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# Beyond Grammar & Spelling

Supporting the Writing Process with Digital Tools and AI

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ELT Connect, 7 December 2019

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# What is Grammarly?

Digital writing tool

## **Beyond Grammar and Spelling**

From grammar and spelling to style and tone, Grammarly helps you eliminate errors and find the perfect words to express yourself.

# Grammarly's Claims

- more accurate and broader feedback than earlier/comparable tools
- contextual awareness (e.g. level of formality can be defined)
- Grammarly's vision: 'creating a comprehensive communication assistant'
  - continual updates

# Technology behind Grammarly

- First generation grammar checkers: pattern matching & string replacement (e.g. *isnt* => *isn't*)
- Second generation: real syntactic processing
  - rule-based descriptions of permissible syntax
  - detected ungrammatical elements
- Grammarly: combines rules, patterns & Artificial Intelligence (AI)
  - Leading AI-based Grammar checker

(Dale 2016)

# Technology behind Grammarly

AI techniques: machine learning including deep learning & natural language processing

- **machine learning:**
  - supervised (teach computers how it's done based on supplied data)
  - unsupervised (autonomously identifies patterns) = deep learning
- **deep learning:** learning unsupervised from unstructured and unlabelled data (black box)
  - basis for AI-assistants

**Wolf**



# Technology behind Grammarly

- **natural language processing:**
  - science of extracting the meaning of written & spoken language
  - requires background knowledge and recognizing hidden & implicit meanings
  - problem for DL because not based on statistics (more data is no solution)
- **privacy concerns**
  - App, Grammarly Add-in, browser extension

# Motivation & Rationale

1. Does Grammarly live up to its promises, considering it claims a narrow niche where context and background knowledge may not always matter so much?
2. How can it be used efficiently and meaningfully in an ELT context (within a process writing approach)?

# Zero-Waste Assignment



- Do you know anyone who follows a 'zero-waste' lifestyle or has adopted elements of a 'zero-waste' lifestyle?
- In the video, the 'zero-waste' lifestyle is described as 'a growing movement'. Do you agree that more and more people are following this lifestyle? Do you personally pay attention to how much trash your lifestyle generates, and do you have any strategies for reducing waste?
- Are attitudes to trash changing? Do you see any differences between your own attitudes and habits compared to your parents and grandparents? If possible, illustrate this with an anecdote or story.
- If you decided to go 'zero-waste', how would your life have to change? What would you have to do differently? Think of different areas of your life, such as food, home life, fashion...

## 1<sup>st</sup> Writing assignment:

Discuss the questions above with your partner. Write a text of about 250-300 words about the most interesting ideas you discussed. Be as specific as possible and include anecdotes and stories you shared.

# Instructions for Peer Reviewing

1. Give your assignment to a partner to review. Mark your partner's text in pencil. You should pay more attention to **language** (tenses, prepositions, spelling, vocabulary etc.) than content, although you should highlight any logical problems that you notice.
2. Return your partner's assignment. Do not hand in your assignment to your teacher, but take it home with you for revisions.

# Guidelines for Using Grammarly

## After the second lesson:

1. Register with [grammarly.com](https://grammarly.com) and copy&paste your assignment. Mark all corrections suggested by Grammarly on your original printout using two different colours – one colour for the suggestions you decide to reject, and another colour for the suggestions you decide to adopt.
2. For the latter category, write your corrections above the highlighted passages on the original printout of your assignment using a pen or coloured marker.
3. Experiment with the hidden features and make any further corrections you consider appropriate. Use a third colour to highlight these.

# Now it's your turn...

1. Form groups of 3-4 people.
2. Analyse your learner text:
  - a. What would you mark?
  - b. What do you think Grammarly would/should mark?
3. Share your thoughts!

# Group A

The first aspect we talked about was, if we know anyone that lives a zero waste lifestyle. I personally do not know anybody that lives that way, I only heard about some guy that lives near my home and he is trying to live that way. I hardly have any more information about him.

I think that it is kind of logic, that more and more people try to follow a zero-waste lifestyle, because, especially last year, people care more about the environment. I personally try to produce as little waste as possible but it's hard, because everything you buy is packed in a lot of waste, like plastic and so on. At home, we switched from plastic bottles to glass bottles. At the end of the month, we had a lot less plastic waste, than the months or years before.

