The number of deaths directly attributed to smoking has fallen in most countries since the 1990's. However, the number of smoking-related deaths **is** still on an upward trajectory in most low-to-middle income countries.

subject (number of smoking-related deaths) — verb (is)

DON'T say / write…

The number of deaths directly attributed to smoking has fallen in most countries since the 1990's. However, it must be pointed out that the number of smoking-related deaths **is** still on an upward trajectory in most low-to-middle income countries.

subject (deaths) — verb (is)

Photo by Victor Garcia on Unsplash

Version A

The image of scientists as objective seekers of truth is periodically jeopardized by the discovery of a major scientific fraud. Recent scandals like Hwang Woo-Suk's fake stem-cell lines or Jan Hendrik Schön's duplicated graphs showed how easy it can be for a scientist to publish fabricated data in the most prestigious journals, and how this can cause a waste of financial and human resources and might pose a risk to human health.

Fanelli D PLOS One 2009

Now let's dissect another text to see if it uses (or not) Techniques F3, F4 and F5. The first step in these text dissections is to look at the first concept in the second sentence (underlined). The next step is to ask yourself: Is that concept an 'old' concept that's been mentioned in the previous sentence? Or is it a 'new' concept that hasn't been mentioned previously?

Version A

The image of scientists as objective seekers of truth is periodically jeopardized by the discovery of a major scientific fraud. Recent scandals like Hwang Woo-Suk's fake stem-cell lines or Jan Hendrik Schön's duplicated graphs showed how easy it can be for a scientist to publish fabricated data in the most prestigious journals, and how this can cause a waste of financial and human resources and might pose a risk to human health.

Fanelli D PLOS One 2009

The first concept in the second sentence (underlined) is an ‘old’ concept, because it was mentioned in the previous sentence (circled in gold). Note that the concept is denoted using different words in the first and second sentences (‘scientific fraud’ and ‘scandals’), but both phrases are referring to the same concept.

Version A

The image of scientists as objective seekers of truth is periodically jeopardized by the discovery of a major scientific fraud. Recent scandals like Hwang Woo-Suk's fake stem-cell lines or Jan Hendrik Schön's duplicated graphs showed how easy it can be for a scientist to publish fabricated data in the most prestigious journals, and how this can cause a waste of financial and human resources and might pose a risk to human health.

Fanelli D PLOS One 2009

Here we have circled the first concept in the second sentence in gold, because it refers to an ‘old’ concept.

Version A

The image of scientists as objective seekers of truth is periodically jeopardized by the discovery of a major scientific fraud. Recent scandals like Hwang Woo-Suk's fake stem-cell lines or Jan Hendrik Schön's duplicated graphs showed how easy it can be for a scientist to publish fabricated data in the most prestigious journals, and how this can cause a waste of financial and human resources and might pose a risk to human health.

Fanelli D PLOS One 2009

What about the second concept in the second sentence (underlined)? Should we circle that in gold (for ‘old’, if it’s been mentioned in the first sentence), or should we circle it in blue (for ‘new’, if it hasn’t been mentioned in the first sentence)? Look at the first sentence to see if this underlined concept in the second sentence has been mentioned there.

Version A

The image of scientists as objective seekers of truth is periodically jeopardized by the discovery of a major scientific fraud. Recent scandals like Hwang Woo-Suk's fake stem-cell lines or Jan Hendrik Schön's duplicated graphs showed how easy it can be for a scientist to publish fabricated data in the most prestigious journals, and how this can cause a waste of financial and human resources and might pose a risk to human health.

Fanelli D PLOS One 2009

That's right! This concept of 'Hwang Woo-Suk's fake stem-cell lines' is a 'new' concept in the text, so we've circled it in blue.

Version A

The image of scientists as objective seekers of truth is periodically jeopardized by the discovery of a major scientific fraud. Recent scandals like Hwang Woo-Suk's fake stem-cell lines or Jan Hendrik Schön's duplicated graphs showed how easy it can be for a scientist to publish fabricated data in the most prestigious journals, and how this can cause a waste of financial and human resources and might pose a risk to human health.

Fanelli D PLOS One 2009

Version A

The image of scientists as objective seekers of truth is periodically jeopardized by the discovery of a major scientific fraud. Recent scandals like Hwang Woo-Suk's fake stem-cell lines or Jan Hendrik Schön's duplicated graphs showed how easy it can be for a scientist to publish fabricated data in the most prestigious journals, and how this can cause a waste of financial and human resources and might pose a risk to human health.

Fanelli D PLOS One 2009

The same is true of the concept of ‘Jan Hendrik Schön’s duplicated graphs’ in the second sentence: it’s a ‘new’ concept because it wasn’t mentioned previously in the text, so we’ve circled it in blue.

Version A

The image of scientists as objective seekers of truth is periodically jeopardized by the discovery of a major scientific fraud. Recent scandals like Hwang Woo-Suk's fake stem-cell lines or Jan Hendrik Schön's duplicated graphs showed how easy it can be for a scientist to publish fabricated data in the most prestigious journals, and how this can cause a waste of financial and human resources and might pose a risk to human health.

Fanelli D PLOS One 2009

Now look at the fourth concept in the second sentence (underlined). Is that an ‘old’ or a ‘new’ concept in this text?

Version A

The image of scientists as objective seekers of truth is periodically jeopardized by the discovery of a major scientific fraud. Recent scandals like Hwang Woo-Suk's fake stem-cell lines or Jan Hendrik Schön's duplicated graphs showed how easy it can be for a scientist to publish fabricated data in the most prestigious journals, and how this can cause a waste of financial and human resources and might pose a risk to human health.

Fanelli D PLOS One 2009

Version A

The image of scientists as objective seekers of truth is periodically jeopardized by the discovery of a major scientific fraud. Recent scandals like Hwang Woo-Suk's fake stem-cell lines or Jan Hendrik Schön's duplicated graphs showed how easy it can be for a scientist to publish fabricated data in the most prestigious journals, and how this can cause a waste of financial and human resources and might pose a risk to human health.

