ChatGPT-3.5 as writing assistant in English for academic purposes

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Context

- **English proficiency: academic acculturation**

  - Audience (lexicon)

  - Summarising & paraphrasing

  - Text structure & organisation

  - Argumentation

  - Using sources

  - (Voice & Stance)

- **Students**:

  - 1st bachelor (N=140)

  - 2nd bachelor (N=120)

- **Discussion of ethics of using AI at start of course – students propose rules**

Rationale

- **AI literacy: being able to use AI**
  - Critically
  - Responsibly
  - Effectively

  (Lauplicher, et al. 2022)

- **High student numbers**
  - Limited individual feedback

- **Foster learner autonomy**

- **AI feedback combined with Human feedback + consultations with interns**

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Procedure

- **Series of tasks to write and revise an argumentative paper**

    1. Brainstorming, outlining, and writing a thesis statement

    2. Writing an introduction

    3. Writing an argumentative paragraph

    4. Using sources to support an argument

    5. Writing a conclusion

    Final product: the argumentative essay

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Procedure

- **Writing and revising procedure**
  1. Write first, rough draft in class
  2. Generate feedback with ChatGPT-3.5 outside of class
     - Examples of (pre-tested) prompts provided

I am writing an argumentative essay about [insert the topic you have selected]. Is my thesis statement [insert your thesis statement] <u>relevant to the essay topic</u> ?

Can you suggest <u>arguments for and against my thesis statement</u>: [insert your thesis statement]

Can you <u>create an outline</u> for the essay using the following arguments: [list the final ideas from part B].

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Procedure

- **Writing and revising procedure**
  1. Write first, rough draft in class
  2. Generate feedback with ChatGPT-3.5 outside of class
     - Examples of (pre-tested) prompts provided
  3. Revise and submit second draft
     - In-class version
     - Chat with ChatGPT
     - Revised draft to be graded
     - Reflection (ChatGPT's strengths/weaknesses & intentions to use it again)
  4. Human feedback and grade: Alena Anishchanka & EduMA interns
  5. Submit final drafts as full essay for grading

Alena – prompts

- **Creating essay prompts**

- **Improving our rubric**

- **Test prompts for students to generate feedback**
  - Unpredictable and vague – be very precise
  - Positive bias when asked to provide feedback – ask it to be critical

- **Inconsistent grading – typically high scores**

- **Made suggestions contrary to theory**
  - Give it more concrete context and information

- **Some good feedback, but random**

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Alena – final drafts

- **Advanced vocabulary**

- **Better paragraph structure**

- **Major changes from earlier versions**

- **No obviously direct copy and pasting from ChatGPT**

- **Better final texts qualitatively, not does not necessarily reflect their compete**

- **Did not seem to master some of the key skills**
  - Formulating thesis statements
  - Using sources

- **Students did not follow Alena's feedback**

Reflection and implications

- **Student reflections:** tension between
  - leveraging its potential to help them improve their writing and
  - lack of reliability and impeding creativity and originality

Reflection and implications

- **Post-course evaluation questionnaire**
  - N=94
  - Anonymous
  - Informed consent

Reflection and implications

- **Have you used ChatGPT to revise our texts outside of EP1?**
  - Yes = 52%
  - No = 48%
- **If no, why not?**
  - I do not trust AI
  - Do not feel it is necessary
  - It didn't occur to me; did not know I could use ChatGPT in this way
  - Other courses do not require it; have not written longer texts for other courses yet
 - Prefer doing it all myself, or asking peers and family members for feedback

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Reflection and implications

- **Have you used ChatGPT to revise our texts outside of EP1?**
  - Yes = 52%
  - No = 48%
- **If yes, for which purpose / in which context?**
  - Summarising texts
  - Proofreading assignments
  - Finding inspiration or brainstorming
  - Ask questions (alternative to Google)
  - To simplify or explain complex concepts

Reflection and implications

- **To what extent did you follow the suggestions made by ChatGPT?** (none=0; all=100)
    - Mean = 57
- **Why (not)?**
    - No
        - Feedback does not seem correct
        - Does not sound like my text anymore
        - Feedback was unnecessary (e.g. requires increasing length)
    - Yes
        - Feedback helped make my text sound more academic (lexicon)
        - Give concrete suggestions for corrections/improvements what I am doing wrong
        - Followed suggestions when it was consistent with theory and exercises from class
- **NB!! Output only as good as the input**