## Group B

Of course the attitudes to trash change. When I compare myself to my parents or grandparents, I don't see a lot of difference between us, because my whole family tries to produce as little waste as possible. The only exception is my grandfather, he thinks that small people like us, don't make any difference. Sometimes he doesn't even separate the waste he produces.

If I had to change my life into a zero-waste lifestyle, a lot had to change. For example, I would have to buy different products in store. But at the moment, I don't really think about all the different ways, I produce waste, so I would have to rethink my way of life.

# Grammarly Demonstration

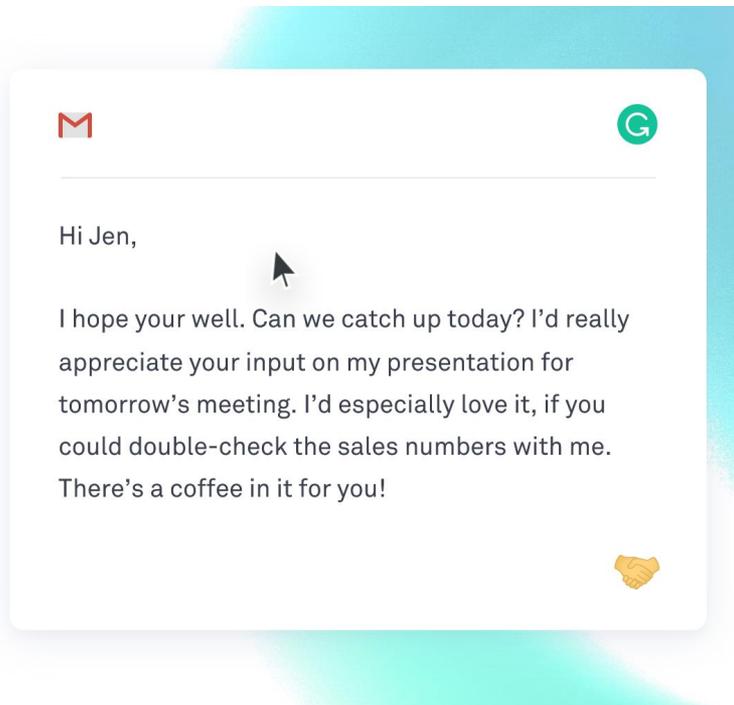
## Great Writing, Simplified

Compose clear, mistake-free writing that makes the right impression with Grammarly's writing assistant.

Add to Firefox It's free

A Featured Extension on Firefox

20 million people use Grammarly to improve their writing



# Sample Corrections

I **for myself** find it hard to form a real opinion about this topic. I have to admit, that I am mostly biased by my parents and relatives. Most of them <sup>do not</sup> ~~don't~~ believe that they can make a difference, so why should they even bother trying? My parents do try to use reusable material instead of plastic. But they still have two cars and shop online and do many other things that one should probably avoid doing in order to save the planet. I have no problem with that. I mean, millionaires are out there flying in their private jets and poisoning the environment so why do we have to be the ones to refrain from enjoying ourselves? If all the billionaires in the world would quit using their private planes, we would probably have already saved the world twice.

So, what is saving the environment <sup>about this</sup> ~~about~~? It's not ~~about~~ how much waste you produce, how much you recycle, and it is certainly not about being totally free of waste. What matters is being mindful <sup>at</sup> ~~about~~ what you buy and what you throw away. Small things like using cotton bags or buying second-hand clothes occasionally can make a difference. If everybody is more conscious about the environment, then we are already a step closer to our goal to save Earth. <sup>(the)</sup>

**for myself** suggestions I decided to adopt

**do not** s. I rejected

**don't** hidden features

~ = Partner  
- = me  
- = rejected corrections by grammarly  
- = adorted ones  
~ = hidden mistakes

October 14<sup>th</sup>, 2019

Language Awareness

Group H

## Zero Waste Living

Since the "renaissance" of environmental awareness, thanks to public figures, such as Greta Thunberg, movements such as the one calling for a reduction of personal waste have become ever more popular. As a prime example of what one can do personally, to make a difference, the Zero Waste Living movement has found several followers among my friends and family members.

