

WEB-BASED CALL PROCESS WRITING TOOLS WEBSITE: A USABILITY STUDY

By Joseph Peters

Hello!

- I am Joseph Peters
- Experienced w/ ESL
- Noted limited support
- Need feedback





The *neuter gender* denotes things without sex; as, a hat, a stick.

Neuter means *neither*: therefore *neuter gender* signifies *neither gender*; that is, *neither masculine nor feminine*.—Hence, *neuter gender* means *no gender*. The gender of nouns is so easily known, that a further explanation of them is unnecessary, except what is given in the following

NOTES.

1. The same noun is sometimes *masculine* and *feminine*, and sometimes *masculine* or *feminine*. The noun *parents* is of the *masculine* and *feminine* gender. The nouns *parent*, *associate*, *neighbour*, *servant*, *friend*, *child*, *bird*, *fish*, &c., if doubtful, are of the *masculine* or *feminine* gender.

2. Some nouns naturally *neuter*, are, when used *figuratively* or *personified*, converted into the *masculine* or *feminine* gender.—Those nouns are rendered *masculine*, which are conspicuous for the attributes of imparting or communicating, and which are by nature strong and efficacious; as, the *sun*, *time*, *death*, *sleep*, *winter*, &c. Those again, are *feminine*, which are conspicuous for the attributes of containing or bringing forth, or which are very beautiful, mild, or amiable: as, the *earth*, *moon*, *church*, *boat*, *vessel*, *city*, *country*, *nature*, *ship*, *soul*, *fortune*, *virtue*, *hope*, *spring*, *peace*, &c.

The *masculine* and *feminine* genders are distinguished in three ways:

1. By different words; as,

Masculine.	Feminine.	Masculine.	Feminine.
Bachelor	maid	King	Queen
Boar	sow	Lad	lass
Boy	girl	Lord	lady
Brother	sister	Man	woman
Butch	dier	Master	mistress
Bull	cow	Milster	spawner
Cock	hen	Nephew	niece
Dog	bitch	Ram	ewe
Drake	duck	Singer	songstress or singer
Earl	countess	Sloven	slut
Father	mother	Son	daughter
Friar	nun	Star	hind
Gander	goose	Uncle	aunt
Hart	roe	Wizard	witch
Horse	mare	Sir	madam
Husband	wife		

2. By a difference in termination; as,

Masculine.	Feminine.	Masculine.	Feminine.
Abbot	abbess	Arbiter	arbitress
Actor	actress	Auditor	auditress
Administrator	administratrix	Author	authoress
Adulterer	adulteress	Baron	baroness
Ambassador	ambassadress	Benefactor	benefactress

The brown quick

~~F~~ox jummps over

the la zy ~~dog~~ dog.



Poll Questions

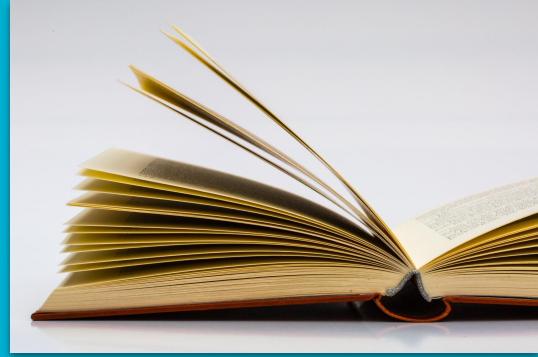
> Have you received feedback with red marks?

> Did you like it?



Analysis: Literature Review

- Writing process not automatic
(Hedge, 2000)
- ESL Teachers are overwhelmed with work
- Focus on interference with communication
(Amrhein & Nassaji, 2010)
- ESL learners want to learn by discovery and exploring
(Littlewood, 2000)



- Technology is supporting active & personalized learning
(Laurillard, 2005)
- Automatic Written Corrective Feedback
(Li, Link, & Hegelheimer, 2015)
- Computer in Language teaching and Learning (CALL)
(Levey, 1997)



Pedagogical Design

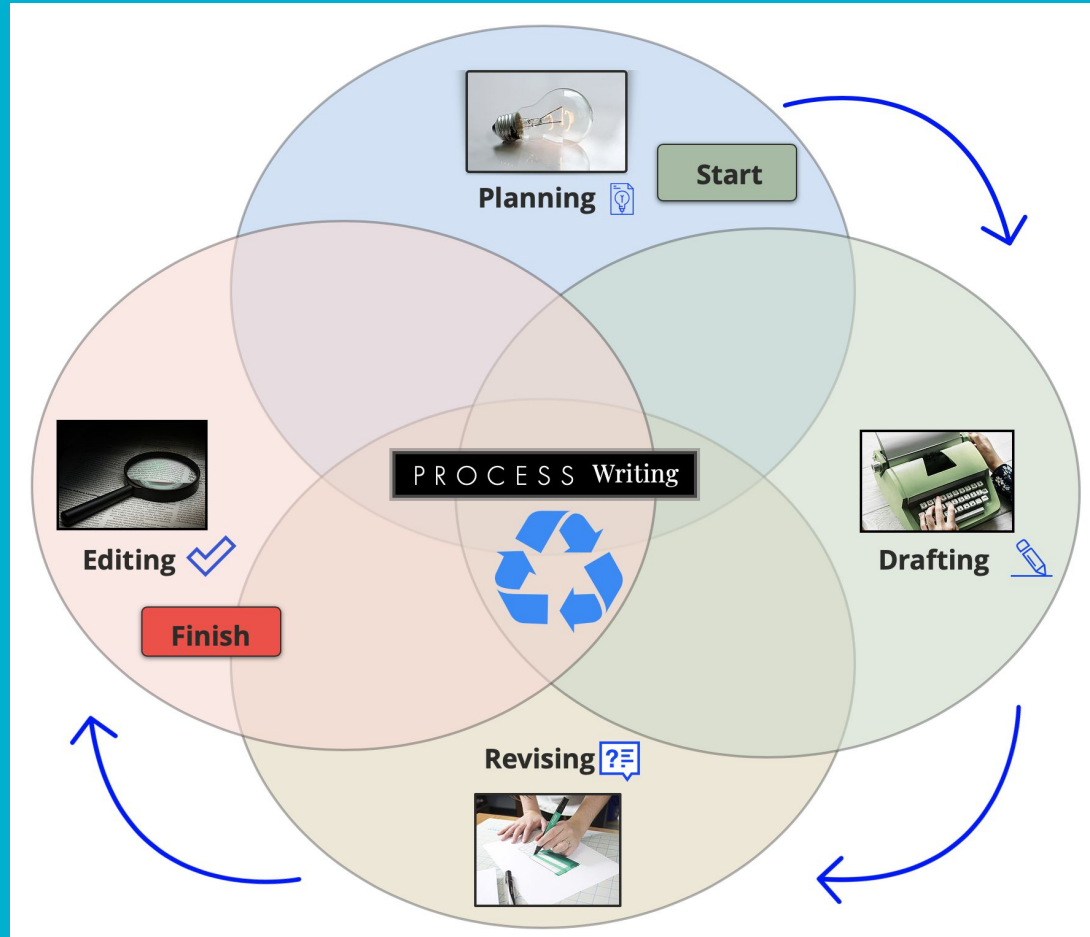
Constructivism is a theory of cognitive growth, where learners facilitate the interactions and activities necessary for their context (Ruey, 2010)



Content Design

ESL teachers are moving toward a process approach to teaching writing

(Coffin et al., 2005; VanderPyl, 2012)





Statement of Problem

English language students are not sufficiently provided with online tools or information to guide them through an online writing process or get formative feedback to improve their writing by themselves.

Statement of Purpose

The purpose of this usability study is to develop the navigation and satisfaction of content presentation of the Web-based Computer Assisted Language Learning (CALL) tools curated website for adult ESL learners.

Research Questions

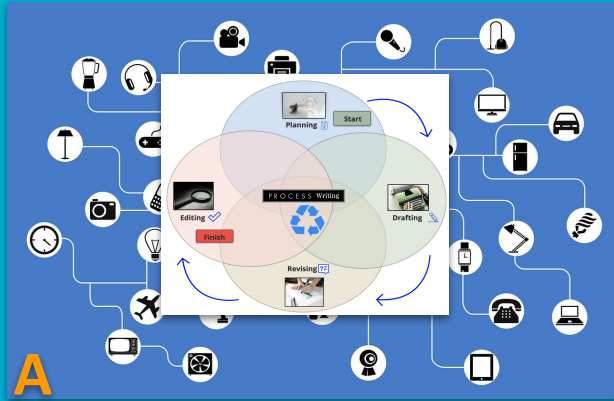
RQ1: How easy is it for participants to navigate the online English Automated written corrective feedback website?

RQ2: How do participants rate their level of satisfaction with the presentation of content provided on the website?

