

V.0.3 Documentation Guide

WR227: Tech Comm

Introductory Technical, Scientific & Professional Communication
Portland State University | Summer Term 2020

File Name: “_README_V.0.3 Documentation Guide”

[Slides](#) and [Drive video](#) (or [Zoom](#))

See also [Example v.0.3 document](#)

Version History

Version	Description	Name	Date
v1.0	Publication of “_README_V.0.3 Documentation Guide”	Covey	08/03/2020

Contents

Version History	1
Contents	1
Introduction	2
Week 7 - Micro Level - Draft v.0.3 - Reviewing and Revising	2
Micro-level overview: words (lexis) and sentences (syntax) in tech comm	3
Words and sentences as units of thought that add up to cognitive load	3
Instructions	5
Step 1: Revise old v.0.2 draft material into your v.0.3 draft	5
1.1: Study guide resources	6
Step 2: Annotate certain micro body elements in your v.0.3 draft	6
Overview	6
2.1: Annotate your technical word use (lexis) in your document	7
2.1.1: Insert one annotation for technical terminology (see also pages 47–51)	7
2.1.2: Insert one annotation for hedging or boosting (see also pages 51–53)	7
2.2: Annotate your technical sentence structure (syntax) in your document	8
2.2.1: Insert annotation that discusses the net effect of your sentence complexity	8
Step 3: Perform a peer review of your assigned class member’s doc	12
Rubric	13

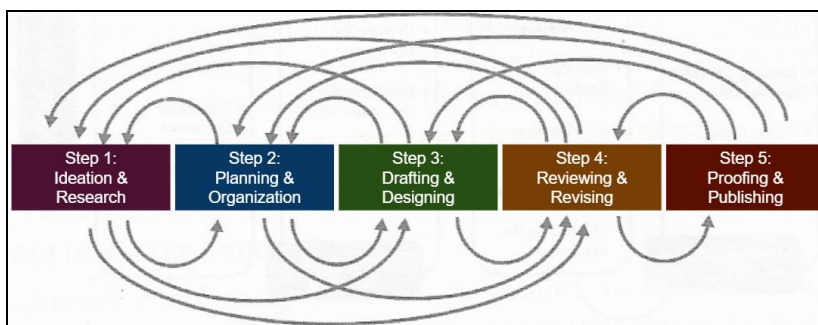
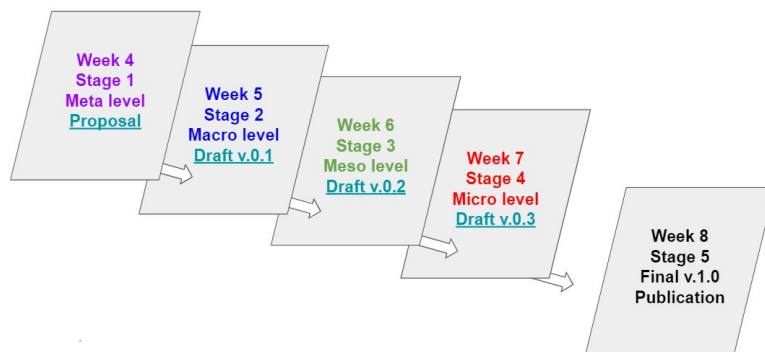
Introduction

Week 7 means we're looking at micro-level writing, also known as the "granule" arrangement and style of words (lexis) in sentences (syntax). In week 7, we also move to version 0.3, which entails refining your rough draft paragraph material created during the v.0.2 draft.

- Proposal
- v.0.1 (week 5): Macro (global) arrangement and style of sections in a document
- v.0.2 (week 6): Meso (intermediate) arrangement and style of paragraphs and visuals
- v.0.3 (week 7): Micro (granule) arrangement and style of words (lexis) & sentences (syntax)
- v.1.0 (week 8, final)