Reflection and implications

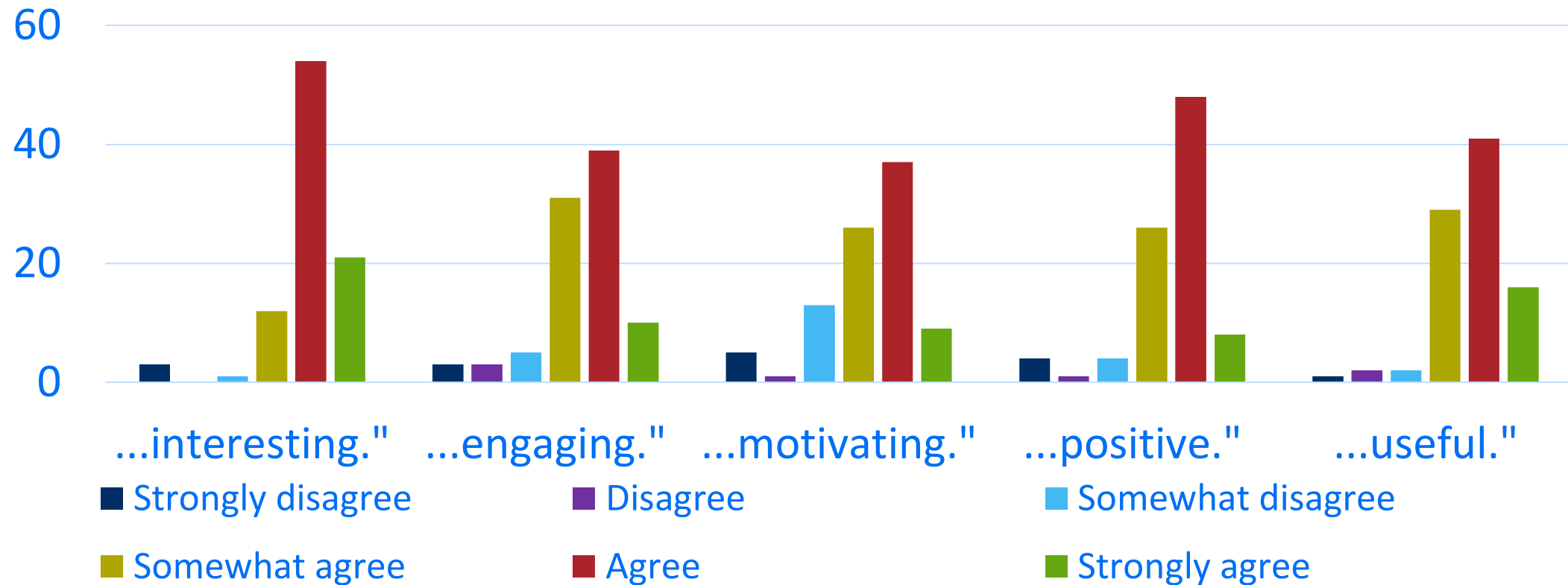In EP1, using ChatGPT...
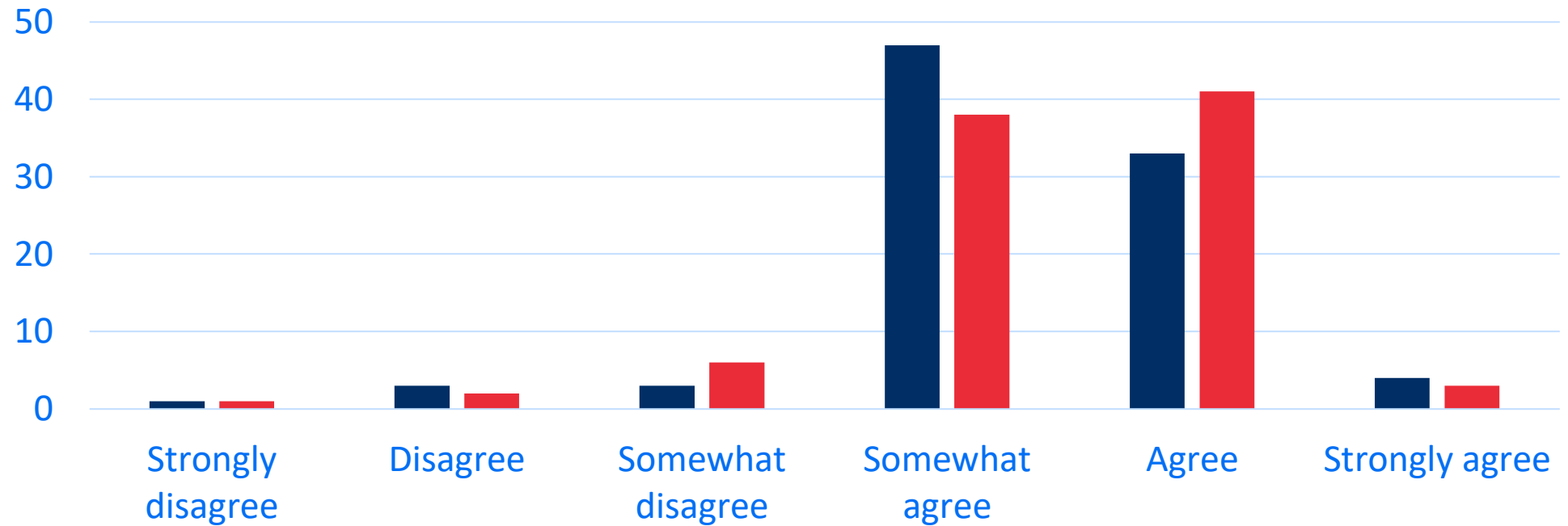
Legend:
- ■ ...helped me to identify