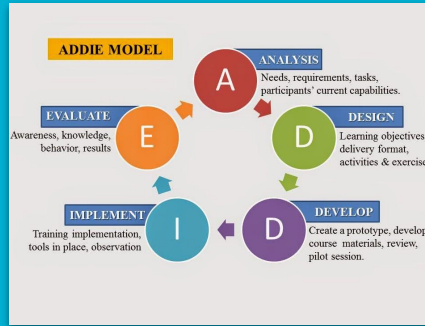


Overview

CALL > Process Writing



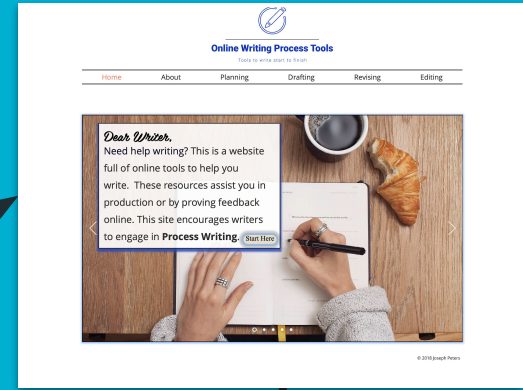
Instructional Design



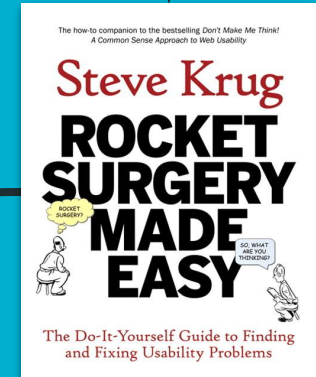
Instructional Strategy



Online Writing Tools Wix Website



Usability Study



Record



Questionnaire &
Survey



Iteration Revision

Keller's ARCS MODEL

Attention

- Active participation

Relevance

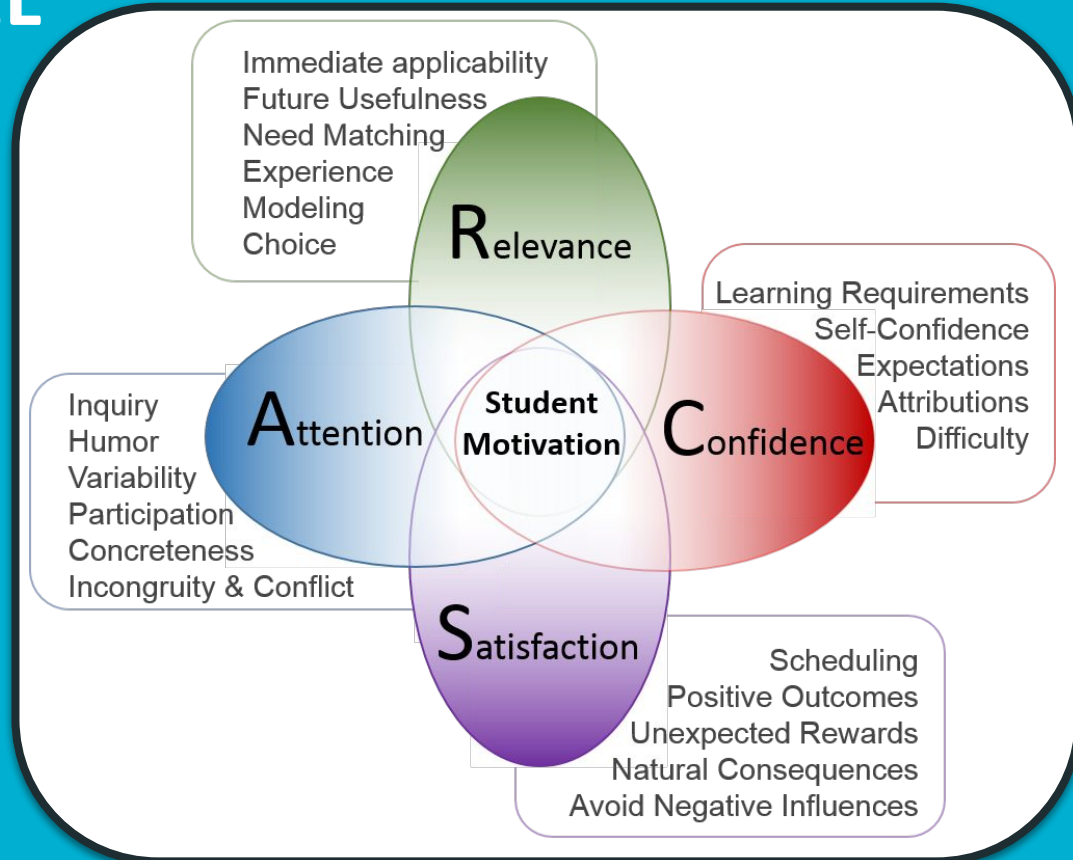
- Choice

Confidence

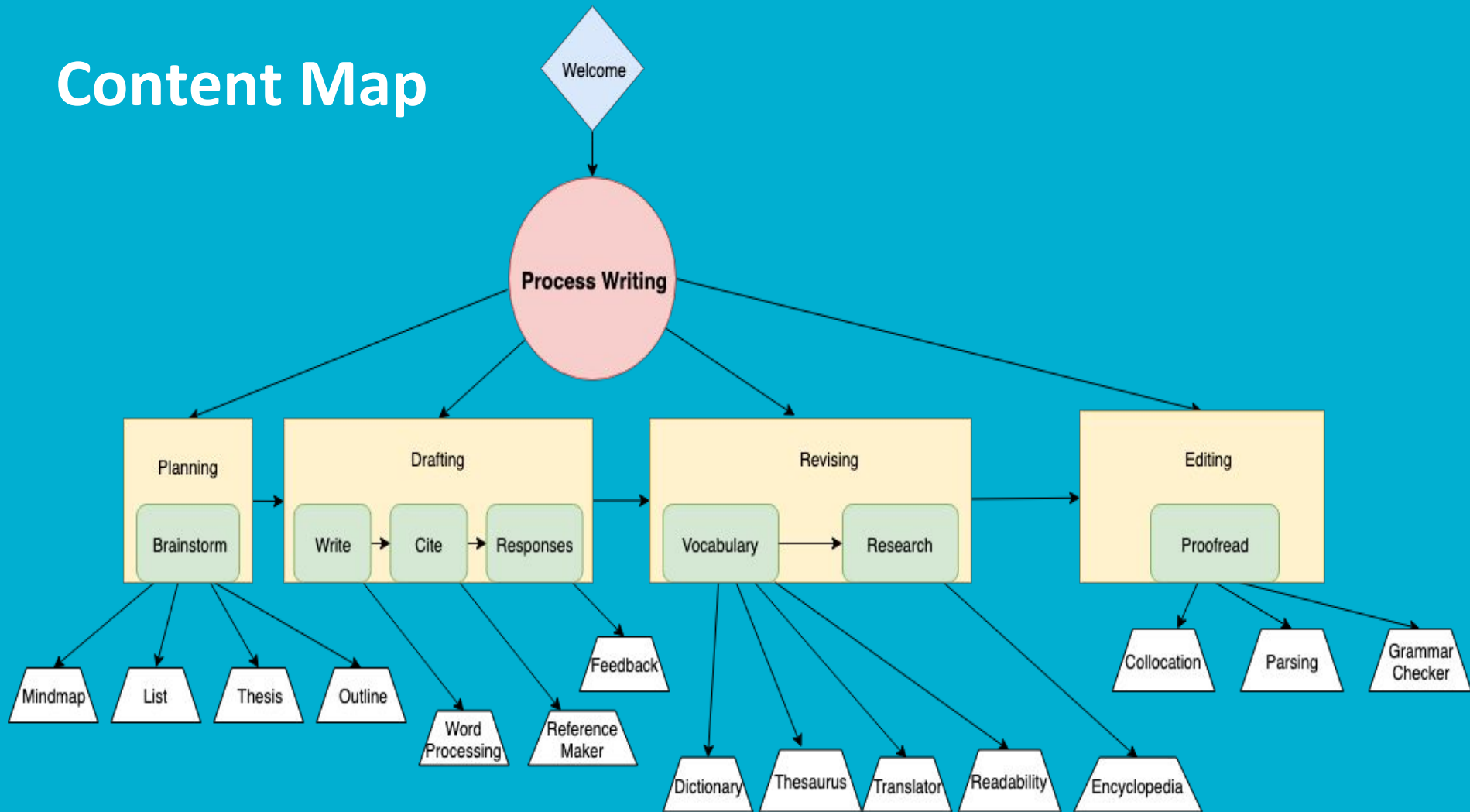
- feedback

Satisfaction

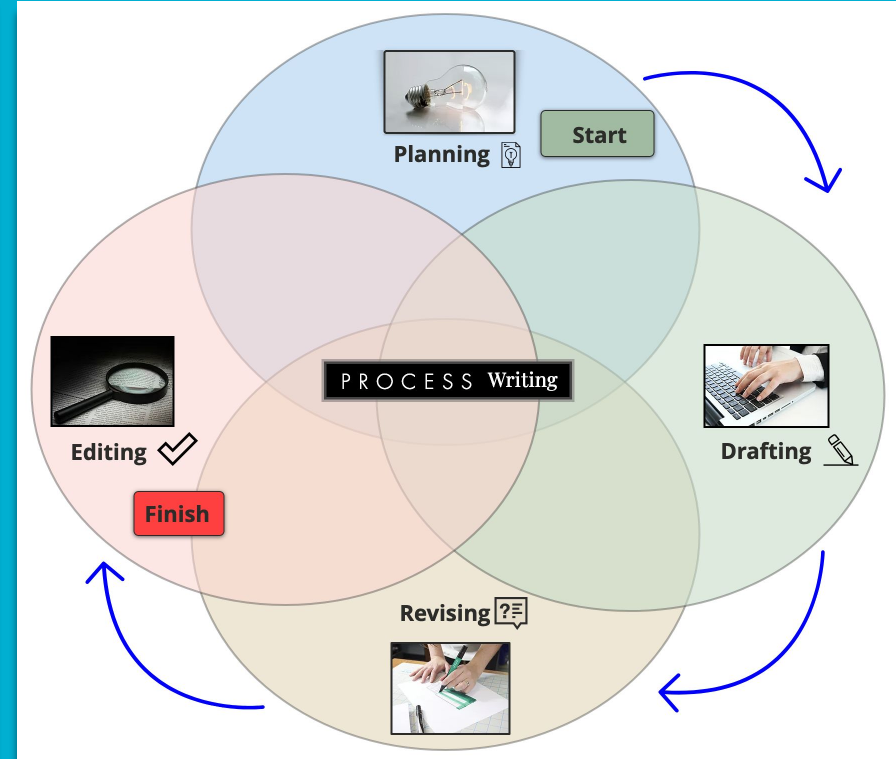
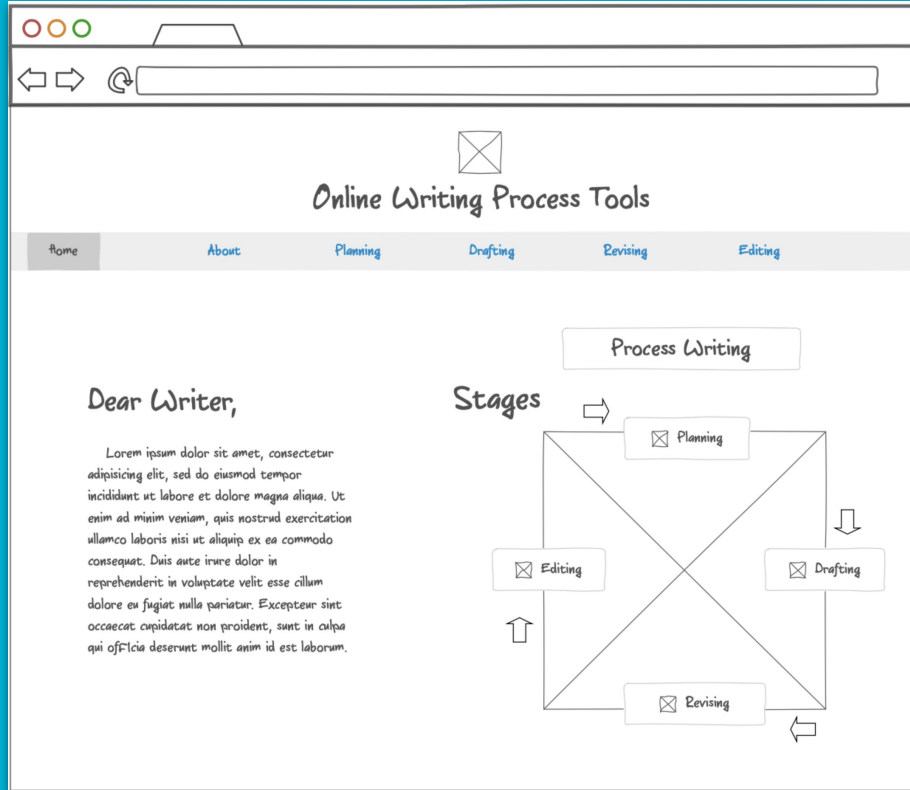
- real world application



Content Map

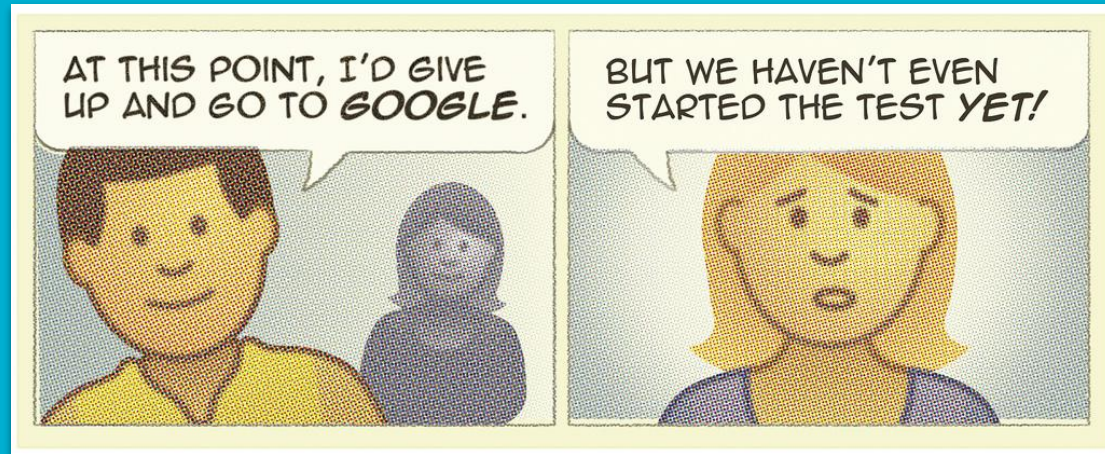


Design: WireFrame



Usability Study

- Steve Krug's (2010) creating user-friendly website via usability testing is effective
- Address user issues before it is released and more people have the same issue (Nielsen, 2003)



Implementation: Data Collection Methods

Survey



Pre- Questionnaire
Demographics and
Background

Post Survey
Navigation & Presentation
Satisfaction

Interview



Scenarios / Tasks:
Think- Aloud
Observations

Task 2: Navigation

You are a learner who, after hearing about this new website and how it will help you be a better writer, decide try it out. You have heard that it includes a writing process. Find out where you can start or learn more about this process.

Participants verbal comments

Rate the level of difficulty completing this task on a scale of 1 to 5.
(1 being very easy and 5 being very difficult)

Explain your rating.

Any suggestions on how to make this task easier?