One such friend of mine has been quite extreme when applying the principle of avoiding waste at all costs. She refuses to use shampoo and most other hygiene products that are bottled in plastic and resorts to different alternatives such as only using water.

This example and many more moderate supporters of this movement <sup>autology</sup> in my personal

# + Punctuation

## Commas:

We shouldn't order things online, because of the packaging.

But on the other hand they agreed...

My mother's siblings on the other hand saw it as...

As a woman I would have to...

... less waste goes to landfill which plays a huge role...

## + Punctuation

**Inverted commas:** Anna [...] does most of her shopping at ■ das Gramm which is...

**Apostrophes:** ... plays a huge role in human ■'s health...

***Wrong suggestion:** When comparing my waste habit with my parents ■ and grandparents ■ ...*

**Dashes:** the so ■ called zero ■ waste lifestyle; school ■ related products; waste free action

## + Punctuation: Premium Alerts

### 'Punctuation in Compound/Complex Sentences'

She answered, that she can reuse the bottle and reduce the amount of plastic she uses.

**No alert:** I think that this is kind (= > a kind) of logic, that more and more people try to follow...

My mom produces little trash, my grandmother is very similar.

**No alert:** I personally do not know anybody that lives that way, I only heard about some guy...

# + Spelling

## Individual items:

idems

devided

everytime => every time

over night => overnight

*generally not corrected: capitalization (except I)*

## Spelling in context:

live / life

rise / raise

very / vary

cloth / clothes

thing / think

advise / advice

adapt / adopt

were / where

prize / price

## + Prepositions

conscious **about** waste => of

pay attention **on** => to

Let's start **with** using... => by

Concerning the difference **of** attitude between... => in

... more recognition **by** the years... => over

## + Grammar

less / fewer: ...which implies that they had **less** things...

much / many: ... not buying too **much** new ones [pieces of clothes]

so not => so as not: ...**so not** to completely ruin our natural habitat

its => it is: ...because **its** nearly impossible

### **Verb Forms:**

send => sent: the amount of trash that is **send** to a landfill

**Tenses:** only with obvious markers (e.g. yesterday - past tense)

## + Grammar

### Agreement:

... a lot of local Youtuber and Influencer **■** started sharing their experiences...

the political and environmental circumstances nowadays **who** makes **s** our generation realise

I buy sparkling water in glass bottles and recycle **it** every time...

## + Grammar

### Adjective / Adverb:

... both take that topic very **serious**

### Articles:

My friend Laura had a big impact on my view of **an** environment.

I hope **the** people all around the world get more concerned about [...]

**Wrong suggestion:** *a friend of mine always wraps her presents  
in **a** newspaper*

## + Grammar

### Missed Mistakes:

People are finally getting conscious about how big of an ecological footprint **are they leaving**, and how **is this** harming our planet.

... since then, I **pay** even more attention to the amount of trash I produce.

If I had to change my life into a zero-waste lifestyle, a lot **had** to change.

***Premium alert:*** *If I **would go** with a zero-waste lifestyle, I would need a lot more time to organize my life [...]*

# ~ Stylistic Features

## 'Clarity: Conciseness' - 'Tautology'

Personally, I have not tried such a lifestyle by now, but my family tries to reduce the amount of plastic...

I personally try to be conscious of what I consume.

Whenever I think of the trash I personally produce...

# ~ Stylistic Features

## 'Clarity: Conciseness' – 'May be unnecessary'

...factors such as global warming weren't really discussed back then.

But is this really the case?

...taking my own cloth bag with me; ...using their own containers for meat

I often cook ready-made meals [...], but actually, real cooking would be healthier

## ~ Stylistic Features

...attitudes towards trash have **definitely** changed

One can **definitely** see a change in modern society.

However, this method is **clearly** not for everyone...

**Obviously, Apparently... simply**

# ~ Stylistic Features

'Clarity: Conciseness' – 'may be wordy'

... have changed their lifestyle completely ~~in order to~~ save the planet; some strategies ~~in order to~~ reduce waste are...