Fanelli D PLOS One 2009

Spot on! The concept of ‘scientist’ in the second sentence is an ‘old’ concept, because it’s already been mentioned in the first sentence – albeit using a slightly different word (‘scientists’ versus ‘scientist’, both circled in gold). Now go ahead and classify the remaining concepts in the second sentence as ‘old’ (gold) or ‘new’ (blue).

Version A

The image of scientists as objective seekers of truth is periodically jeopardized by the discovery of a major scientific fraud. Recent scandals like Hwang Woo-Suk's fake stem-cell lines or Jan Hendrik Schön's duplicated graphs showed how easy it can be for a scientist to publish fabricated data in the most prestigious journals, and how this can cause a waste of financial and human resources and might pose a risk to human health.

Fanelli D PLOS One 2009

Can you see that the second sentence in this text contains a mixture of ‘old’ (in gold) and ‘new’(in blue) concepts? Now let’s analyze this dissected text. Does it use Technique F3 and mention ‘old’ concepts before ‘new’ concepts? Well, kind of, but not completely. What about Technique F4 (link to preceding text in first 9 words of a sentence)?

Version A

The image of scientists as objective seekers of truth is periodically jeopardized by the discovery of a major scientific fraud. Recent scandals like Hwang Woo-Suk's fake stem-cell lines or Jan Hendrik Schön's duplicated graphs showed how easy it can be for a scientist to publish fabricated data in the most prestigious journals, and how this can cause a waste of financial and human resources and might pose a risk to human health.

Fanelli D PLOS One 2009

Version A

The image of scientists as objective seekers of truth is periodically jeopardized by the discovery of a major scientific fraud. Recent scandals like Hwang Woo-Suk's fake stem-cell lines or Jan Hendrik Schön's duplicated graphs showed how easy it can be for a scientist to publish fabricated data in the most prestigious journals, and how this can cause a waste of financial and human resources and might pose a risk to human health.

Fanelli D PLOS One 2009

Yes! This text uses Technique F4, because the second sentence makes a connection to the previous sentence (via the word ‘scandals’) within the first 2 words of the sentence. So if this text is using Techniques F4 and F3, why is it so hard to follow? It boils down to non-use of Technique F5 (include subject and verb in the first 9 words of a sentence).

Version A

The image of scientists as objective seekers of truth is periodically jeopardized by the discovery of a major scientific fraud. Recent scandals like Hwang Woo-Suk's fake stem-cell lines or Jan Hendrik Schön's duplicated graphs showed how easy it can be for a scientist to publish fabricated data in the most prestigious journals, and how this can cause a waste of financial and human resources and might pose a risk to human health.

Fanelli D PLOS One 2009

There are several subject-verb pairs in the second sentence, but the subject-verb pair we're interested in for Technique F5 is the MAIN subject-verb pair: the one that makes sense on its own, even if you delete the other subject-verb pairs from the sentence, or the one that constitutes the main topic of the sentence.

Version A

The image of scientists as objective seekers of truth is periodically jeopardized by the discovery of a major scientific fraud (1). Recent scandals (2) like Hwang Woo-Suk's fake stem-cell lines or Jan Hendrik Schön's duplicated graphs showed (verb) how easy it can be for a scientist to publish fabricated data in the most prestigious journals, and how this can cause a waste of financial and human resources and might pose a risk to human health.

Fanelli D PLOS One 2009

Analyzing this dissected text further, we see that while it uses Techniques F3 and F4, it fails to make use of Technique F5 (include subject and verb in the first 9 words of a sentence). In fact, it's not until 15 words into the second sentence that the main subject and verb of that sentence are revealed. This makes the text unnecessarily difficult to read and understand.

Version A

The image of scientists as objective seekers of truth is periodically jeopardized by the discovery of a major scientific fraud. Recent scandals like Hwang Woo-Suk's fake stem-cell lines or Jan Hendrik Schön's duplicated graphs show how easy it can be for a scientist to publish fabricated data in the most prestigious journals, and how this can cause a waste of financial and human resources and might pose a risk to human health.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

subject

verb

Fanelli D PLOS One 2009

Let's rearrange the text to get the subject and verb within the first 9 words of the second sentence.

Version A

The image of scientists as objective seekers of truth is periodically jeopardized by the discovery of a major scientific fraud. Recent scandals like Hwang Woo-Suk's fake stem-cell lines or Jan Hendrik Schön's duplicated graphs showed how easy it can be for a scientist to publish fabricated data in the most prestigious journals, and how this can cause a waste of financial and human resources and might pose a risk to human health.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

subject

verb

Fanelli D PLOS One 2009

Let's rearrange the text to get the subject and verb within the first 9 words of the second sentence.

Version A

The image of scientists as objective seekers of truth is periodically jeopardized by the discovery of a major scientific fraud. Recent scandals like Hwang Woo-Suk's fake stem-cell lines or Jan Hendrik Schön's duplicated graphs showed how easy it can be for a scientist to publish fabricated data in the most prestigious journals, and how this can cause a waste of financial and human resources and might pose a risk to human health.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

subject

verb

Fanelli D PLOS One 2009

To follow Technique F5 (and include subject and verb in the first 9 words of a sentence), one option is to simply delete text between the subject and verb, as shown at right. Now we cover the subject and verb within the first 9 (3) words of the second sentence.

Version B

The image of scientists as objective seekers of truth is periodically jeopardized by the discovery of a major scientific fraud. Recent scandals like Hwang Woo-Suk's fake stem-cell lines or Jan Hendrik Schön's duplicated graphs showed how easy it can be for a scientist to publish fabricated data in the most prestigious journals, and how this can cause a waste of financial and human resources and might pose a risk to human health.

1 subject 2 verb 3

Adapted from Fanelli D PLOS One 2009

Here's a cleaned-up version of the text. It's easier to read, right? It now makes use of Techniques F3, F4 and F5. However, in editing the text we've changed its content, and it no longer fully reflects what the author was saying. We need to add back the phrases we deleted, but we're going to do it in a way that also follows Techniques F3, F4 and F5.