Evaluation: Participants

- Adults 18+
- Past / present ESL students
- Voluntary
- Basic computer skills



Evaluation: Participant Demographics



42% Male



58% Female

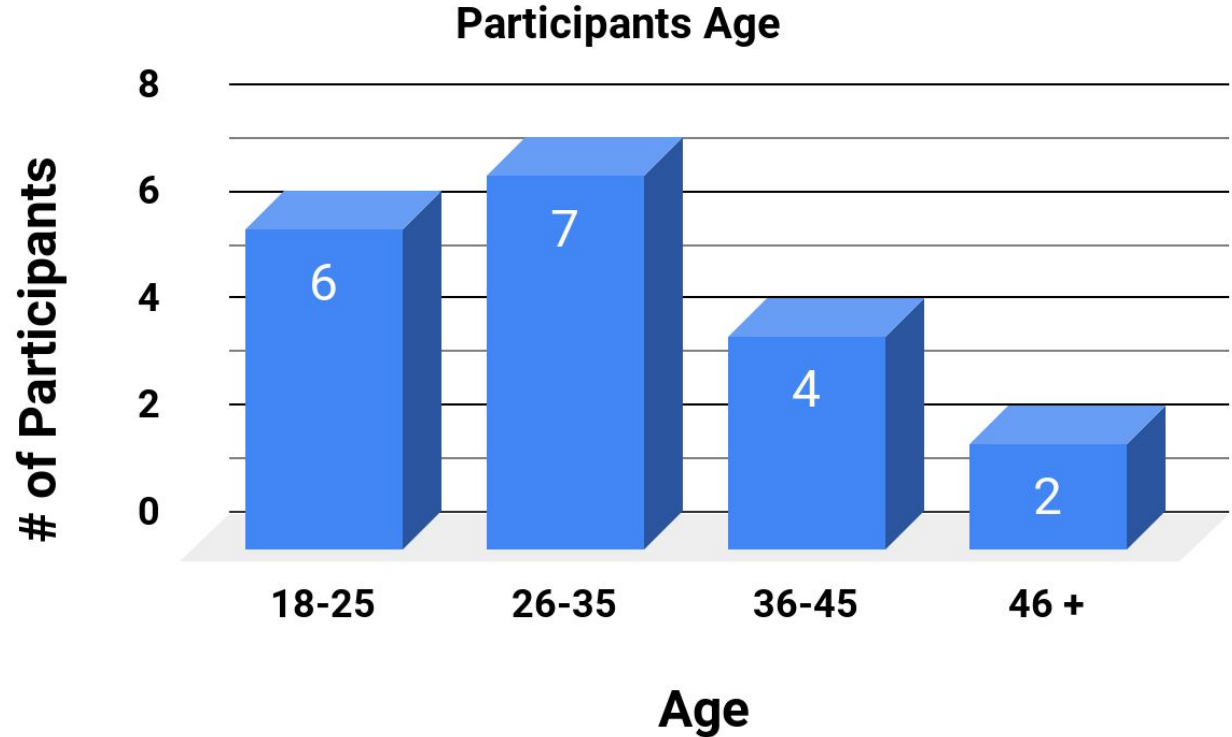
Total

8 Male

+

11 Female

= 19 Participants





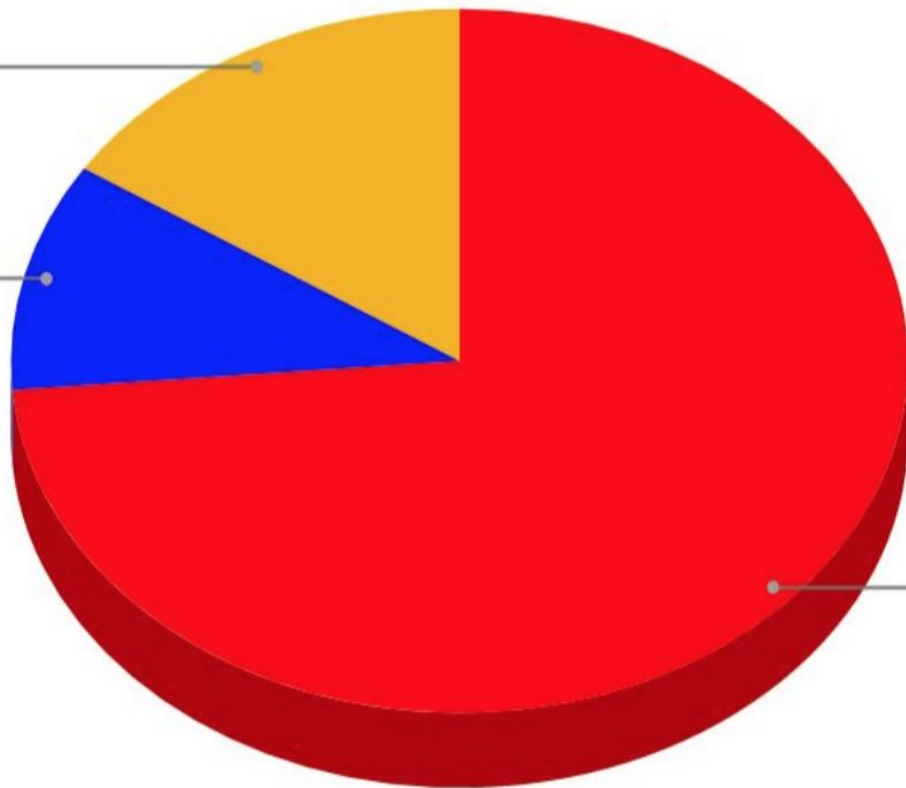
Participant First Language

Mandarin

15.8%

Korean

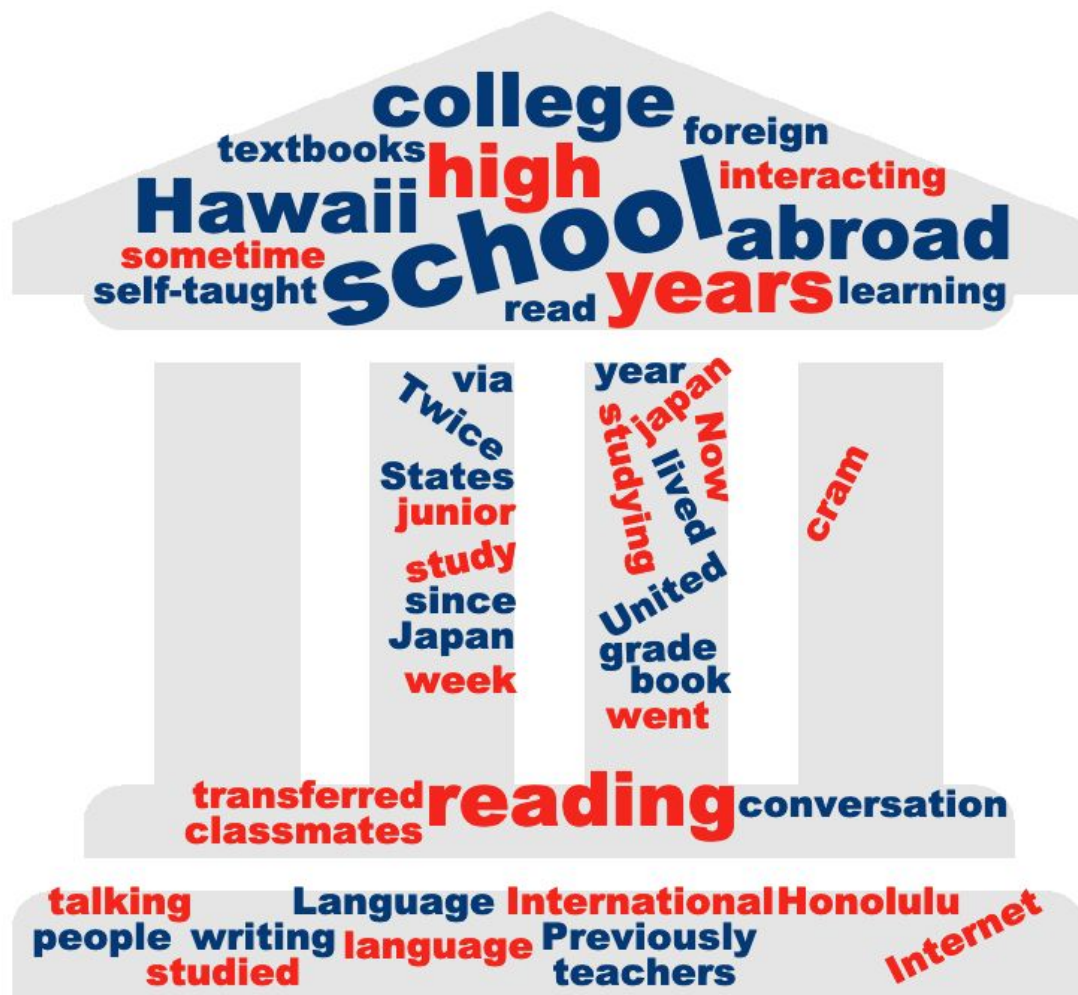
10.5%



Japanese

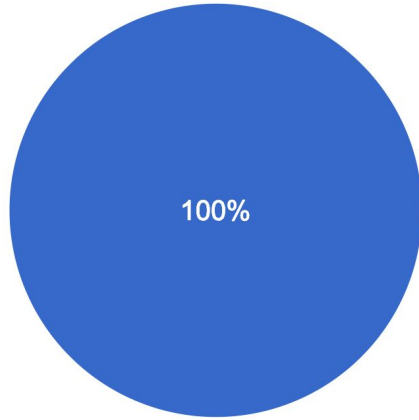
73.7%

How participants
studied English...

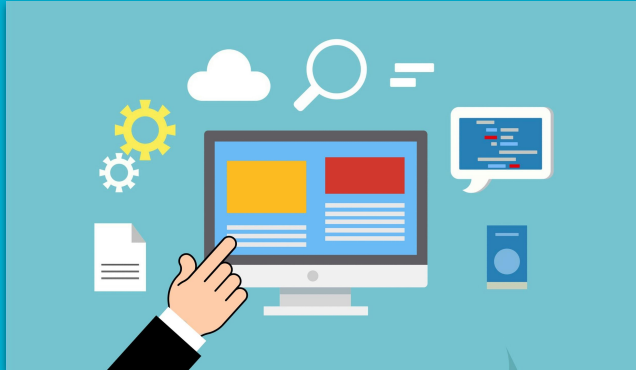


How often do you use the Internet?

19 responses



- Every Day
- Once a Week
- Once a Month
- Never



Web Study Tools

A word cloud of web study tools. The words are arranged in a triangular shape. The most prominent word is "Google dictionary" in large blue letters. Other words include "translation" (diagonal), "Word" (purple), "English" (green), "library" (green), "Writing" (red), "processors" (light blue), "Grammerly" (blue), "word" (blue), "Online" (red), "online" (blue), "DBs" (green), "docs" (blue), and "lang8" (blue).