Week 7 - Micro Level - Draft v.0.3 - Reviewing and Revising

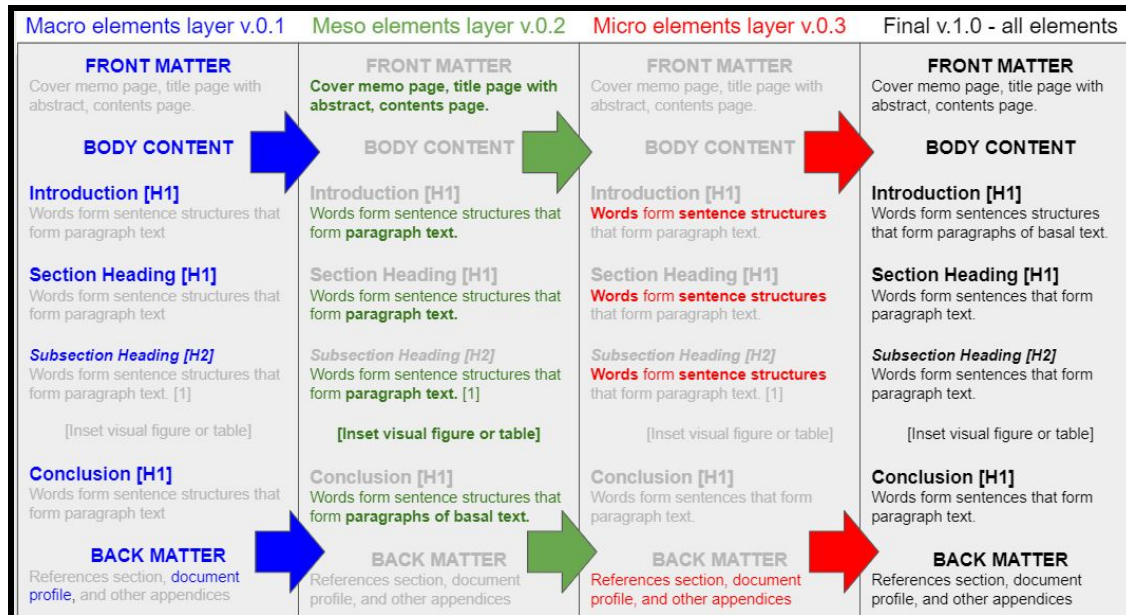
Below are the [5 stages to publishing a document](#) as they relate to the portfolio writing project:



By the end of the v.0.3 review and this week, you will have finished moving through not just the micro level (word and sentence), but that also means that we've completed the meso (paragraph) and micro (global) levels. Publication, the final phase, is on the horizon next week.

Micro-level overview: words (lexis) and sentences (syntax) in tech comm

Micro-level writing in technical communication refers specifically to word choice (lexis) and sentence structures (syntax). In Kmiec and Long's model, the micro-level elements follow the macro and meso, as shown in the conceptual figure below (micro = red layer).



At this point, the different elements and layers should be complementing and supplementing one another, overlapping in a broader sense of authority, clarity, and unity through concision, cohesion, accuracy, contrast, and comprehensiveness.

Words and sentences as units of thought that add up to cognitive load

This week, we take a microscopic look at a document's micro-level structures and elements: word choices and sentence structures through the grammatical lens of technical communication.

Kmiec & Longo's "net effect" = cognitive load / mental weight / neural energy during reading



A sentence can be one word or more, building up in complexity from single-verb sentences to simple sentences, compound sentences, complex sentences, and beyond. [For a summary of the grammar building blocks discussed below, see [SUNY's Technical Writing](#) textbook.]

Verb

Stop!

Verb / direct object (imperative mood)

Paste into the document. Sign the contract. Go from there.

Subject noun / verb / direct object (noun or adjective)

The software application was insufficient. People donated supplies in person.

Subject noun / verb / direct object / indirect object

CoViD-19 was transmitted to cats by humans.

Subject noun / verb / direct object / indirect object / modifying phrase (evidential)

CoViD-19 was transmitted to cats by humans, the study found.

Subject noun / booster or hedger / verb / direct object / indirect object / modifying phrase

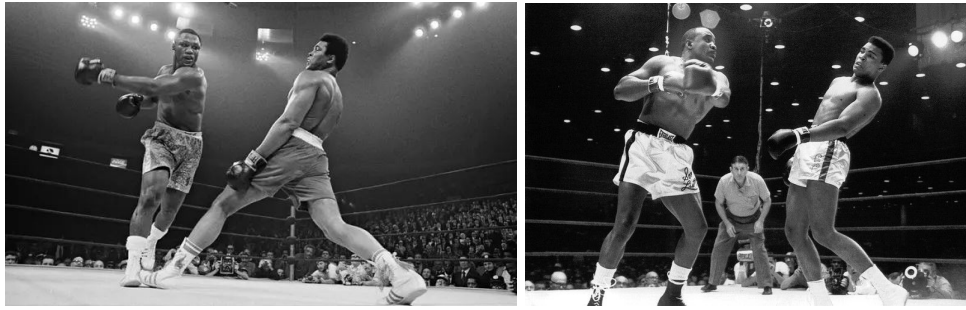
CoViD-19 was likely transmitted to cats by humans, according to American Medical Association.