Our group came to the conclusion (=> **concluded**) that the waste separation policy in Austria is great.

...we are used to utilising plastic on a daily basis => daily

... they don't ~~have the need~~ to buy...

## ~ Stylistic Features

Despite the fact that older generations may not think about reducing trash...

In some areas, my household is already almost without waste, due to the fact that (=> **because, since**) we can use old clothes ...

***Premium alert:** It is not necessary and possible to follow this way of living for every person on earth, but we should at least become aware of what we do to our planet and find out which small changes we can make. => ...on earth. However, we should...*

# ~ Language Preference

## American English

favor

center

utilize

realized

labeled

afterward

## British English

favour

centre

utilise / utilize

realised / realized

labelled

afterwards

# ~ Language Preference

## Oxford comma

AmE: obligatory; BrE: optional

bamboo toothbrushes, metal razors, and cloth bags

## ~ 'Misuse' of Passive Voice

+

From personal experience, I am enabled to say...

-

... a rather popular trend, which has been adopted [...] all over the world.

... the waste, which is produced in our household, consists of ...

# Premium Alerts

## 'Word choice'

Even in my family, everyone speaks about this tremendous way of living.

People are trying to reduce their waste production as good as possible.

# Premium Alerts

## Word Choice

It is mainly the media, especially social media, and the political and environmental circumstances nowadays **who** make our generation realise that further **steps need to be done** so as not to completely ruin our natural habitat and to preserve it for future generations.

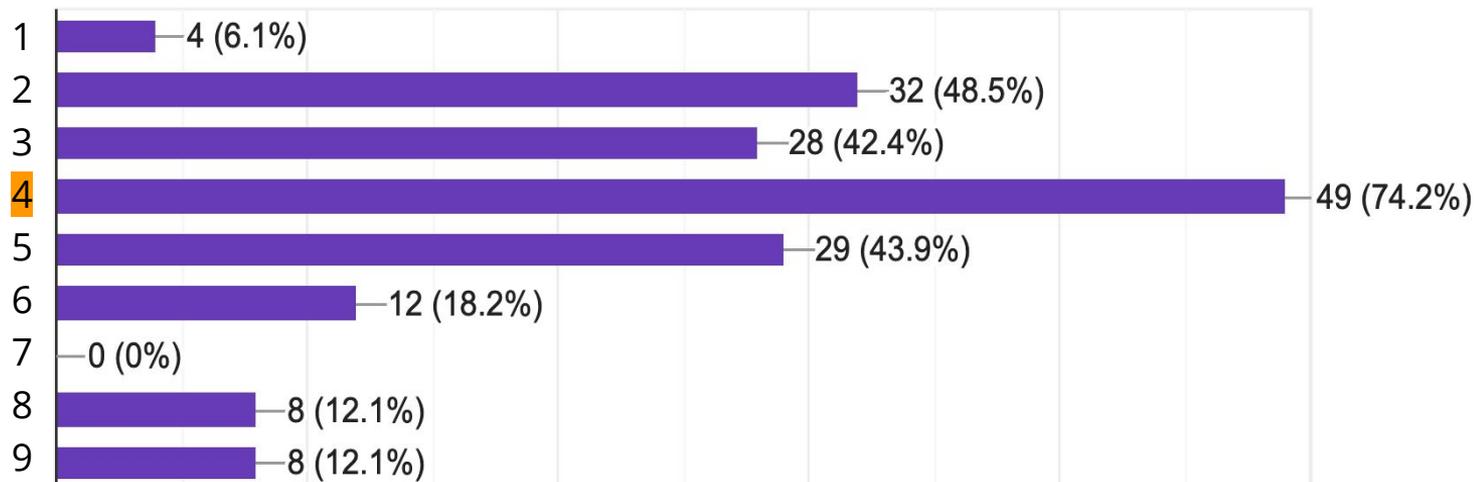
- Pronoun Use
  - Comma (relative clause)
- Passive Voice Misuse
- Misplaced Words or Phrases

## Now it's your turn...

1. Which tools do you personally use when you write?
2. Which tools do you consider most helpful for learners?
3. Which tools do you think our students use when writing assignments?
4. How familiar do you think our students are with AI writing tools such as Grammarly, Pro Writing Aid, Style Writer, GrammarCheck.net etc.?

