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CSCI3832
Assignment1
How many words?

I decided what a word is on the basis of what was in the dictionary I used to conduct this research. I used the New Oxford American Dictionary, third edition. To me a word is something that holds some kind of practical meaning. It is something that can be translated or used to describe something or someone. By using the dictionary, it contains words that are associated with a definition, this allowed me to consider these as words. Since the dictionary included places, cities, and names I considered these to be words as well.

To decide what "knowing a word" meant, I looked at a word and if on the top of my head without looking at the definition, I could interpret the word and associate it with a meaning, then I knew it. I believe if I can properly think of a words definition or associated meaning, then I knew what that word meant. Also I considered the fact that If I could use that word in a sentence or an example, then I would consider it as knowing the word.

To determine "how many" meant, I decided that meant how many words I knew with the associated definition. If I could look at a word in the dictionary and define it/ determine it as a "known" word, then that counted. This mostly meant words in my native language, English, but also some French words as I took French classes and can decipher and define multiple words in that language.

To count how many words, I knew, I took the New Oxford American Dictionary and flipped to a random page. On the page I would go down the list of each word, if I could look at the word and recognize it and define it, I counted it as knowing it. I took tally of all the words I knew on that one page and made a proportion of the words I knew on the page over the total number of words on that page. I repeated this 5 times to get a more accurate result with more trials. Once I completed the trials, I took each proportion and added them. I divided the result by 5 to get the average number and then took that and multiplied by the total number of words in the New Oxford American Dictionary. I found out the total number by and internet search as the book itself did not have a count in it. This total came out to be 350,000 total words in the dictionary. Below is the math I used that led me to my result, how many words I know.

$21/56 + 32/56 + 21/39 + 23/41 + 21/32 = 2.17711571965$

$2.17711571965 / 5 = 0.43542314393 * 350,000$

$= 152398.100375$ words in English + about 20 French words.

Total number of words I know is about 152,418 words.