Put parts of speech in strategic patterns and points of emphasis in sentences and paragraphs

CoViD-19 was probably given to cats by humans, according to some tests. However, whether the novel virus has a direct correlation to animal-human transmission still remains to be seen.

Research on the virus is still in the early phases. The next step is more clinical trials.

Results: Kmiec & Longo's "net effect" = the dance between writers and readers, the writers calculating when to be malleable to their readers and when to emphasize points to readers.



Instructions

Step 1: Revise old v.0.2 draft material into your v.0.3 draft

Below are steps on how to start inserting draft content in your v.0.3 draft that includes micro-layer elements and organizational structures:

1. Make a copy of your v.0.2 draft and leave your copy archived in the [v.0.2 folder](#) and rename “v.0.2” to “v.0.3” in your file name.
2. Move your original file to [v.0.3 folder](#) (Important: move your original file, not your copy).
 - The formula is [Last name, First name_Title_Genre_v.0.3]
3. Start the [reviewing and revising](#) phase of your writing:
 - Prerequisite materials: Rough draft technical documentation
 - Put on your editorial hat. Reread your draft and note where there are gaps in your content. Gauge what level of editing remains to be done for various parts of your technical document:
 - First priority - Substantive/development editing: Examples of the first priority items include, but are not limited to, some of the following: there is research still to be one, or there are sections that don’t have outlines still, or many sections lack content, or there are still graphics that need to be built, or all of the above or other large gaps in content.
 - Second priority - Line editing: Almost every line to a large majority of them still need some form of editing.
 - Third priority - Copy editing: Some areas of wording, phrasing, and syntax still need polishing for clarity, consistency, cohesion, accuracy, consistency, comprehensiveness.
 - Fourth priority - Proofreading: The text is relatively polished, set, stable, well formed, and there are a few spots that require attention to do one last

check on clarity, consistency, cohesion, accuracy, consistency, comprehensiveness.

- Based on the needs and priorities at this point in the writing process, develop a list of writing tasks and start working through the tasks that can be accomplished easily while aiming to finish the tasks in the highest priority category in the time you have.
- On the due date and time, 8/10, final draft content is not needed, but leaves only one week to finalize the draft before the end of the quarter. Therefore, while this is a rough draft version, the work when you turn in v.0.3 should be around 80 to 90 percent finished to put you in solid standing for finals week. Of course, this is just an average; various document projects will be in different states, obviously.

1.1: Study guide resources

While you turn old v.0.2 draft materials into your v.0.3 draft, use these resources to help revisions:

- Use the progressing document version examples with embedded notes to help:
 - [EXAMPLE Aaron, Hank Disaster Documentation Experience Report v.0.3](#)
 - [EXAMPLE Aaron, Hank Disaster Documentation Experience Report v.0.2](#)
 - [EXAMPLE Aaron, Hank Disaster Documentation Experience Report v.0.1](#)
- Use the portfolio study guide documents to help with some of the writing decisions you're having to make:
 - Are you asking yourself, "What document organizations should I choose for the purpose that I am trying to achieve with my document?" Go to: [Example types of informative, enabling, and persuasive portfolio documents](#).
 - For a high-level step-by-step process, go to the [5 stages of the writing process](#).
 - Are you looking to understand how to string together paragraphs in ways that help describe the situation to readers? Go to [Methods of idea development](#).
 - While the needed elements for this week are micro, perhaps you're wondering generally about the document, in which case go to [Portfolio document specifications](#), which has all the documentation requirements in one spot.

Step 2: Annotate certain micro body elements in your v.0.3 draft

Overview

To practice some of Kmiec and Longo's micro-level techniques, you're being tasked in this v.0.3 draft assignment to also self-annotate your Google documents with three (3) notes of rationale in the form of embedded comments in your right margin.