my strengths and weaknesses in writing academic papers.
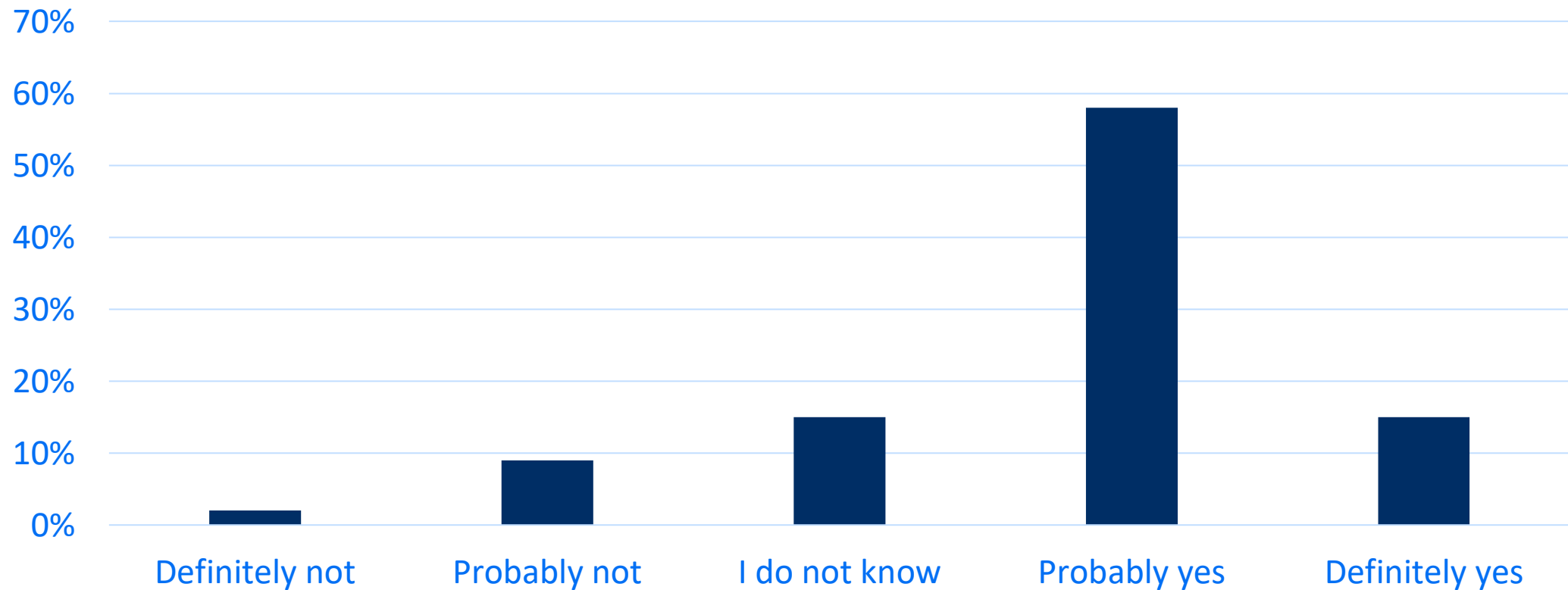- ■ ...helped me to become better at writing academic papers in English.