## Which tools do you use when you write assignments?

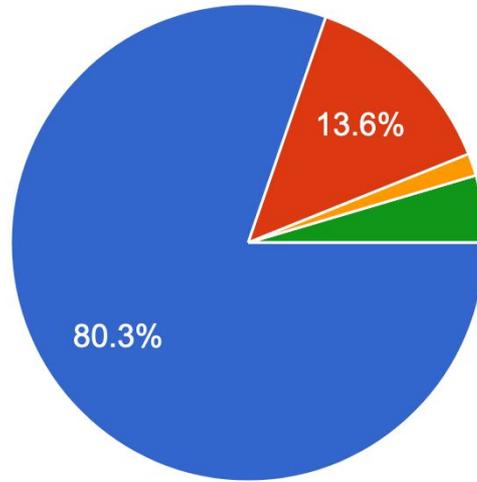
66 responses



1... None; 2... Word spellchecker; 3... Word grammar checker;  
4... Bilingual dict.; 5... Monolingual dict.; 6... Collocations dict.  
7... Corpus; 8... Online forum; 9... Grammar reference book

# Did you ever use Grammarly before the first assignment for LA1?

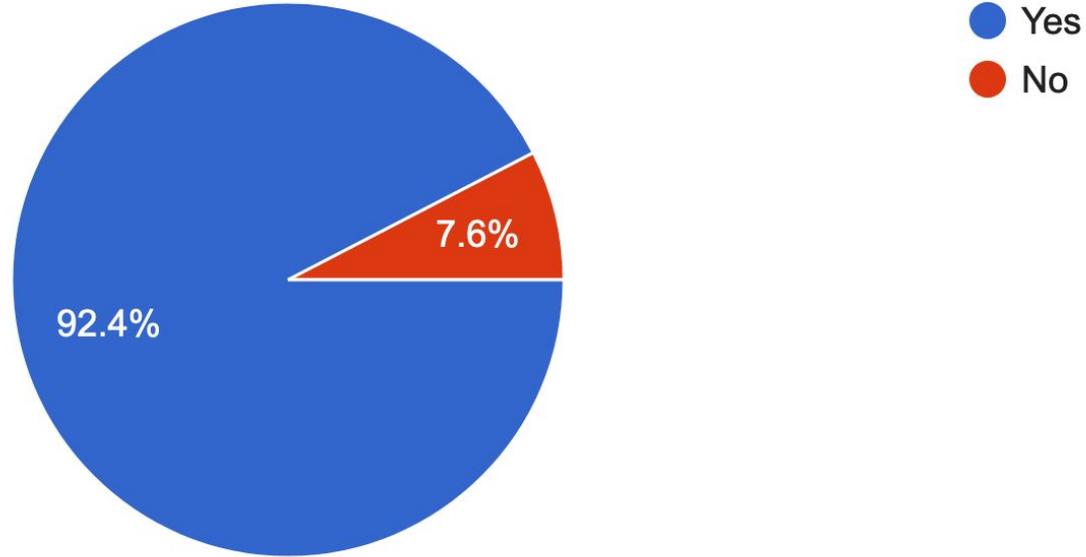
66 responses



- No
- Yes, the free version
- Yes, the premium version
- Yes, the free version of the app
- Yes, the app with premium features