- Two (2) comment bubbles in your document's right margin for word choice (lexis):
 - One note from you providing rationale for an instance of using terminology
 - One note from you giving the reason for the use of a hedger or booster
- One (1) comment bubble in your doc's right margin for sentence structure (syntax):
 - One note from you weighing the complexity of one of your compound or complex sentences

See instructions below for how to complete these required annotated elements listed above.

2.1: Annotate your technical word use (lexis) in your document

In general, word choice (lexis, diction) is an important writing decision. While word choice is something writers concern themselves about during the entire writing cycle, in the end phases of reviewing and revising, like we're in, they often come into particular focus. Technical communication is always thinking of possible connotations of words to target readers that might need to be revised. TC is always considering the percentage of words devoted to industry jargon, conversational tones, or erudite language and documentation's register, i.e., the level of technical language used in the documentation. TC is assessing the documentation's tone, whether it's casual and informal tone (e.g., "they're") or formal ("they are"). (As a default, they avoid informal language and try to write in [plain language](#), but also keep attuned to your readership/audience.)

As it relates to your own documentation, consider how your own word choice connects rhetorically to your readers and their situation. As you do this, also consider Kmiec and Longo's techniques discussed in their word/lexis-focused section "Lexical Technique: Word Choice, Technical Terms, and Hedges and Boosters," which starts on page 47 of the IEEE textbook.

2.1.1: Insert one annotation for technical terminology (see also pages 47-51)

Insert one comment to annotate any technical term used in your v.0.3 document. The technical term you choose can be any specialized noun or a verb (see examples below). The comment should explain the rationale for using this term: Why did you choose this term or set of terms as the terminology relates to your audience? See further instructions and [examples](#) below.

- *Example of a technical noun note embedded in document text:* “Editorially speaking, the title “initial” does not describe how the initial damage assessment (IDA) fits into the whole and is a misnomer from a local standpoint. This adjective is based more on how the assessment is viewed by the group in charge of leading, and thus naming, the stage.”
- *Example of a technical verb note embedded in document text:* “Whenever, whatever, wherever, whoever an emergency hits, depending on the cause, this event can set off a cascade of complex communication between entities, prepared or unprepared, insured or not.

2.1.2: Insert one annotation for hedging or boosting (see also pages 51-53)

Insert one comment to annotate any hedging or boosting word that you're using in your v.0.3 document. This word can be a modal verb or one a “hedging” or “boosting” adverb modifier discussed in the textbook (below is an [example](#) of all three, but you only need one type):

- *Examples of modal, hedger, and booster notes embedded in text:* “An enterprise-level CCMS assisting the damage assessment publication process could possibly increase content production and data consumption enormously—not to mention further help manage workflows between content producing reporters and applicants and content reviewing management and broader governance.”

See the screenshot of page 52 below for more examples of hedging and boosting terms.

52 THE IEEE GUIDE TO WRITING IN THE ENGINEERING AND TECHNICAL FIELDS

“considerable cost.”) *Takeaway: Hedges and boosters are modifiers that diminish and amplify.*

<u>Hedging words</u>		<u>Boosting words</u>		<u>Attitude words</u>
about	possibly	actually	in fact	appropriately
almost	seemingly	always	never	disappointing
essentially	suspected	Certainly	obviously	interestingly
largely	uncertain	clearly	undoubtedly	preferably
mostly	unclear	definitely	well-known	understandably

In addition to adverb modifiers, a special class of hedging and boosting auxiliary verbs called *modals* help to create the specific conditions under which a verb exists or functions. English modals include words like can, could, may, might, shall, should, will, would, and must (as well as phrases like needs to, has to, and ought to). Consider the following sentences.

(p) Outlet B-17 *should* be brought up to code.

(q) Outlet B-17 *must* be brought up to code.

(r) Outlet B-17 *could* be brought up to code.

(s) Outlet B-17 *will* be brought up to code.

2.2: Annotate your technical sentence structure (syntax) in your document

Words and phrases describing your technical topic can be assembled together to form sentences. The structures that technical writers choose can sometimes help clarity and readability or, worse, obscure meaning and obfuscate facts.

2.2.1: Insert annotation that discusses the net effect of your sentence complexity

In this step, you'll use sentence complexity and clausal positioning to calculate the "net effect," or "cognitive weight," of a certain claim or argument in one of your compound or complex sentences.