Data Analysis

Nielsen's Severity for Usability Problems

Rating Scale

Ranking	Meaning
0	Team does not agree that issue impacts system usability
1	Cosmetic problem only; need not be fixed unless extra time is available on project
2	Minor usability problem; fixing this should be given low priority
3	Major usability problem; important to fix, so should be given high priority
4	Usability catastrophe; imperative to fix before product can be released

Source: Nielsen, Jakob. Heuristic Evaluation. (1994). In J. Nielsen & R. L. Mack, (Eds.), *Usability Inspection Methods*. New York, New York: John Wiley & Sons.

1st Iteration Changes

Navigation

- Broken links
- Revised Nav Bar
- Navigation icons
- Consistency

Presentation

- Appropriate Level
- Visuals
- Typography
- Adding information



Online Writing Process Tools

Tools to write start to finish

Home

About

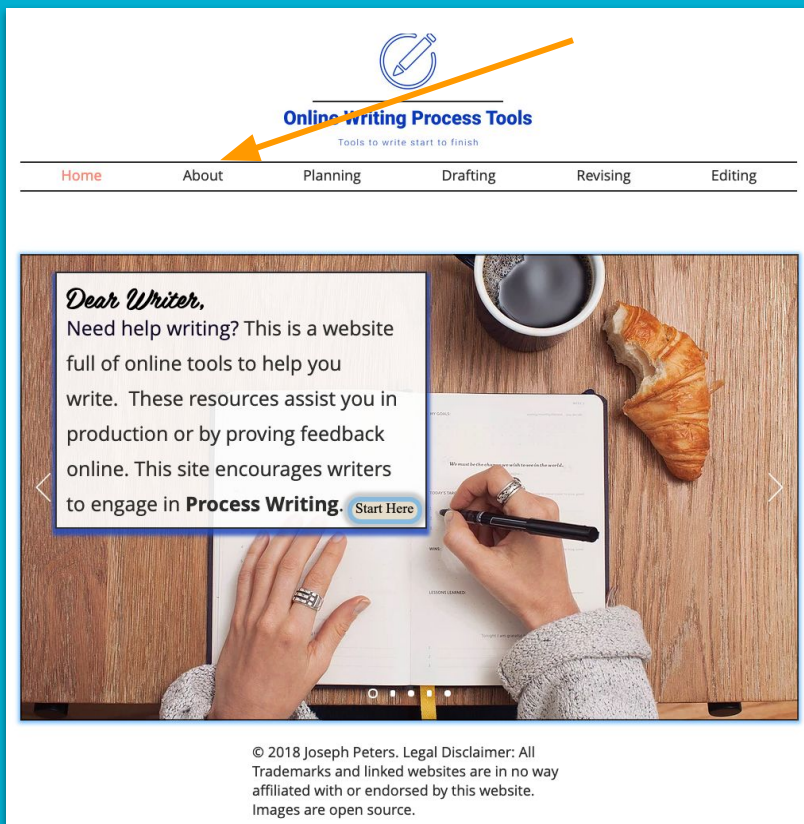
Planning

Drafting

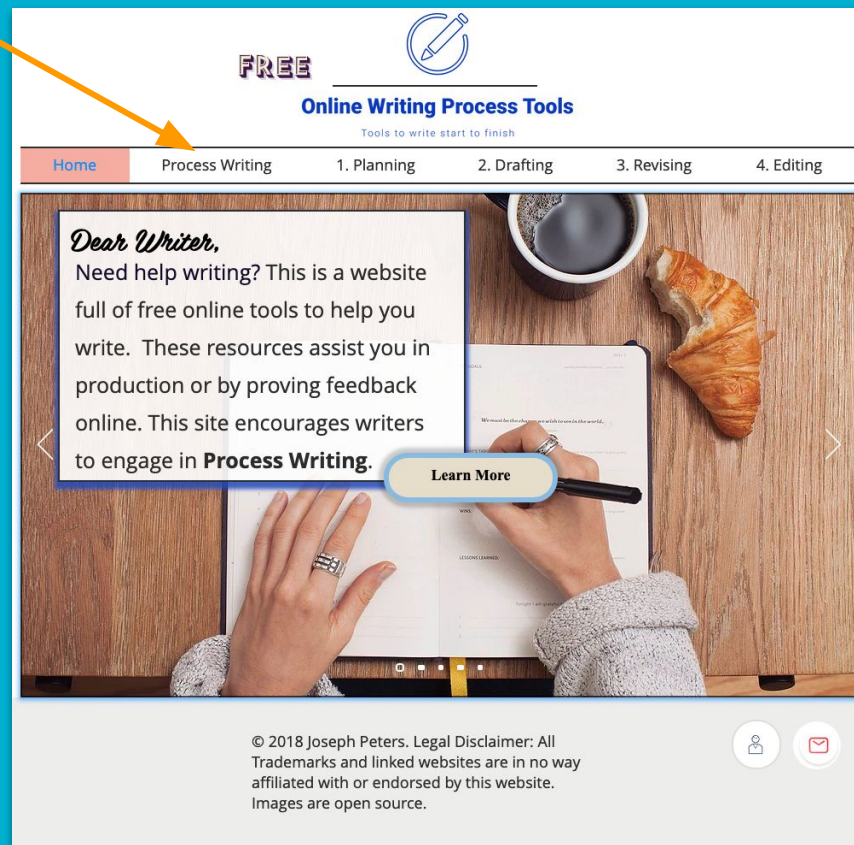
Revising

Editing







*I thought that this about
meant about this site*



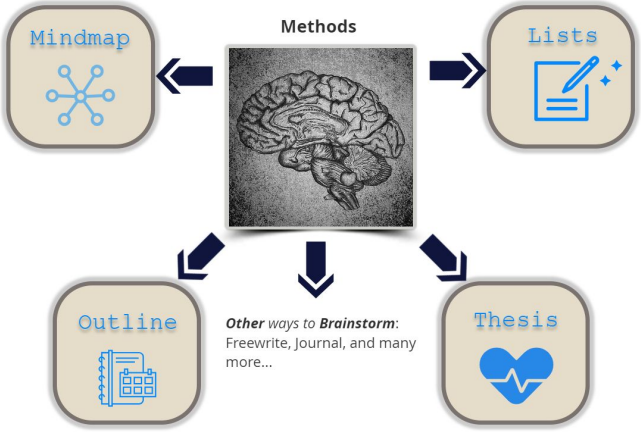
*I didn't know this order before I
watched this website*

Home About **Planning** Drafting Revising Editing

 **Planning.** Create ideas to write about. This stage is where the **topic** and **target audience** are generally chosen.

Activity: **Brainstorm** 

a strategy for generating ideas (*topics/points*) to write about and set your thoughts into words that might become the plot (*what*), characters (*who*), theme (*why*), structure (*How*), setting (*where*), and thesis (*opinion*) on paper. There are many ways to Brainstorm.



Methods



Mindmap

Lists

Outline

Thesis

Other ways to Brainstorm:
Freewrite, Journal, and many more...

  Drafting

FREE 

Online Writing Process Tools

Tools to write start to finish

Home Process Writing **1. Planning** 2. Drafting 3. Revising 4. Editing

PROCESS Writing

Stage 1: Planning Stage 2: Drafting Stage 3: Revising Stage 4: Editing

Create ideas to write about. This stage is where the **topic** and **target audience** are generally chosen.

Activity 

Brainstorming 

Definition 

a strategy for generating ideas (*topics/points*) to write about and set your thoughts into words that might become the plot (*what*), characters (*who*), theme (*why*), structure (*How*), setting (*where*), and thesis (*opinion*) on paper.

TOOLS 

Instructions 

Choose a tool to help you engage in the stages activity.

Mindman Lists Outline Thesis

- Added Navigation
- Added Instructions

Presentation

Lists



are organized collections of ideas one at a time. Utilize post-its (movable text blocks) to create lists.