Version B

The image of scientists as objective seekers of truth is periodically jeopardized by the discovery of a major scientific fraud. Recent scandals showed how easy it can be for a scientist to publish fabricated data in the most prestigious journals, and how this can cause a waste of financial and human resources and might pose a risk to human health

1 subject 2 3 verb

Adapted from Fanelli D PLOS One 2009

In this adapted text we've added back the text we deleted from the middle of the second sentence, and it's now shown as a separate (third) sentence at the end of the text. Does this new sentence make use of Techniques F3, F4 and F5? Let's dissect the text and analyze it.

Version B

The image of scientists as objective seekers of truth is periodically jeopardized by the discovery of a major scientific fraud. Recent scandals showed how easy it can be for a scientist to publish fabricated data in the most prestigious journals, and how this can cause a waste of financial and human resources and might pose a risk to human health. Example scandals are Hwang Woo-Suk's fake stem-cell lines or Jan Hendrik Schön's duplicated graphs.

1 subject 2 verb 3

Adapted from Fanelli D PLOS One 2009

The third sentence uses Technique F3: it places the ‘old’ (gold) concept before the ’new’ (blue) concepts in that sentence. It also uses Techniques F4 and F5: the link to the previous sentence is made within the first 9 (2) words, and the subject and verb of that sentence are included in those first 9 (3) words. The text is easier to read than the original, do you agree?

Version B

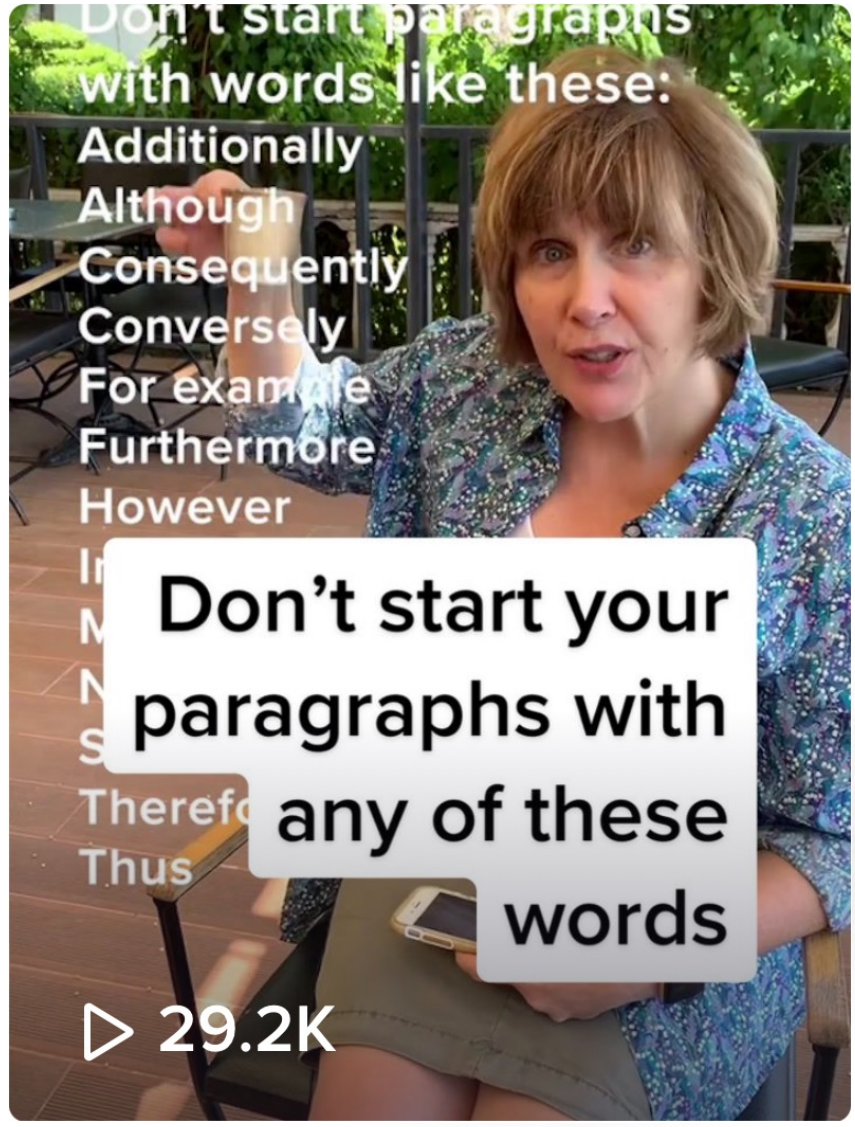
The image of scientists as objective seekers of truth is periodically jeopardized by the discovery of a major scientific fraud. Recent scandals showed how easy it can be for a scientist to publish fabricated data in the most prestigious journals and how this can cause a waste of financial and human resources and might pose a risk to human health. Example scandals are Hwang Woo-Suk's fake stem-cell lines or Jan Hendrik Schön's duplicated graphs.

Adapted from Fanelli D PLOS One 2009

F3 F4 and F5 explain why it's better NOT to start a paragraph with these words

Additionally
Although
Consequently
Conversely
For example
Furthermore
However
Indeed
Moreover
Nonetheless
Similarly
Therefore
Thus

https://www.tiktok.com/@salis_institute/video/7098314009895603457?is_from_webapp=1&sender_device=pc&web_id=7063789275557922305