The first thing to do is find either a compound sentence (coordinating) or a complex sentence (subordinating) in which you compare two items against one another: e.g., weighing a pro/benefit against a con/issue/cost/risk/hurdle, looking at a similarity or a difference, making an informative claim about one thing versus another thing, comparing one feature to another, recommending some option over another option, arguing for something against something else, or persuading someone to do one action and not another. To give you an idea of what this might look like, below are two examples from the "[Conclusion](#)" section of the example v.0.3 document:

- *Example 1: "Battery-free, paper-based methods are inexpensive, easy to use, and resilient, but the transition of analog data to digital form is also then made more difficult and can be error-prone."*
- *Example 2: "The current digital platform used to communicate data/info currently relies heavily on desktop publishing software that promotes ballooning paperwork; however, the efficiency and expediency of newly structured information architecture and automated workflows for desktop/mobile devices must be weighed against their relative fragility."*

As you look through your documentation for a compound or complex sentence to annotate with a comment bubble, below is a reminder of the different levels of complexity:

- Simple sentence: Contains a subject + verb:
 - (e.g., The solution defies belief)
- Compound sentence: Two simple sentences joined by a coordinating conjunction:
 - (e.g., The solution defies belief, yet it is simple)
- Complex sentence: Contains a simple sentence (subject + verb) + at least one dependent clause, which also contains a subject + verb, and oftentimes a subordinating conjunction:
 - (e.g., When you think about it, the solution is simple)
- Complex-compound sentence: Contains a subject + verb + a dependent clause, as well as an additional simple sentence joined by a coordinating conjunction:
 - (e.g., If you think about it, the solution is simple, yet it defies belief)

After you have located and chosen a sentence, insert a comment in your Google Doc (Insert / Comment, Ctrl + Alt + M). In the comment, discuss this chosen compound or complex sentence in your document as it relates to Kmiec and Longo’s principles of “net effect,” discussed in Chapter 2 and shown in the table on page 65 (see examples of comment-bubble rationales and the textbook figure below to help you write your own annotation).

- *Example 1: “Battery-free, paper-based methods are inexpensive, easy to use, and resilient, but the transition of analog data to digital form is also then made more difficult and can be error-prone.”*
- *Example 2: “The current digital platform used to communicate data/info currently relies heavily on desktop publishing software that promotes ballooning paperwork; however, the efficiency and expediency of newly structured information architecture and automated workflows for desktop/mobile devices must be weighed against their relative fragility.”*

In addition to the examples above is the table shown below¹, in which compound and complex sentence components are broken into a matrix of positions and coordinations. In this table, we can see that with simply one independent clause, one dependent clause, and an either coordinating or subordinating conjunction, the position of these elements in sentences reveals a different “Net effect” on readers:

- T2 & T3 (subordinate, “though” in the table is the subordinating conjunction.)
- T4 & T5 (coordinate, “but” in the table is the coordinating conjunction.)
- T6 & T7 (subordinate)

¹ From Table 2.1 on page 65 of Kmiec and Longo’s IEEE Guide textbook

Weak position Chronological reading flow -> Strong position		
Independent, main clause (subject + predicate)		Coordinating conjunction
Dependent clause (subject + predicate)		Subordinating conjunction

[ID]	Sentence	Net effect
T1	Microfiltration requires no chemical additives. <i>Unmitigated sentence represented as positive.</i>	1.0
T2	Though flocculation is inexpensive, microfiltration requires no chemical additives. <i>Subordinate: -0.4 Independent +1.0; Strong position: +0.2</i>	0.8
T3	Microfiltration requires no chemical additives, though flocculation is inexpensive. <i>Independent +1.0 Subordinate: -0.4; Strong position: -0.2</i>	0.4
T4	Flocculation is inexpensive, but microfiltration requires no chemical additives. <i>Independent -1.0 Independent +1.0; Strong position: +0.2</i>	0.2
T5	Microfiltration requires no chemical additives, but flocculation is inexpensive. <i>Independent +1.0 Independent -1.0; Strong position: -0.2</i>	-0.2
T6	Flocculation is inexpensive, though microfiltration requires no chemical additives. <i>Independent -1.0 Subordinate: +0.4; Strong position: +0.2</i>	-0.4
T7	Though microfiltration requires no chemical additives, flocculation is inexpensive. <i>Subordinate: +0.4 Independent -1.0; Strong position: -0.2</i>	-0.8
T8	Flocculation is inexpensive. <i>Unmitigated sentence represented as negative.</i>	-1.0

This color-coded matrix above is from the [week 7 slide deck](#) (see the [video for a verbal rundown of the above](#)).