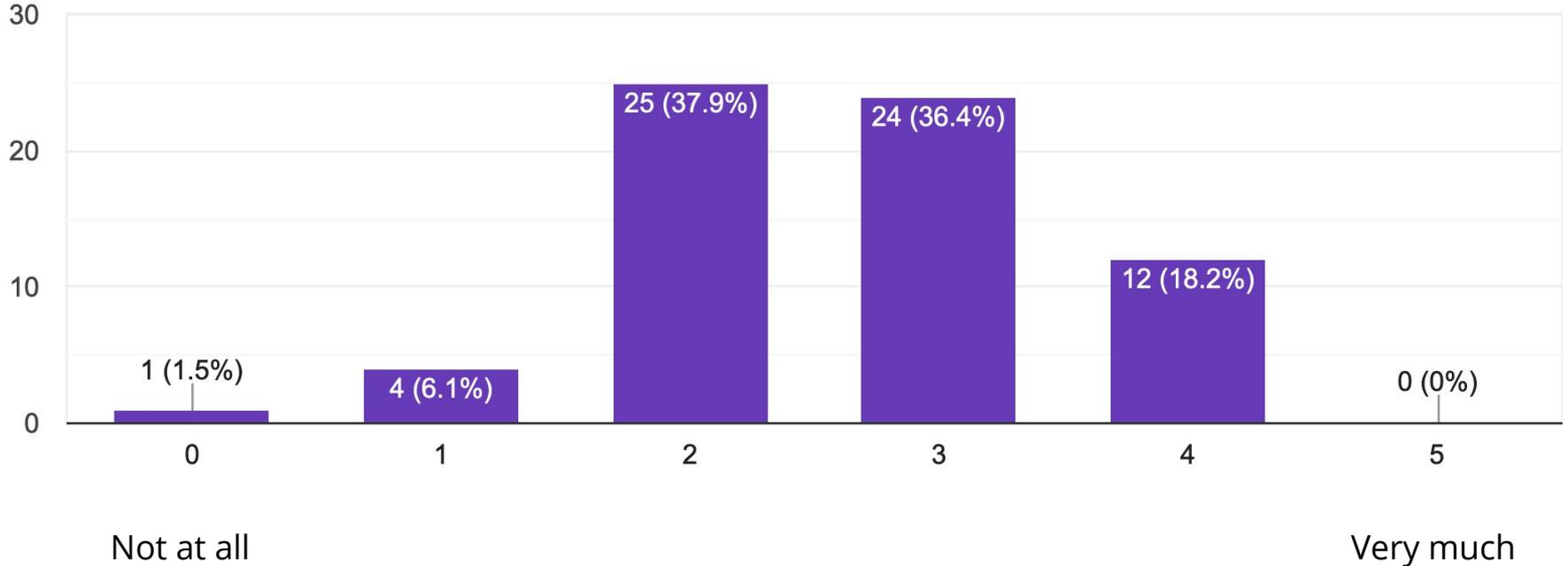
# Do you think that using Grammarly improved your first writing assignment for LA1?

66 responses



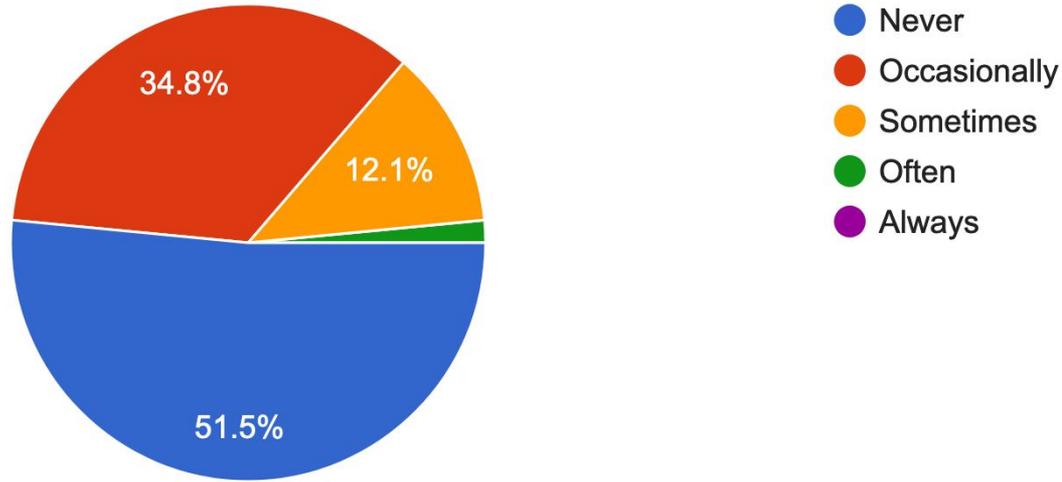
# How much do you think using Grammarly improved your assignment?

66 responses



How often do you ask somebody else to proofread your assignments for university before you submit them to your teacher?