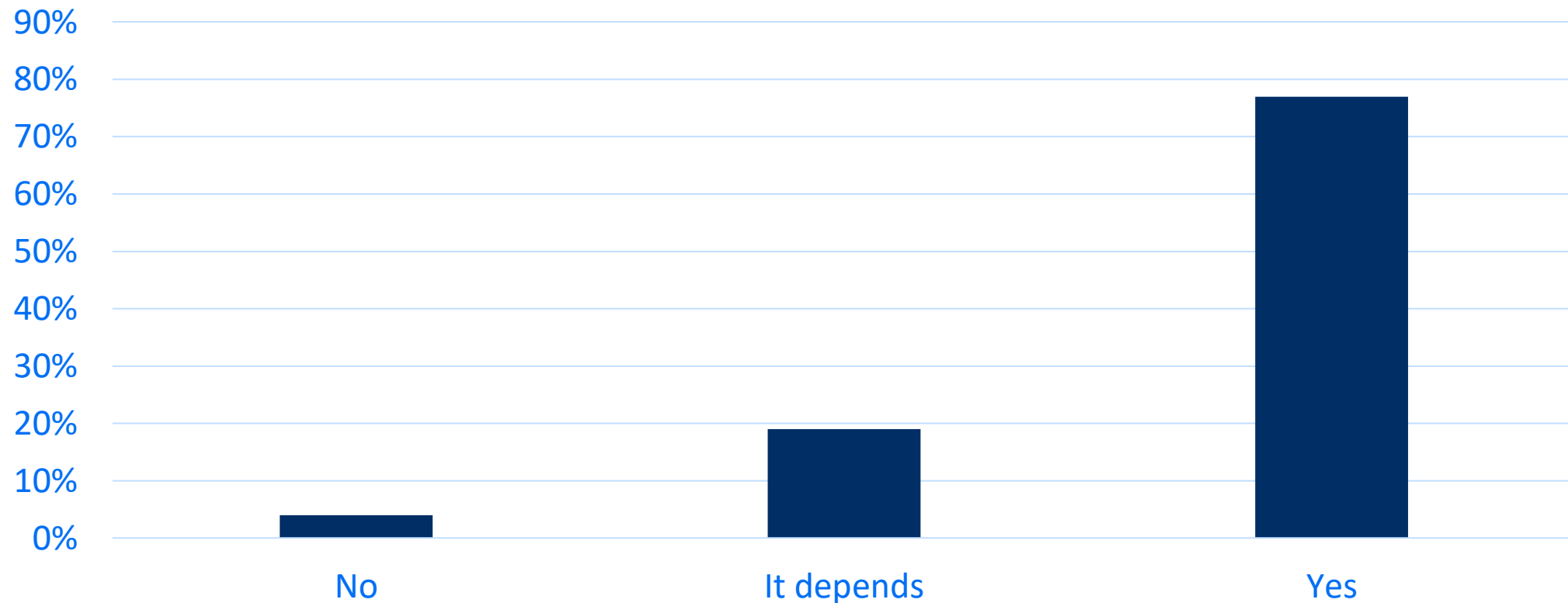# Reflection and implications

Chart Title

Reflection and implications

Do you intend to use ChatGPT in the future to revise your texts in other courses?