Here in action is Kmiec & Longo's "net effect" = cognitive load / mental weight / reading energy



According to the table above, if a technical expert is arguing strongly for microfiltration in their document, and this experts also wants to provide a well-balanced statement that acknowledges both sides of the argument, then T2 is the sentence construction with the most net effect that still observes both sides of the argument In T2, the opposing side's argument claim is given the lead position in the sentence, the weaker position, and the argument for flocculation is made into a subordinate clause by the insertion of the subordinating conjunction "though," further weakening the claim in readers minds, which the writer is also against. T2 then finishes with the intended argument for microfiltration as the independent clause in the end position in the sentence, aka, strong position.

On the ends of Kmiec and Longo's matrix are the extremes of the argument. Notice that the closer to 0, the more "even keeled," balanced, and unbiased the argument seems. However, the



closer to 1 or -1, the more forceful and bent toward onesideness that the argument reads. Both T1 and T2 do not acknowledge the other side of the argument, and while their relative net effect is high at 1 and -1, the statements are leaving information out of the conversation and perhaps in context could start to tread into moral ambiguity by purposeful omission.

McMurrey's grammar and mechanics page

See also McMurrey's [Common Grammar, Usage, and Spelling Problems](#) for further assistance on common grammar and mechanics issues that often pop up for technical communication.

Step 3: Perform a peer review of your assigned class member's doc

Find your name, then find your peer review assignment documentation name. Go to the [v.0.3 folder](#) to find this person's document. Then move through [the portfolio document requirements and specifications checklist via this Google Form](#). Keep in mind that you are not grading your peer's work; you're just helping provide them an editorial spot check of where their document stands with respect to the broad requirements for all portfolio projects (it also gets you thinking about your own document too).

ID	Your name	Your V.0.3 Peer Review Assignment Name
1	AlOtaibi, Khaled	Bi, Wenyu
2	Bi, Wenyu	Bingham, Samuel
3	Bingham, Samuel	Dietrich, Christopher
4	Dietrich, Christopher	Escudero, Abraham
5	Escudero, Abraham	Fonseca, Nicholas
6	Fonseca, Nicholas	Gu, Dajun
7	Gu, Dajun	Helber, Ryan
8	Helber, Ryan	Howard, Christopher
9	Howard, Christopher	Jiang, Tao
10	Jiang, Tao	Li, Jialin
11	Li, Jialin	Lopez, Ivan
12	Lopez, Ivan	Ma, Min
13	Ma, Min	Mersman, Christopher
14	Mersman, Christopher	Sanchez Lopez, Lupita
15	Sanchez Lopez, Lupita	Rapoport, Jesse
16	Rapoport, Jesse	Sayed Ali, Abdulaziz
17	Sayed Ali, Abdulaziz	Smith, Zena
18	Smith, Zena	Srirama, Vivek
19	Srirama, Vivek	Tait, Keenan
20	Tait, Keenan	Thorkelson, Scott
21	Thorkelson, Scott	Williams, Jennifer
22	Williams, Jennifer	Zeigler, Samantha
23	Zeigler, Samantha	AlOtaibi, Khaled
24	Alawadhi, Hamad	Lopez, Ivan

Rubric

Below is the breakdown of the amount of credit awarded for each element.

Credit amount	Required meso element*
5	v.0.3 draft has all of the prerequisite v.0.1 and v.0.2 elements.
10	We have collectively moved 4/5ths through the 5-step portfolio process, and the v.0.3 draft should be about 80 percent complete as it relates to the baseline word count: 2,300 words x 0.8 = at least ~1,840 words. Please keep in mind that draft material doesn't have to be the finished product, but you should be working toward the finished product for this course, due next week.
5	Create one annotation/comment bubble providing a rationale for the use of a technical term (noun or verb) in your document.
5	Create one annotation/comment bubble providing a rationale for the use of an instance of either hedging or boosting in your document.
5	Create one annotation/comment bubble of a compound or complex sentence that provides a short discussion of the net effect of your sentence complexity in one sentence in your document. Try calculating your net effect.
10	Complete the peer review (survey) for your peer's portfolio documentation
40	Total

*Each of the rows has a corresponding specifications section above that provides details on the various required meso elements in this rubric.

As always, email covey@pdx.edu with questions or further needs.