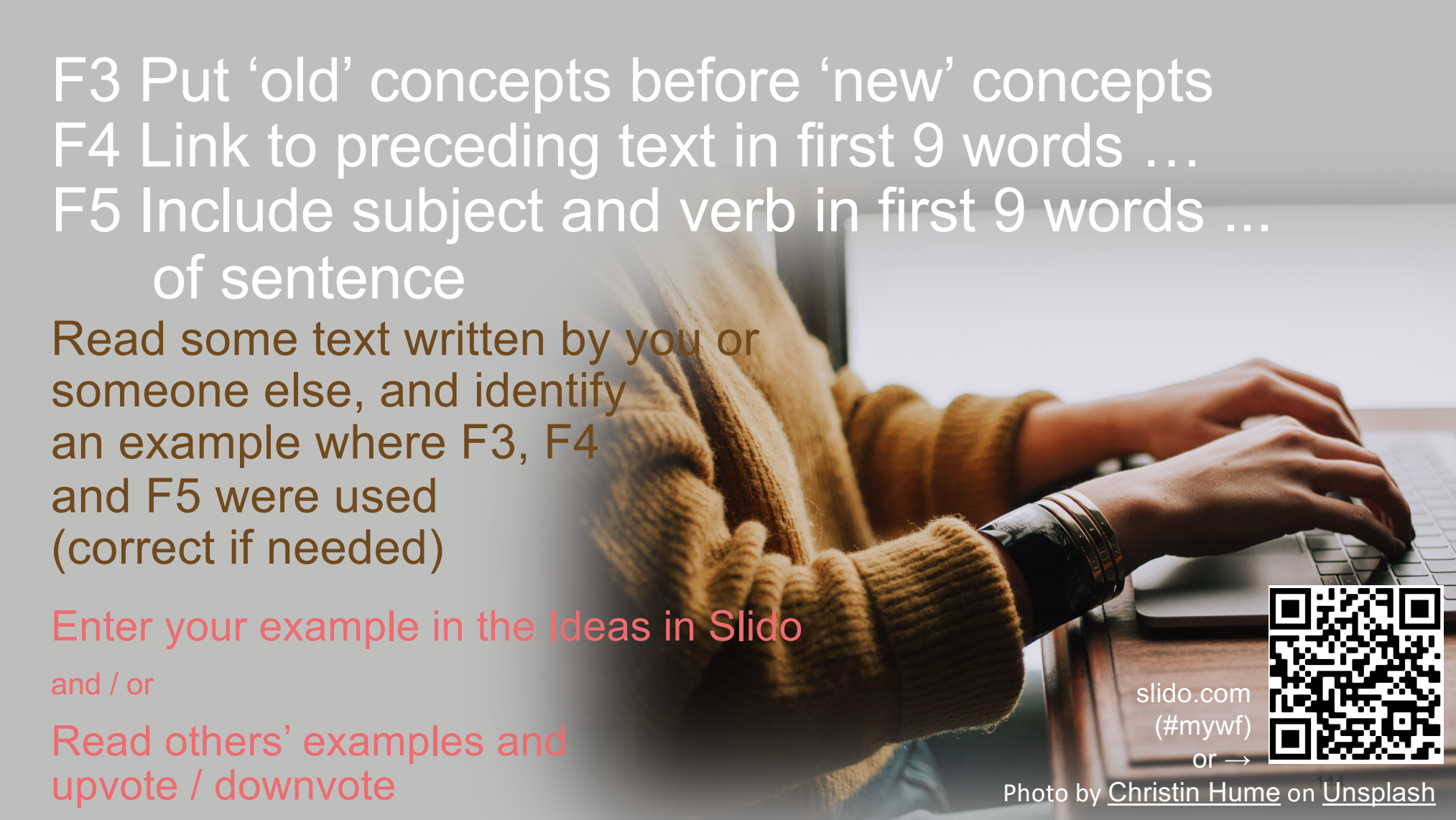
F3 Put ‘old’ concepts before ‘new’ concepts
F4 Link to preceding text in first 9 words …
F5 Include subject and verb in first 9 words ...
of sentence

Read some text written by you or someone else, and identify an example where F3, F4 and F5 were used (correct if needed)

Enter your example in the Ideas in Slido

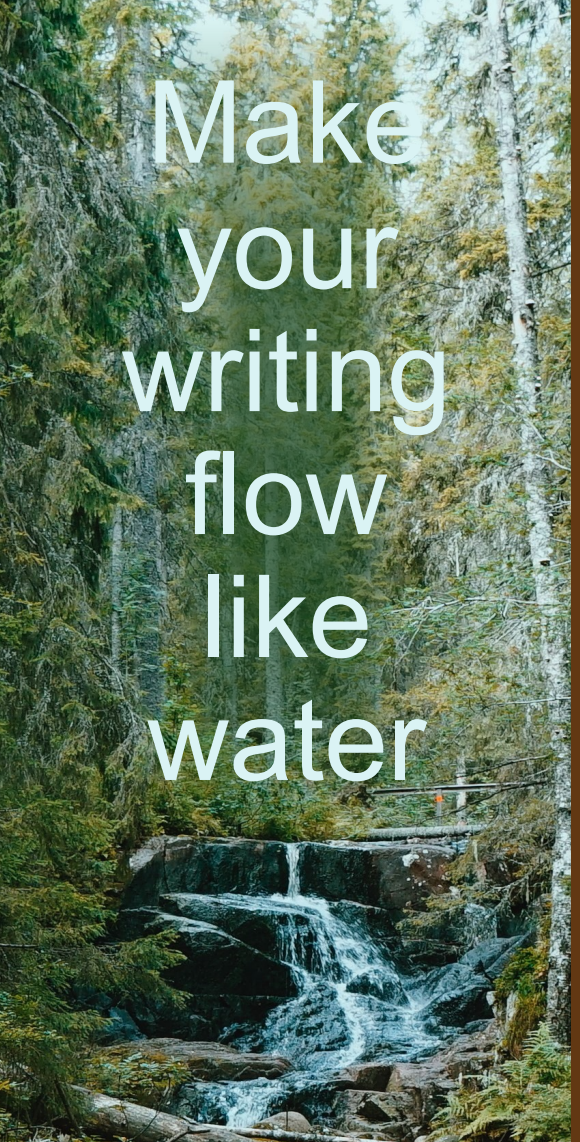
and / or

Read others’ examples and upvote / downvote



slido.com
(#mywf)
or →

Photo by Christin Hume on Unsplash



Make your writing flow like water

1 Use the 5 writing techniques that promote flow

- F1 Say what you're gonna say before you say it
- F2 Move from general information to specific information
- F3 Put 'old' concepts before 'new' concepts
- F4 Link to preceding text within the first 9 words of a sentence
- F5 Include subject and verb in the first 9 words of a sentence