Reflection and implications

Based on your experience with ChatGPT this semseter, would you recommend that students use it in EP1 in the same way next year?
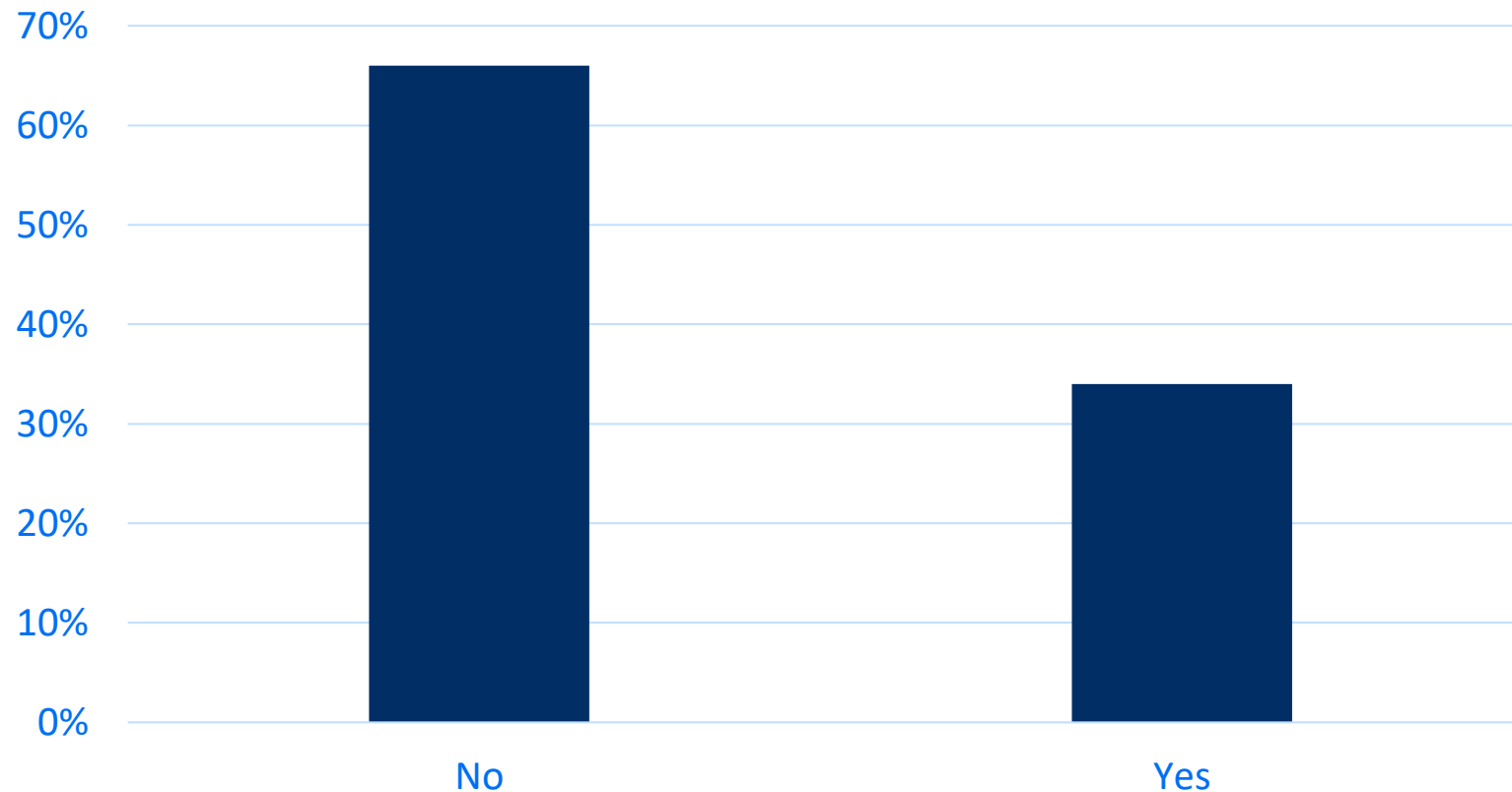
Reflection and implications

- ## Why (not)?