TOOLS



- clean, modern
- collaborative
- Maximum 5 lists, login
- good, guided



- clean, old
- collaborative
- no max # of lists
- ok, simple



- simple
- voting, chat
- lacks ease, login
- good, idea selection



- more options
- pdf integration
- multiple views, login
- good, slow



- simple
- quick
- no account required
- ok, limited function



- more options
- pdf integration
- multiple views, login
- good, slow



- simple
- quick
- no account required
- ok, limited function



Best Choice Added

Example: Stormboard

it's stressful to find the good one

2nd Iteration Changes

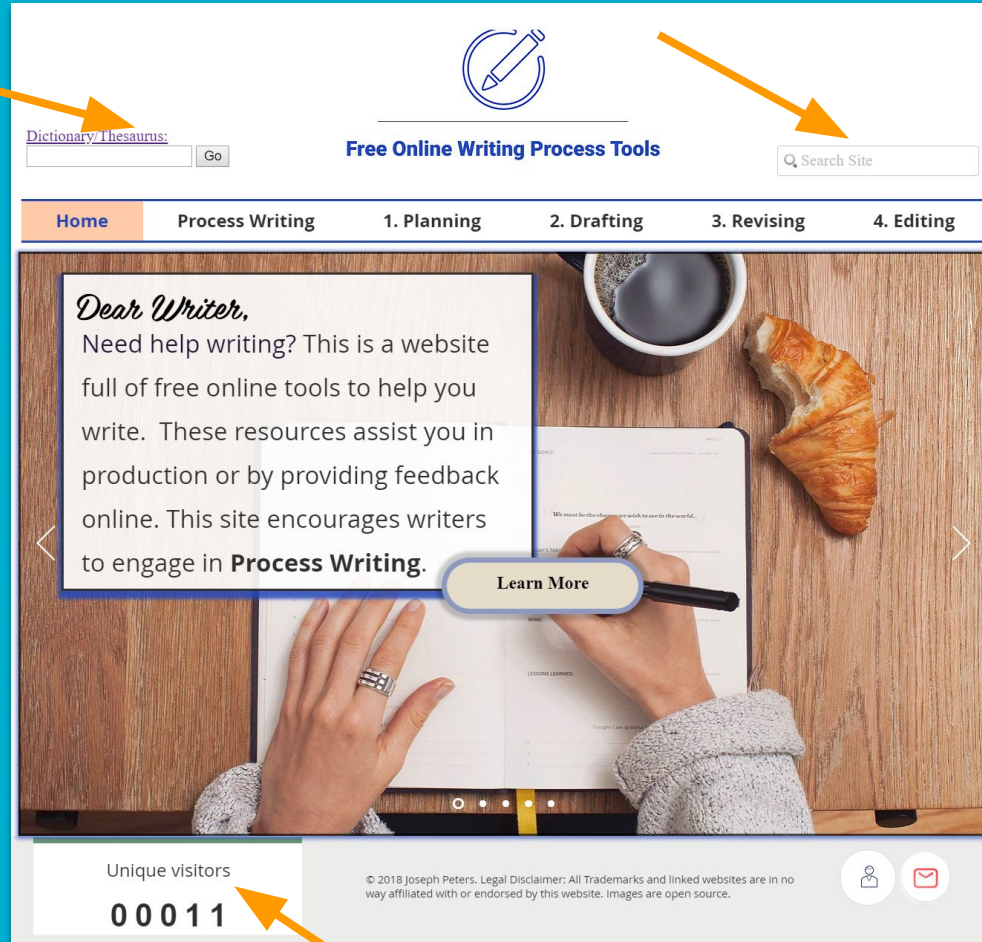
Presentation

- Clarified text
- Added instructions
- Added videos
- Revised rating system
- Objective descriptions
- Added Examples
- Added Images



Navigation

Is there any way you can create like search function?



FREE



Online Writing Process Tools

Tools to write start to finish

Home Process Writing Planning Drafting Revising Editing



Stage: Planning

View More



Activity: Brainstorming

View More



Tool
Rubric

- a) value to writer
- c) best use
- d) comparison to other tools
- e) rating
- f) how-to- guide

coggle

- Easy to use, unlimited public maps
- Collaborative
- Only 3 private diagrams, requires signup
- good, google integration

How-to

POPPLT

- Text w/ images or drawings
- Showing visuals, use try it out!
- 10 private diagrams, no download
- good, functionality

if you just say good I don't know how good it is



TOOLS



Instructions

Choose a tool to help you engage in brainstorming connect ideas by linking them into group sets.

Mindmap



Definition



a **diagram** of ideas and grouping the together by drawing a line between

Click icon to choose tool



Account Setup



Features

of Free Diagrams

3

10

3

3

Collaboration



language support



assign tasks

Online Storage



File Support



history mode

Visits

7.53M

197.77K

2.05M

4.83M

Editors Rating



I would expect something like different stars

FREE



Online Writing Process Tools

Tools to write start to finish

Home Process Writing Planning Drafting Revising Editing



Stage: Planning

View More



Activity: Brainstorming

View More



Mindmap



About



Tool
Rubric

- a) value to writer
- c) best use
- d) comparison to other tools
- e) rating
- f) how-to- guide



- Easy to use, unlimited public maps
- Collaborative
- Only 3 private diagrams, requires signup
- good, google integration

How-to



- Text w/ images or drawings
- Showing visuals, use try it out!
- 10 private diagrams, no download
- good, functionality



TOOLS



Instructions

Choose a tool to help you engage in brainstorming connect ideas by linking them into group sets.

Mindmap



Definition



a **diagram** of ideas and grouping them together by drawing a line between them.

Click icon to choose tool

draw.io



coggle

mindmeister

bubbl

Account Setup



Features

of Free Diagrams

3

10

3

3

3

Collaboration



language support



assign tasks

draw function

Online Storage



File Support



history mode



Visits

7.53M

197.77K

2.05M

4.83M

488.38K

Editors Rating



This is a bit confusing

- Less Hidden text
- Instructions

Presentation

The slide compares two online document editors. The top section compares Google Docs and editor.com. Google Docs is described as popular, part of the Google Suite, with download options, good options, requiring an account with a phone number, a Google alternative (Open Office), less well-known, and not polished. editor.com is described as quick, no account needed, save as .txt file only, and good and simple. The bottom section is titled 'Example: Google Docs' and shows a video player for 'Lesson 01 Google Docs Basics'. An orange arrow points from the text 'Added Videos' at the bottom to the video player.

Google Docs	editor.com
popular	quick
google suite	no account
download options	save as .txt file only
good, options	good, simple

Example: Google Docs

Google Docs - Tutorial 01 Learn the Basics

Lesson 01 Google Docs Basics

© 2018 Joseph Peter Legal Disclaimer: All Trademarks and linked websites are in no way affiliated with or endorsed by this website. Images are open source.

I want to see the sample, example

The slide features the draw.io logo on the left and a video player on the right. The video player shows a thumbnail for 'Draw.io Tutorial - Getting Start...' with the text 'Draw.io' and 'Getting Starte' visible. An orange arrow points from the text 'Added Videos' at the bottom to the video player.

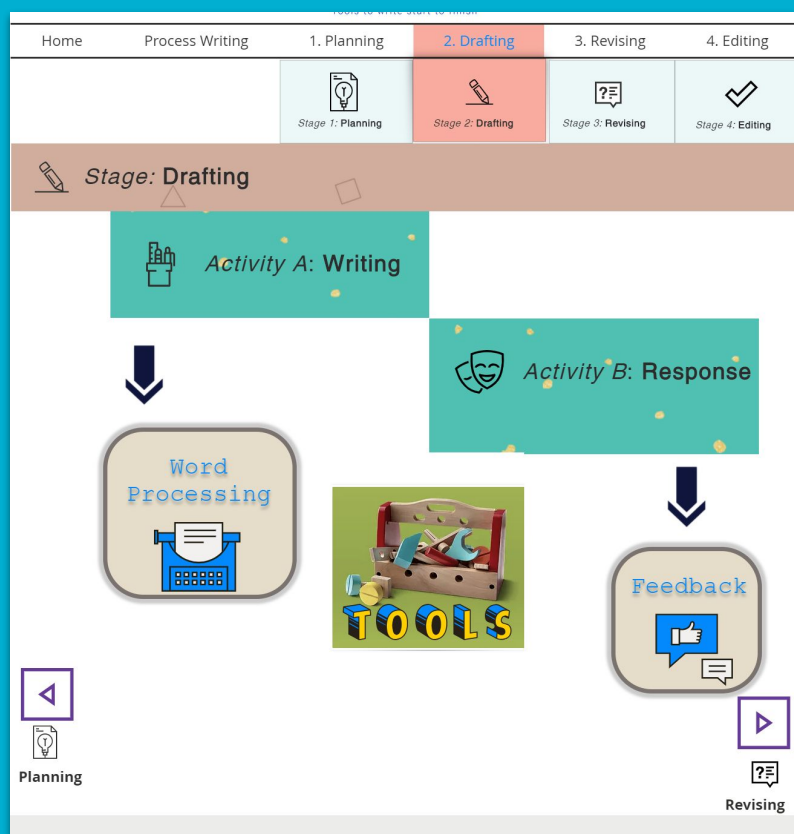
draw.io

Draw.io Tutorial - Getting Start...

Draw.io

Getting Starte

Added Videos



I want to see the sample, example

Expand and organize ideas to create *meaning* using **sentences, paragraphs, essays, & citations**. This stage focuses on developing fluency by writing then checking if things make sense with peers, tutors, teacher, and anyone. who can respond and react to ideas with content comments: suggestions, questions, etc.