2 Choose words that promote clarity

- 2.1 Use everyday words or annotated jargon
- 2.2 Use the same term (or an echo of the same term) when referring to the same thing
- 2.3 Use the same order of concepts throughout
- 2.4 Avoid the words 'including' and its variants – they are ambiguous

Photo from Unsplash

Abstract

Words are the building blocks of communicating science. As our understanding of the world progresses, scientific disciplines naturally enrich their specialized vocabulary (jargon). However, in the era of interdisciplinarity, the use of jargon may hinder effective communication among scientists that do not share a common scientific background. The question of how jargon limits the transmission of scientific knowledge has long been debated but rarely addressed quantitatively. We explored the relationship between the use of jargon and citations, using 21 486 articles focusing on cave research, a multidisciplinary field particularly prone to terminological specialization, and where linguistic disagreement among peers is frequent. We demonstrate a significant negative relationship between the proportion of jargon words in the title and abstract and the number of citations a paper receives. Given that these elements are the hook to readers, we urge scientists to restrict jargon to sections of the paper where its use is unavoidable.

Biological science practices

Specialized terminology reduces the number of citations of scientific papers

Alejandro Martínez† and Stefano Mammola†

Published: 07 April 2021

https://doi.org/10.1098/rspb.2020.2581

Review history

Abstract

https://www.researchgate.net/publication/343794568_Specialized_terminology_limits_the_reach_of_new_scientific_knowledge

CAREERS | PUBLISHING

Want other scientists to cite you? Drop the jargon

6 APR 2021 • BY KATIE LANGIN

SHARE:

MICROSTOCKHUB/ISTOCK

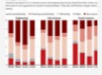
Got a tip for Science's news department?

CONNECT ›

ADVERTISEMENT

SCIENCEINSIDER

22 NOV 2021
BY JEFFREY MERVIS
House science committee chair leaves bipartisan legacy as she bids farewell



22 NOV 2021
BY JEFFREY MERVIS
Black students take on more debt and get fewer slots on grants, data show

https://www.science.org/content/article/want-other-scientists-cite-you-drop-jargon

2.1 Use everyday words or annotated jargon

✓ *"In the brain, the arcuate nucleus of the hypothalamus (ARC) is the region that controls ..."*

✗ *"The ARC controls ..."*

It's not about finding substitute words for technical words, it's about adding extra words to describe the technical words

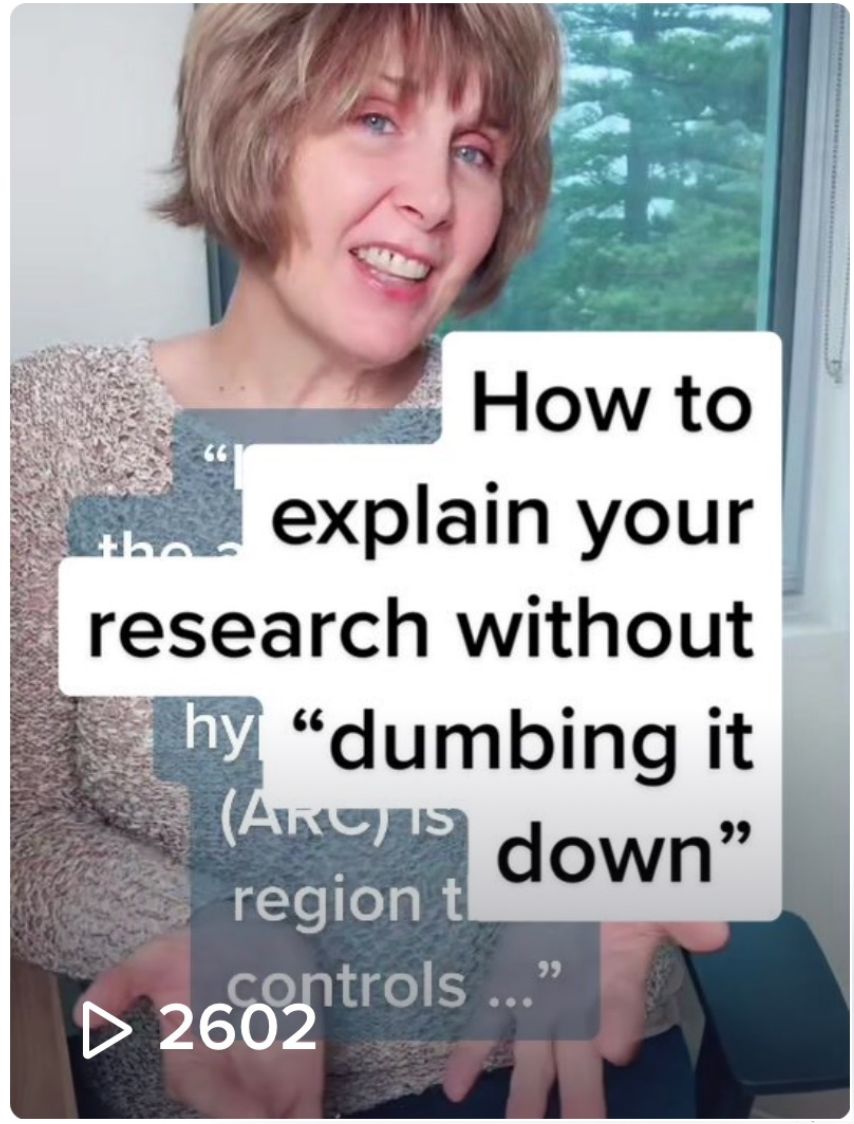
Annotated jargon like this is useful because it is acceptable to experts and non-experts alike

Photo by Brett Jordan on Unsplash

2.1 Use everyday words annotated jargon

Avoid abbreviations at all cost!

https://www.tiktok.com/@salis_institute/video/7091479864066215169?is_from_webapp=1&sender_device=pc&web_id=7063789275557922305



2.1 Use everyday words or annotated jargon

✓ *“ Plant pathogens secrete proteinaceous effector molecules that promote disease …”*

✗ *“ Plant pathogens secrete proteinaceous molecules <u>called</u> effectors that promote disease …”*

Sounds a bit patronizing?