  - Students will use it anyway, it is best for them to learn how to do it correctly

  - Students should learn that it is not always reliable

  - It helps students improve their writing – your own personal tutor available 24/7

  - Low threshold feedback (less scary than a professor's feedback)

  - Students should be able to choose whether they use it or not

  - Strict and clear rules should be made about how to use it

    - Students should share their chats for transparency
    - In-class writing is important
    - Should not write texts for students – these are "soulless"
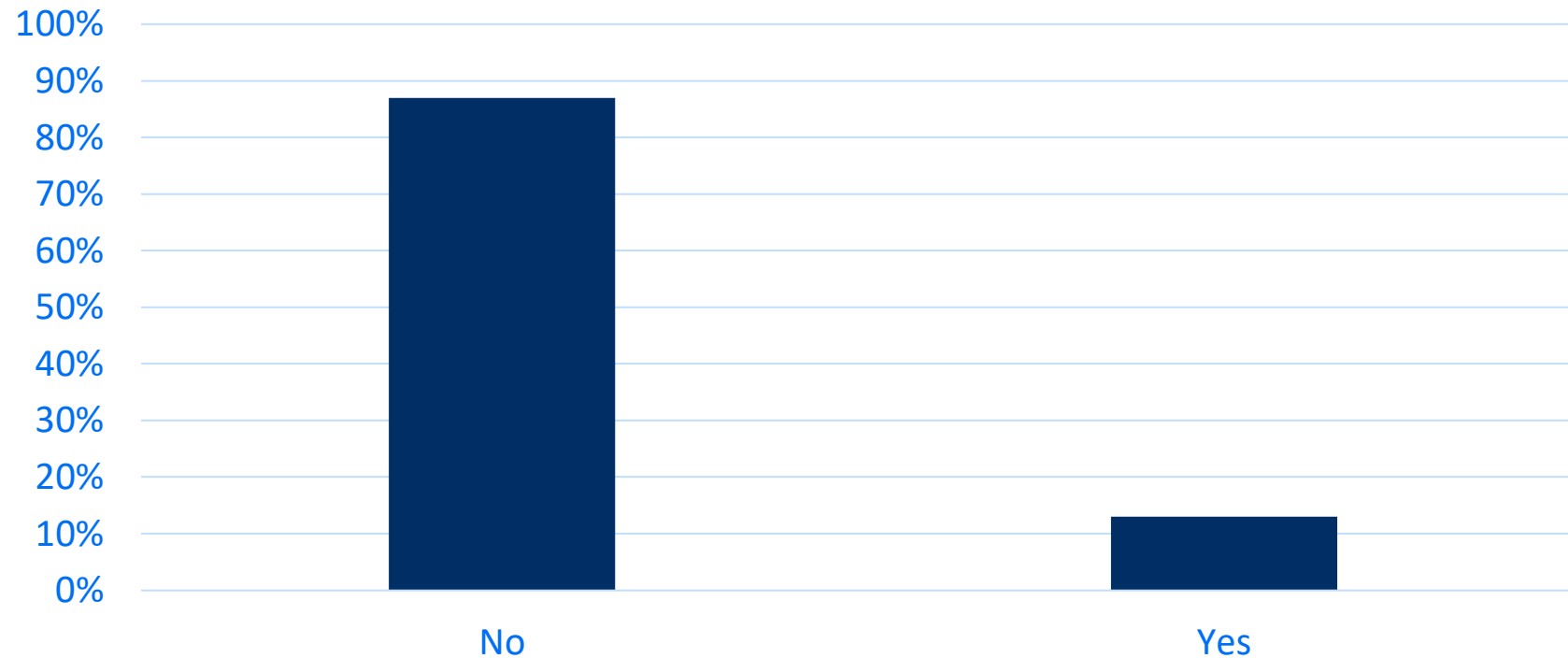
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Reflection and implications

Are you tempted to use ChatGPT or another AI program to write an essay, paper or assignment for you?

Reflection and implications

Have you ever actually used ChatGPT, or another AI program, to write an essay, paper or assignment for you, either in EP1 or other courses?