Activity

Write

Cite

Respond

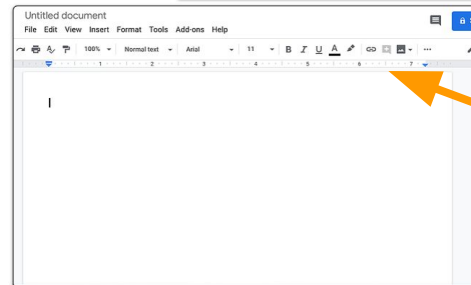
Write

Definition

a way of communicating by combining words into sentences, paragraphs, and even essays.

Instructions

Choose a tool to help you write your ideas in a document.



TOOLS

Word Processing

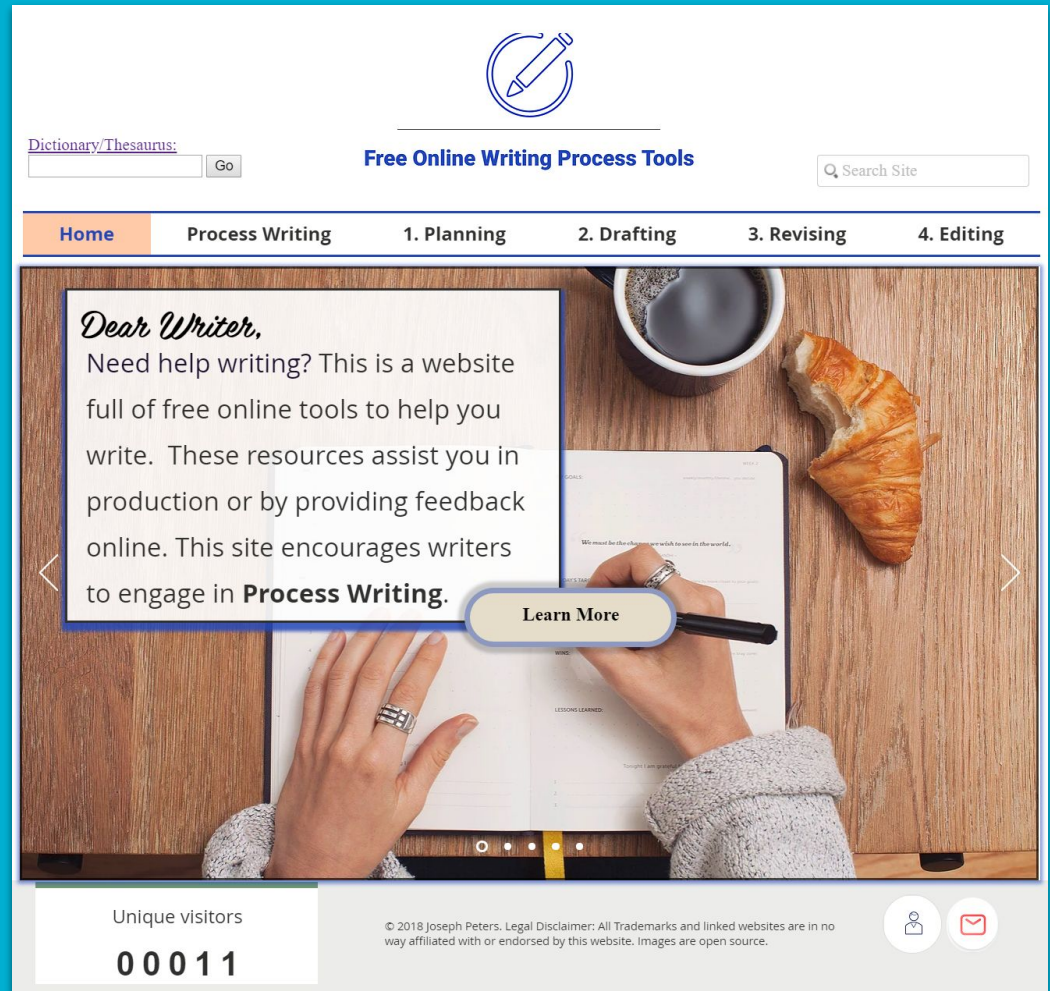
3rd Iteration Changes

Navigation

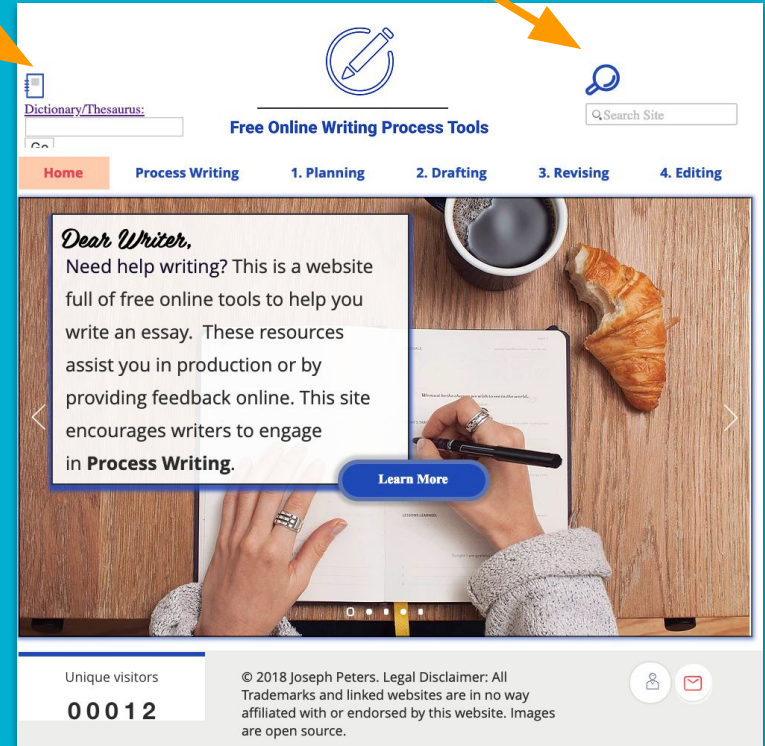
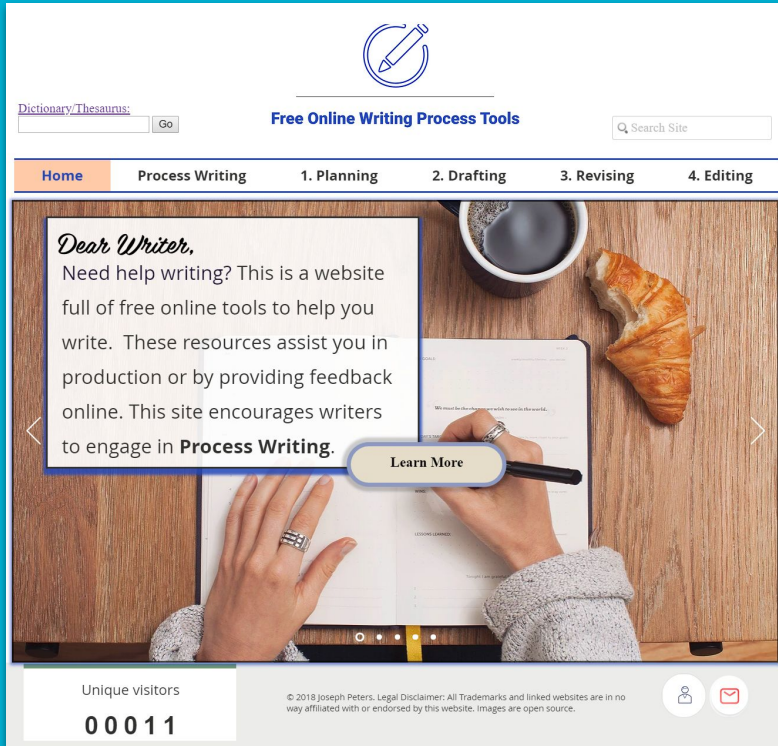
- Added navigation with hidden pages
- Added scaffolding with instructions and arrows

Presentation

- Added images and icons
- Simplified colors
- Less content



Added Icons



Navigation

Home Process Writing 1. Planning 2. Drafting 3. Revising 4. Editing

Process Writing



Expand and organize ideas to create *meaning* using **sentences, paragraphs, essays, & citations**. This stage focuses on developing fluency by writing then checking if things make sense with peers, tutors, teacher, and anyone. who can respond and react to ideas with content comments: suggestions, questions, etc.



Activity



Write



Cite



Respond



Write



Definition

a way of communicating by combining words into sentences, paragraphs, and even essays.



Instructions

Choose a tool to help you write your ideas in a document.



TOOLS

Home Process Writing 1. Planning 2. Drafting 3. Revising 4. Editing

Process Writing



Expand and organize ideas to create *meaning* using **sentences, paragraphs, essays, & citations**. This stage focuses on developing fluency by writing then checking if things make sense with peers, tutors, teacher, and anyone. who can respond and react to ideas with content comments: suggestions, questions, etc.



Activities



Instructions

Engage in the activities to expand your ideas



Write

A. Write your ideas in a document.



Cite

B. Cite where you got information.



Responses

C. Get responses and input from real people to help you rediscover meaning.

- Sequencing

I was thinking like three colors and then make it consistent

TOOLS

Instructions

Choose a tool to help you engage in brainstorming connect ideas by linking them into group sets.