✗ *“ Plant pathogen effectors promote disease …”*

Photo by Brett Jordan on Unsplash

2.1 Use everyday words or annotated jargon

What technical terms do you use when writing about your research? How can you annotate them to make them understandable to people outside your immediate field?

✓ *"Productivity of these coral reef fishes, which is defined as biomass or energy produced per unit time, is low"*

✗ *"Productivity of these coral reef fishes is low"*

Photo by Brett Jordan on Unsplash

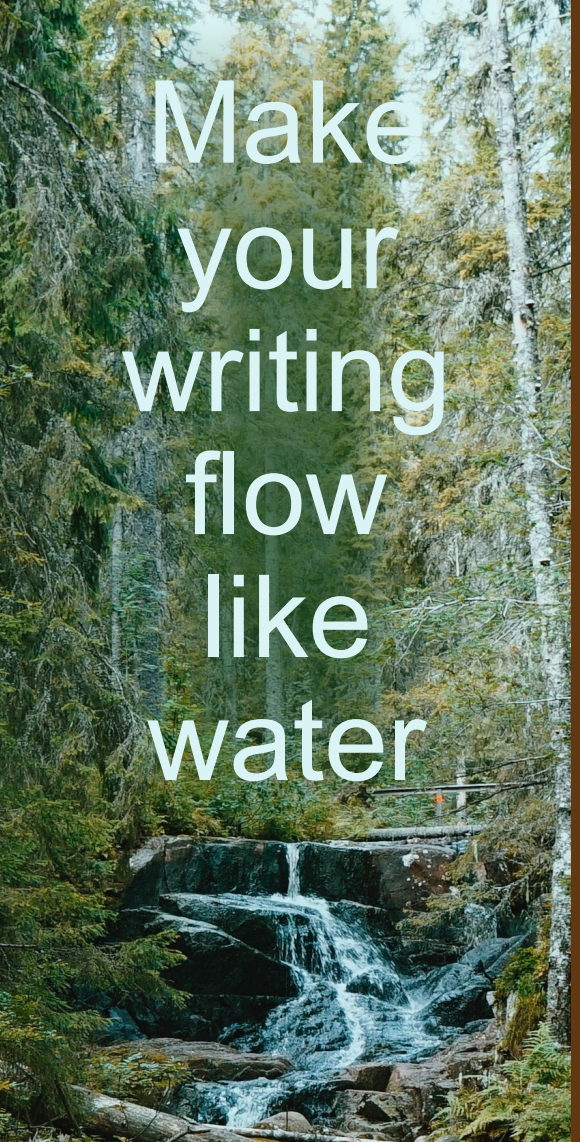
2.1 Use everyday words or annotated jargon

Abbreviations are a type of jargon

Avoid abbreviations at all cost because they…

- confuse readers
- don't save you that many words

https://www.tiktok.com/@salis_institute/video/7101983665739042049?is_from_webapp=1&sender_device=pc&web_id=7063789275557922305



Make your writing flow like water

1 Use the 5 writing techniques that promote flow

- F1 Say what you're gonna say before you say it
- F2 Move from general information to specific information
- F3 Put 'old' concepts before 'new' concepts
- F4 Link to preceding text within the first 9 words of a sentence
- F5 Include subject and verb in the first 9 words of a sentence

2 Choose words that promote clarity

- 2.1 Use everyday words or annotated jargon
- 2.2 Use the same term (or an echo of the same term) when referring to the same thing
- 2.3 Use the same order of concepts throughout
- 2.4 Avoid the words 'including' and its variants – they are ambiguous

Photo from Unsplash

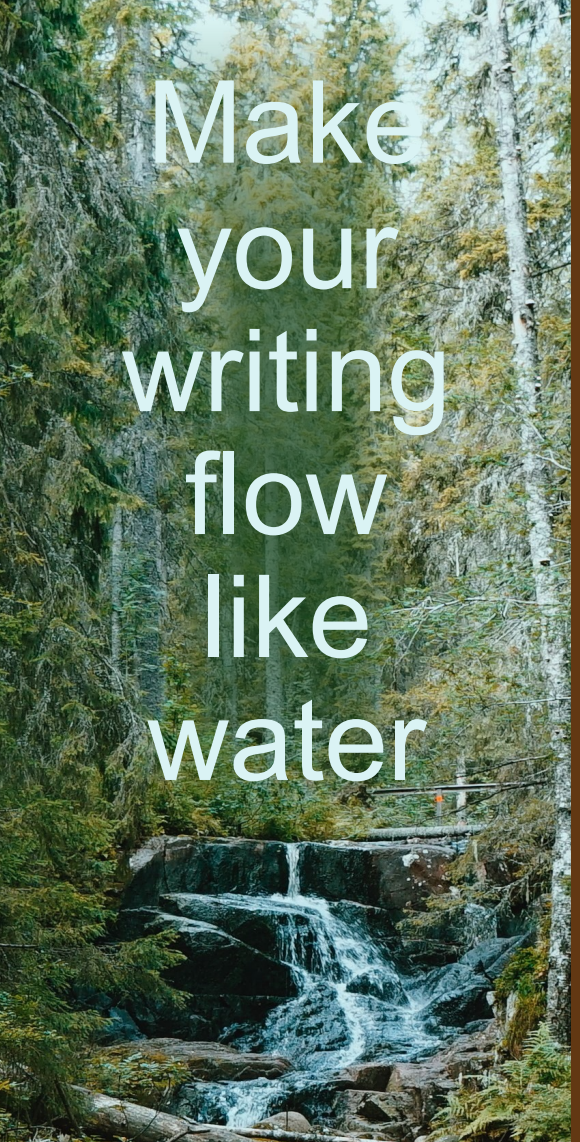
2.2 Use the same term (or an echo of the same term) when referring to the same thing

What is 'the thing' (concept) you refer to most often when talking about your research? What consistent term(s) can you use when referring to it?

