**COMP90082 Project TG**: Topic generation & text generation

* Log-in page, etc.

**Topic generator**

* 2 options to begin with
  + Manually enter an area/topic of interest
  + Select from a range of broad topics (e.g., arts, health)
* Suggestions should:
  + Be of broad academic interest, but not require specialist knowledge (i.e., not too technical)
  + Be limited to non-fiction/expository writing
  + Be narrow enough to avoid (a) overlap with other texts and (b) coverage of well-known/general knowledge (e.g., ‘environmental problems’ is too broad, while ‘environmental problems caused by ships in the Caribbean’ would be more suitable)
  + Exclude topics that may cause a strong emotional reaction (e.g., capital punishment, abortion)
* Generate a list of topics (use ChatGPT or other AI to help)
* Can remove and edit topics, then save others to a ‘topic ideas list’ that can be later viewed (the topics from the topic list should also be editable and removeable)

**Text generator: Specifications** (use ChatGPT or other generative AI language models for text generation)

* Topic (to enter, either manually or select from the ‘topic ideas list’)
* Genre (as part of the prompt, to go with the topic), e.g.,
  + Expository: process, cause & effect, problem-solution, compare & contrast, definition, classification
  + Descriptive
  + Narrative
  + Persuasive/opinion: review, argument, essay
* Text length/word count (e.g., around 1000 words, at least 100 words)
* Number of paragraphs, including range (e.g., 1, 7 to 10)
* Difficulty of text: may need to try a few options to see what works best, e.g.,
  + Flesch Reading Ease = 206.835 – (1.015 x average sentence length) – (84.6 x average syllables per word)]; Flesch Kincaid Grade Level = 0.39 (total words / total sentences) + 11.8 (total syllables/total words) – 15.59
  + Age range/grade level of target readers
  + IELTS score?
  + CEFR level?
* Other aspects of text (to add to the prompt) that can be selected (or not selected)
  + Avoid listing things
  + If possible: multiple (semantically) similar themes/ideas/words/phrases should come up relatively close (within the same paragraph or two adjacent ones; may depend on length of text)
    - Maybe use semantic tagger to help with this?
  + Clear introduction and conclusion paragraphs that don’t obviously repeat main points from the body of the text (want to avoid too much repetition of text)

**\*Example** of having enough similar ideas given to make convincing distractors: This means ideas are all mentioned in the text rather than randomly thought up for questions, which makes it impossible for test takers to guess the answer by matching text from the questions to the longer text. (Narrative rather than typical expository text but should be applicable to all types of text.)

Text: *It was my dog’s birthday last week, so I got her a shiny red ball because her old tennis ball needed to be replaced. Spot seems happy with her present, though she still prefers her bone chew toy. She can chew on it for hours, even though she completely ignores her other chew toy, which is duck shaped. Maybe it’s because she likes live ducks so much that she can’t bear to chew on a fake one.*

Item: What is the dog’s favourite toy?

1. A red ball.
2. A tennis ball.
3. A bone chew toy.
4. A duck chew toy.