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Reflection and implications

- **Why (not)?**
    - It is dishonest
    - You risk failing
    - It is unreliable and inaccurate
    - It cannot write with the 'soul' of a human
    - It is obvious when not written by a student
    - I will not learn anything and I want to improve my writing skills
    - I have used it to get inspiration (writing a draft for me and then rewriting 80% of it)
    - Tempted yes, but would not do it because I would not feel good about myself
    - Yes, because I did not understand the assignment and did not have time to do it myself (procrastinating)

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Reflection and implications

I believe students are likely to use ChatGPT, or other AI programs to write their essays, papers and assignment for them.
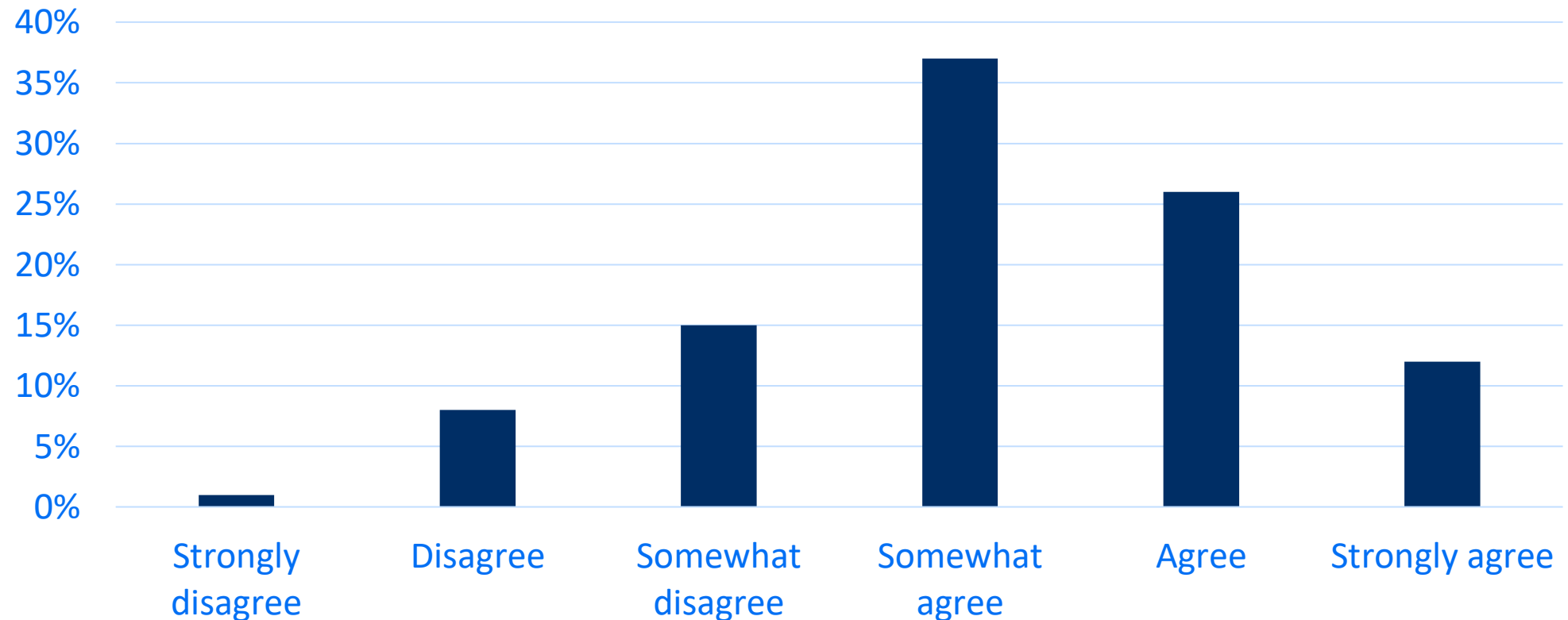
Reflection and implications

- **Why (not)?**
    - It is easy and fast – students procrastinate and are becoming more lazy
    - Students have a heavy workload, they lack motivation and energy
    - Some students are not educated on its limitations (it hallucinates)
    - Students will use it, but perhaps not to write the entire text for them
    - It will cause them to fail

Reflection and implications

- Importance of prompt engineering skills (garbage in – garbage out)
- Emphasise use of ChatGPT as tutor (interaction partner)
- Possibility for deeper engagement with theory
- ChatGPT or another tool/app/platform?
- Develop students' feedback literacy
- Automated writing feedback/scoring
- Reconsider assessment
- Set clear guidelines
- To be investigated:
  - Nature of revisions
  - (Long-term) learning gains
  - Copying and pasting from ChatGPT

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