66 responses

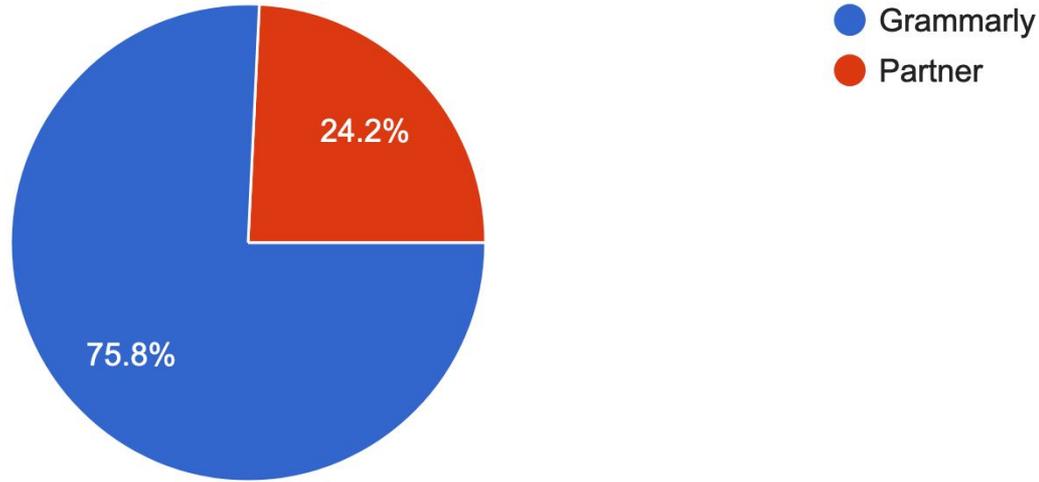


A word cloud featuring various English-related terms. The words are arranged in a roughly circular shape. The largest word is 'native\_speaker' in blue. Other prominent words include 'friend' in black, 'classmate' in red, and 'family\_member' in yellow. Smaller words include 'girlfriend', 'depends', 'boyfriend', 'Mum', 'my\_parents', 'classmates', and 'a\_friend\_that\_studied\_English'. The words are written in different styles, including cursive and sans-serif fonts.

girlfriend  
depends  
native\_speaker  
friend  
classmate  
Mum my\_parents  
classmates  
a\_friend\_that\_studied\_English  
boyfriend  
family\_member

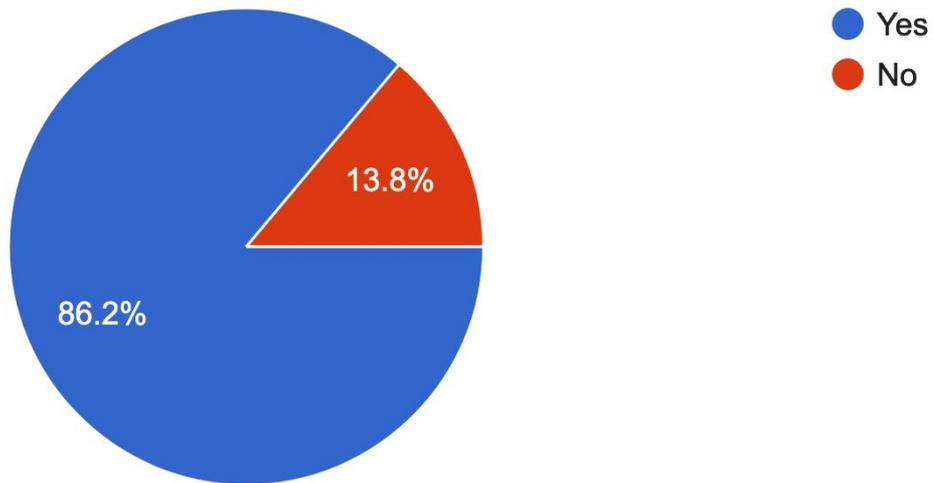
In your opinion, what was more helpful for improving your assignment: Grammarly or your partner's suggestions for revision?