- ✓ *dietary treatments for obesity**
- ✓ *dietary energy restriction for the treatment of obesity*
- ✓ *treatments for obesity involving dietary energy restriction*
- ✓ *weight loss achieved by dietary treatments for obesity*
- ✗ *lifestyle-based obesity treatments*
- ✗ *energy restriction for the treatment of obesity*
- ✗ *energy-restricted diets for obesity*
- ✗ *weight loss interventions*

* first term used / preferred term

Photo by Brett Jordan on Unsplash



Make your writing flow like water

1 Use the 5 writing techniques that promote flow

- F1 Say what you're gonna say before you say it
- F2 Move from general information to specific information
- F3 Put 'old' concepts before 'new' concepts
- F4 Link to preceding text within the first 9 words of a sentence
- F5 Include subject and verb in the first 9 words of a sentence

2 Choose words that promote clarity

- 2.1 Use everyday words or annotated jargon
- 2.2 Use the same term (or an echo of the same term) when referring to the same thing
- 2.3 Use the same order of concepts throughout
- 2.4 Avoid the words 'including' and its variants – they are ambiguous

Photo from Unsplash

2.3 Use the same order of concepts throughout

*We aim to implement a sustainable and supported clinical pathway for managing anxiety and depression in patients with cancer**

✓ *Compared to the general population, anxiety and depression disproportionately affect patients with cancer.*

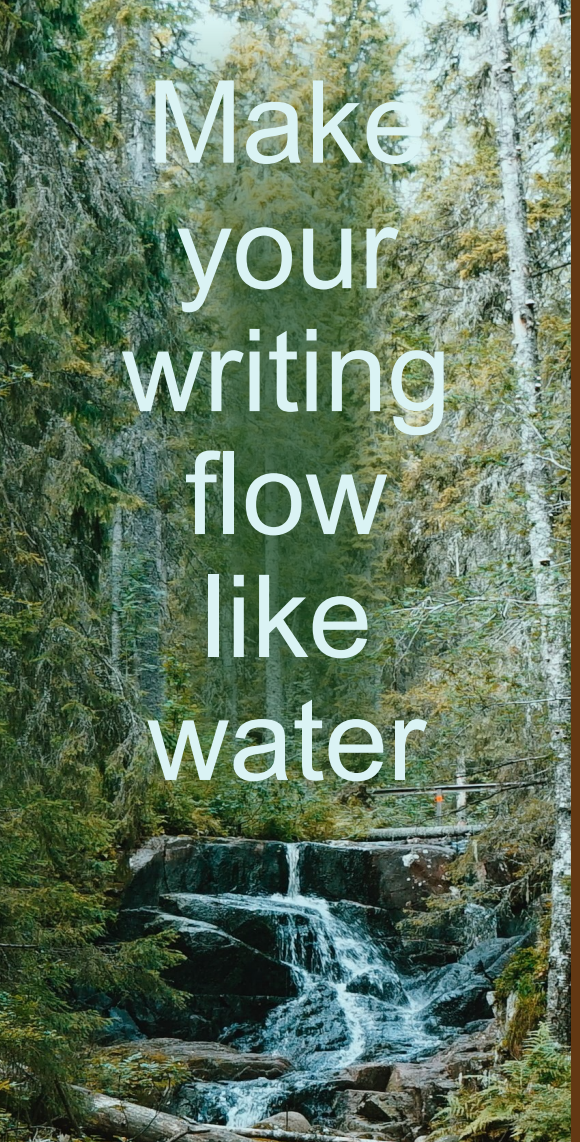
✓ *While five clinical pathways have been shown to offer the support requested by this patient population, these clinical pathways fail to combine sustainability with that support.*

✗ *Compared to the general population, depression and anxiety disproportionately affect patients with cancer.*

✗ *While five clinical pathways have been shown to offer the support requested by this patient population, these clinical pathways are not sustainable.*

* first order of terms used / preferred order of terms used

Photo by Brett Jordan on Unsplash



Make your writing flow like water

1 Use the 5 writing techniques that promote flow

- F1 Say what you're gonna say before you say it
- F2 Move from general information to specific information
- F3 Put 'old' concepts before 'new' concepts
- F4 Link to preceding text within the first 9 words of a sentence
- F5 Include subject and verb in the first 9 words of a sentence

2 Choose words that promote clarity

- 2.1 Use everyday words or annotated jargon
- 2.2 Use the same term (or an echo of the same term) when referring to the same thing
- 2.3 Use the same order of concepts throughout
- 2.4 Avoid the words 'including' and its variants – they are ambiguous

Photo from Unsplash

2.4 Avoid the word ‘including’ and its variants – they are ambiguous

These words are used for saying that a person or thing is **part of** a particular group or amount

This means that when you use the word ‘including’ or its variants (e.g., ‘included’), there is a possibility that you may be talking about just a part of something bigger

Photo by Brett Jordan on Unsplash

2.4 Avoid the word ‘including’ and its variants – they are ambiguous

✓ *“Full selection criteria for this clinical trial have been published previously (reference), and the selection criteria relevant to this secondary analysis were x, y and z.”*