Mindmap

Definition

a **diagram** of ideas and together by drawing a line

Click icon to choose tool

Account Setup	✓	✓	✓	✓
Features				
# of Free Diagrams	3	10	3	3
Collaboration	✓	language support	✓	assign ta
Online Storage	✓	File Support	✓	history mo
Visits	7.53M	197.77K	2.05M	4.83M
Editors Rating	★★★★★	★★★★★	★★★★★	★★★★★

TOOLS

Instructions

Choose a tool to help you engage in brainstorming connect ideas by linking them into group sets.

Mindmap

Definition

a **diagram** of ideas and grouping them together by drawing a line between them.

See Draw.io

See Popplet

See Coggle

See Mindmeister

Account Setup	✗	✓	✓	✓
Features				
# of Free Diagrams	3	10	3	3
Collaboration	✓	language support	✓	assign tasks
Online Storage	✓	File Support	✓	history mode
Visits	7.53M	197.77K	2.05M	4.83M
Editors Rating	★★★★★	★★★★★	★★★★★	★★★★★

TOOLS

Instructions

Choose a tool to help you engage in brainstorming connect ideas by linking them into group sets.

Mindmap



Definition

a **diagram** of ideas and grouping them together by drawing a line between them.

Click icon to choose tool



Account Setup



Features

of Free Diagrams

3

10

3

3

3

Collaboration



language support



assign tasks



draw function

Online Storage



File Support



history mode



Visits

7.53M

197.77K

2.05M

4.83M

488.38K

Editors Rating



TOOLS

Instructions

Choose a tool to help you engage in brainstorming connect ideas by linking them into group sets.

Mindmap



Definition

a **diagram** of ideas and grouping them together by drawing a line between them.



See Draw.io



See Popplet



See Coggle



See Mindmeister

Account Setup



Features

of Free Diagrams

3

10

3

3

Collaboration



language support



assign tasks

Online Storage



File Support



history mode

Visits

7.53M

197.77K

2.05M

4.83M

Editors Rating



maybe lesser options because so many options...maybe 3 options

Users liked the Website

Comments

- *The website is very informative! I personally really like it!*
- *Every information was useful*
- *I think this is very good for English learning people*



Evaluation: Post- Survey

- 5 point Likert Scale
- 16 items
- Explanation box

Section 2 of 4

✕

⋮

Design and Layout

1. The webpages were easy to understand. *

1

2

3

4

5

Strongly Disagree

☐

☐

☐

☐

☐

Strongly Agree

Please explain your answer (optional)

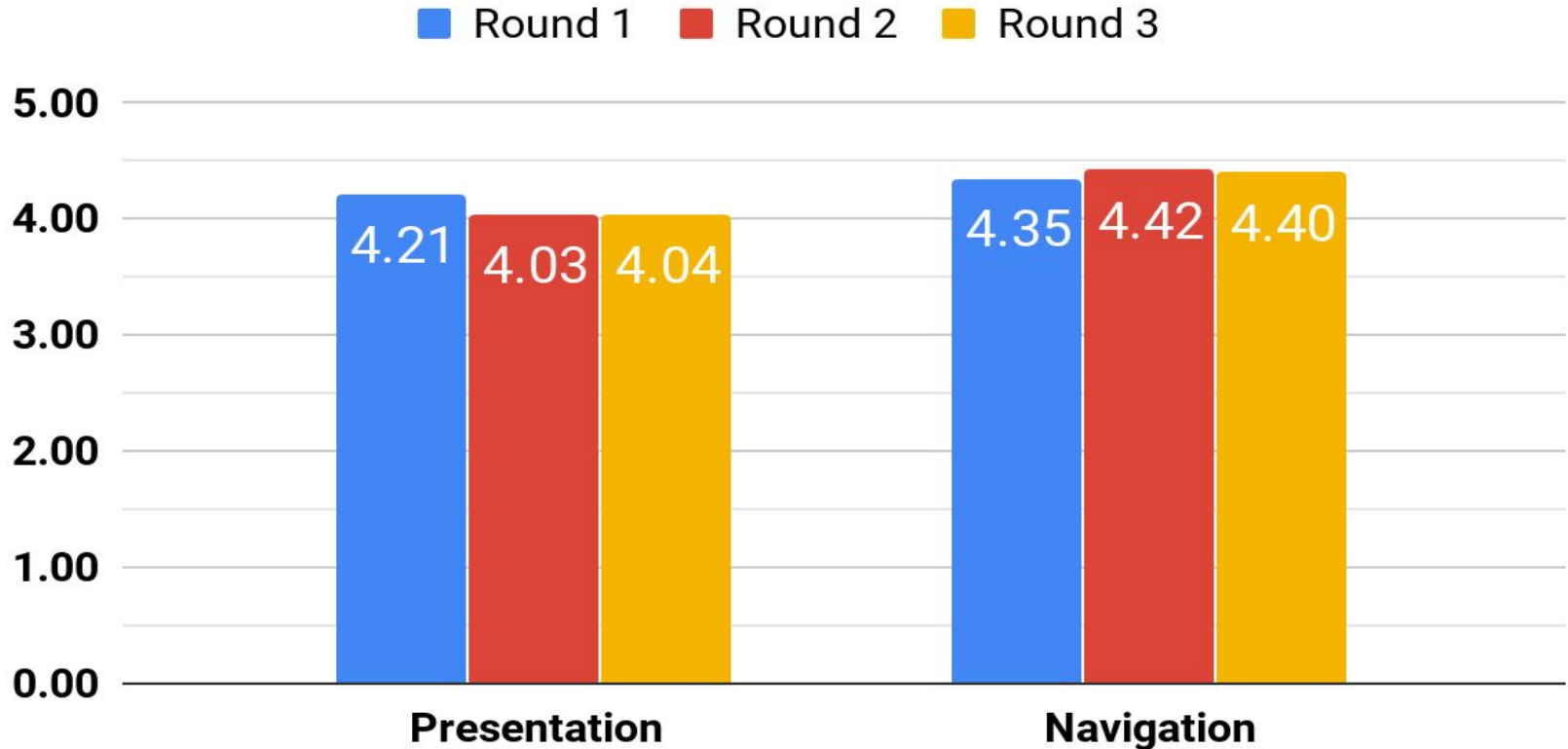
Short answer text

Navigation 7
Organization 3
Format 4

Presentation 9
Text 4
Visual 5

Post Survey Results

Overall



Conclusions: Results Summary



Research Question

1: How easy is it for participants to navigate the online English Automated written corrective feedback website?

2: How do participants rate their level of satisfaction with the presentation of content provided on the website?

Answers

1: Participants revealed many difficulties with navigating the site for each iteration, but expressed interest in using tools

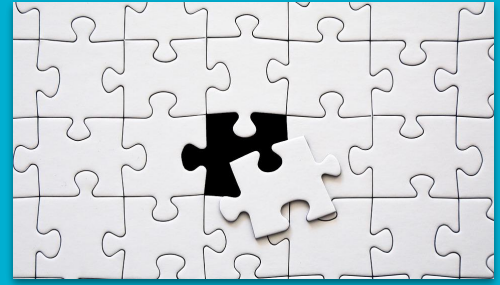
2: Changes in Navigation and Presentation did not reflect significant impact on user satisfaction

Discussions

- Website can provide language learners with a toolkit for supplementary feedback on their writing
- Site tweaks vs overhaul
- Instructional Design in Usability Studies
- Accommodating scope of study and instruction
- Observation vs Surveys
- Follow Protocol to ensure documentation



Discussion



Challenges: Tasks Difficulty

- Users were not able to complete some of the tasks and mentioned that they were unfamiliar with the context, means, procedures, location, or wording *“actually I would go to Google”*

Type

- Issues with global and specific task possibly due to lack of context

Time & Scope

- Interview Protocol changed and used one task for each stage of the process writing
- IRB resubmitted after first round

Discussion



Challenges: Instructional Design

Prescriptive

- "citation.. happens when I am drafting not at the end of the process"
- "I think that citation can happen in different stages, so i am unsure what category it should go under"

Choice

- "Because i haven't use these tools before, I would just randomly click all the tools to check the website...look at the layout..and I want to see if its user friendly"
- "I want to see what's so special about these tools"



Future Development

- More Scaffolded Instruction: Videos
- User autonomy and empowerment: Commenting
- Paid tools included
- Instructional design analysis
- Additional iterations and participants

A close-up, low-angle shot of a person's hand raised high in the air, palm facing forward. The hand is positioned on the right side of the frame. The person is wearing a dark, textured wristband on their left wrist. The background is a dimly lit room with warm, out-of-focus lights (bokeh) and a blurred figure of another person in the distance. The overall atmosphere is that of a social gathering or event.

THANKS!

Any questions?