66 responses



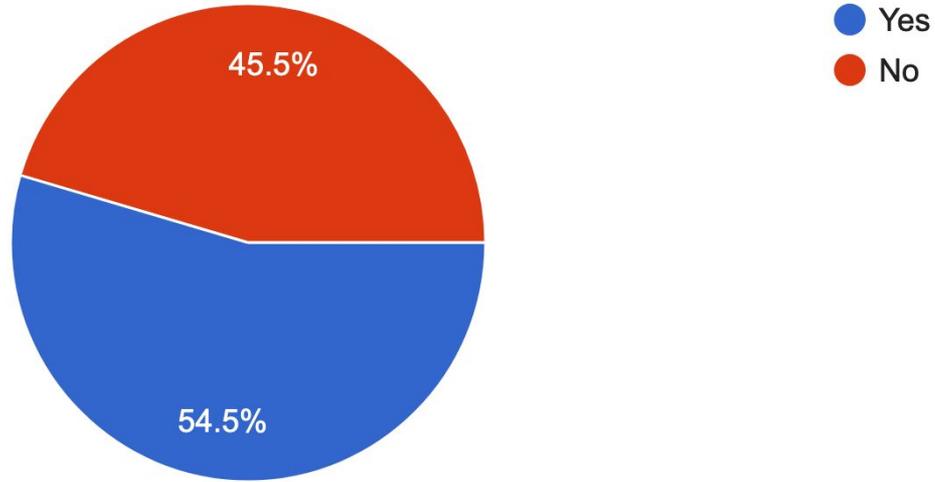
Overall, do you think the benefits resulting from using Grammarly are worth the additional effort involved?

65 responses



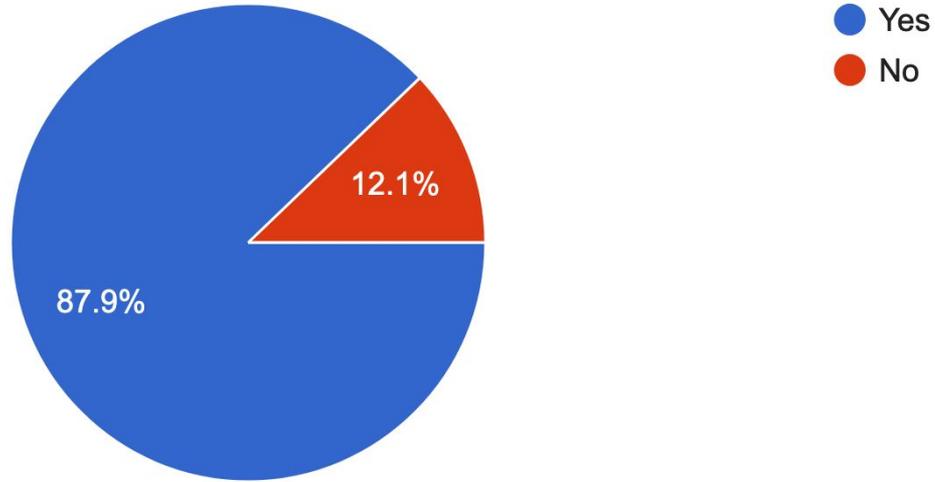
Did you use Grammarly for the second assignment (story writing - focus on past tenses)?

66 responses



# Do you think you will use Grammarly again in the future?

66 responses



academic\_papers  
presentations  
background  
graded  
seminar\_paper  
short\_stories  
English\_texts  
scientific\_papers  
formal\_style  
perfection  
higher\_level  
grammar  
personal  
important  
thesis  
story  
commas  
check  
proofreading  
uni\_assignments  
hurry  
overlook  
essays  
e-mails  
no\_extra\_effort  
improve  
academic\_writing

# Pedagogical Implications

- student language level: students need sound knowledge of grammar to weed out incorrect suggestions
- familiarity with metalanguage: difficult terms (e.g. 'tautology')
- role of the teacher/facilitator: using an editing tool for language teaching (e.g. be aware of limitations, such as tense use)
- same issues addressed in all texts, regardless of writer's needs: differentiating proficiency levels in future updates?

(Dembsey 2017; O'Neill & Russell 2019)

# Now it's your turn...

1. Do you have experience teaching with AI based writing tools?
2. Can you think of ways you could use Grammarly (or similar tools) in your teaching?



**Thank you!**

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