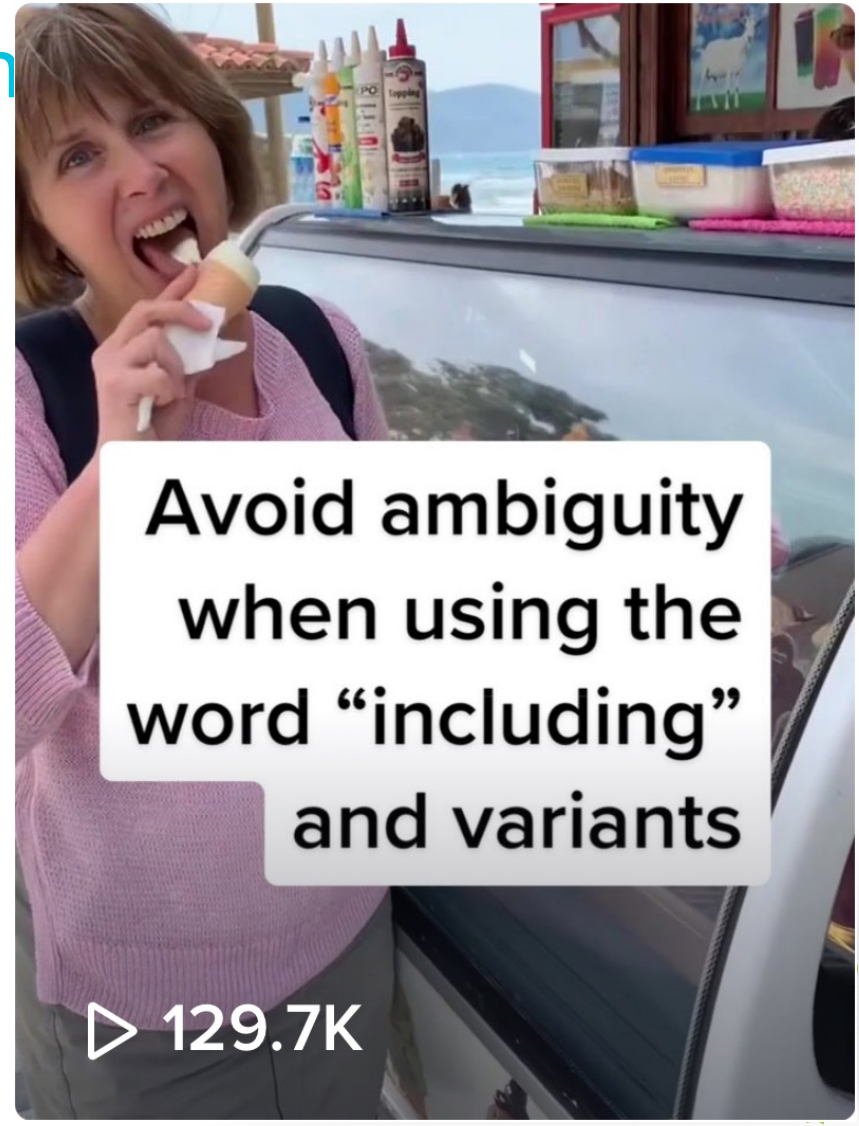
✓ *“Full selection criteria for this clinical trial are listed in Table x. Noteworthy are the selection criteria of x, y and z.”*

✗ *“Selection criteria for this clinical trial included x, y and z.”*

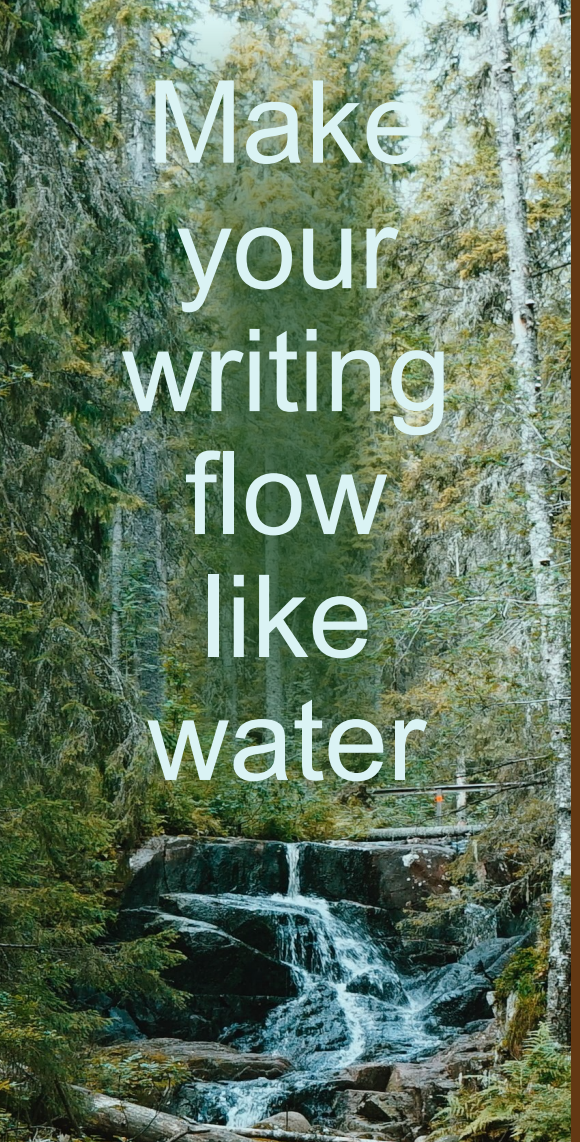
Photo by Brett Jordan on Unsplash

2.4 Avoid the word ‘includin and its variants – they are ambiguous

Ice cream flavours are a relatable way to explain this ☺



https://www.tiktok.com/@salis_institute/video/7099453506402159873?is_from_webapp=1&sender_device=pc&web_id=7063789275557922305



Make your writing flow like water

1 Use the 5 writing techniques that promote flow

- F1 Say what you're gonna say before you say it
- F2 Move from general information to specific information
- F3 Put 'old' concepts before 'new' concepts
- F4 Link to preceding text within the first 9 words of a sentence
- F5 Include subject and verb in the first 9 words of a sentence

2 Choose words that promote clarity

- 2.1 Use everyday words or annotated jargon
- 2.2 Use the same term (or an echo of the same term) when referring to the same thing
- 2.3 Use the same order of concepts throughout
- 2.4 Avoid the words 'including' and its variants – they are ambiguous

Photo from Unsplash

How was this training for you?

(1-minute survey)

21 Jun 2022

Scan the above code with your phone camera or click below to take survey

https://www.salisinstitute.com/feedback-forms/feedback-on-mywf-21-jun-2022/

Photo by bantersnaps on Unsplash