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Critical Text Analysis and Production
Possibilities and limitations of using AI in EFL essay writing

(From Year 10/11)

Objectives
- to foster students' analytical reading, writing and speaking skills
- to enhance their text and media competencies by encouraging them to use digital tools
- to enable them to critically reflect on the potentials and challenges of using AI-chatbots in the context of their own text productions

The Topic, Texts and Materials
The evolution of chatbot technology which is based on artificial intelligence (AI) has attracted people's attention worldwide and caused controversial discussions on AI's potential as well as limitations for future communication technology. AI chatbots are used across contexts to gather information, stimulate ideas, give immediate answers to all kinds of questions, and produce auditive, written and visual content. As they can also be used for the modification, production and analysis of texts, AI chatbots are highly relevant for learning in general and language learning in particular. Thus, the availability and usage of AI chatbots in education presents an innovative opportunity for teachers as well as for students within the context of English language education. AI has great potential for preparing lessons and developing teaching material and also for use within the lesson itself. Examples of the former are creating visual material appropriate to the lesson's content, generating written and spoken texts, adapting texts to certain levels of competency or simply getting inspired for a lesson's content and structure. Within the lesson and classroom itself, AI chatbots can be used for example to enhance students' argumentative skills by collecting arguments, as a conversation partner (e.g. for a phone call) or for helping students to write texts. However, students need to be able to critically reflect on the potentials and limitations that go along with the use of AI for text production. In particular, attention needs to be paid to promoting students' text and media competencies. This objective will form the focus of this material, allowing students to work systematically with an AI chatbot under the guidance of the teacher.

To enable students to approach the topic in a conscious, self-reflective and critical way, the material consists of a cartoon analysis as a possible introduction as well as an AI-generated essay on the advantages and disadvantages related to students' use of AI chatbots in essay writing. The text will be analysed according to genre-specific criteria (e.g. the form, structure and content of argumentative essays). Finally, an individual text production completes the text work.

Suggested Treatment
Step 1
Introduction to the topic and pre-reading activity: A cartoon analysis
As an introduction to the lesson, students are asked to describe and interpret a cartoon which visualises an interaction between a robot and a teenager. First in a group of two and later in groups of four, they are asked to work on the assignments of **Transparency 1** and become engaged in a dialogue and group discussion related to the topic of writing essays by means of an AI chatbot. For suggested solutions cf. **S1**.

Step 2
Text analysis
Now students are asked to work in a practical way with an AI-generated text (**T1**), based on an exemplary prompt. Since using an AI chatbot is only allowed from the age of eighteen, the text work should proceed under the guidance of the teacher. Students are required to critically analyse the text according to distinct criteria provided in an evaluation grid (**W1**). On the basis of their critical evaluation of the AI-generated text, students then create a list of different (counter-) arguments as preparation for their own text production (**W2**). For suggested solutions cf. **S2**.

Step 3
Text production
Based on the conclusions of the text analysis, the students should then collect already stated as well as additional arguments (pro/con) (**W2**) to plan their own text production. Based on the list, students write their own argumentative essays. Subsequently, they evaluate and discuss their texts in a writing conference (cf. **W2**, Assignment C). For suggested solutions cf. **S3**.

Potential Additional Task
As an additional task, teachers and students could focus on the process of prompting (explicit instructions) and its influence on the AI-generated text. In this regard, it is possible to try out different types of prompts exploratively within the same context to analyse similarites as well as differences between the AI-generated texts.

T1 Analysing an AI-generated Essay

Prompt: *Write an essay about the advantages and disadvantages of students using AI for essay-writing.*

Using AI for essay-writing has both advantages and disadvantages. The advantages include the potential for improved work efficiency, faster task execution, and reduced human error. AI can also provide digital assistance and help in repetitive tasks, leading to 24/7 availability. However, the disadvantages encompass high costs of creation, the potential to make humans lazy, and concerns about unemployment. Additionally, AI may not be able to think creatively or outside the box, and there are ethical and privacy concerns related to the use of AI in education. It is important for students to be aware of both the positive and negative consequences of using AI for essay-writing.

The advantages of using AI for essay-writing include:

1. Improved work efficiency: AI can handle tedious and mundane tasks, allowing humans to focus on more creative aspects of work [4].
2. Faster task execution and reduced human error: AI algorithms can execute tasks more quickly and make fewer errors than humans [4].
3. Digital assistance and 24/7 availability: AI can provide digital assistance and help in repetitive jobs, leading to 24/7 availability [2].

On the other hand, the disadvantages of using AI for essay-writing are:

1. High costs of creation: The creation of AI involves significant costs, including the need for frequent upgrades to meet the latest requirements [3].
2. Potential to make humans lazy: AI applications can automate a majority of the work, leading to concerns about humans becoming dependent and lazy due to these inventions [2].
3. Unemployment concerns: There are concerns that the use of AI could lead to unemployment as machines take over tasks that were previously done by humans [2].
4. Lack of creativity: AI may not be able to think creatively or outside the box, which is a limitation when it comes to tasks requiring creative thinking [5].
5. Ethical and privacy concerns: The use of AI in education raises ethical and privacy concerns due to the significant amount of data collected and analyzed on students [5].

In conclusion, while AI offers several advantages for writing essays, such as improved efficiency and digital assistance, it also poses challenges such as high costs, potential for human laziness, and ethical concerns. Students should carefully consider both the positive and negative aspects of using AI essay-writing.

Citations:
[1] https://edubirdie.com/examples/essay-on-the-advantages-and-disadvantages-of-artificial-intelligence/
[2] https://towardsdatascience.com/advantages-and-disadvantages-of-artificial-intelligence-182a5ef6588c
[3] https://www.knowledgehut.com/blog/data-science/advantages-and-disadvantages-of-artificial-intelligence
[4] https://essayforum.com/writing/discuss-advantages-disadvantages-using-89304/
[5] https://www.simplilearn.com/advantages-and-disadvantages-of-artificial-intelligence-article

AI Chatbot: Perplexity.ai
Generated on December 27, 2023

W1 Critical Text Analysis (Evaluation Grid)

■ ■ ■ ■

Assignments
A Text analysis

Read the text which was produced by the AI-chatbot 'perplexity.ai'. Fill in the grid below and evaluate the text according to the given criteria.

Criteria	[+]	[O]	[-]	Comments:
1. Form & Structure The essay is of reasonable length. It consists of introduction, body (main part), and conclusion according to their functions: The introduction states the thesis, introduces the reader to the topic and the problem, and outlines the main points. The body presents and develops the main arguments and discusses different viewpoints. The conclusion summarizes the main points, restates the thesis, and reinforces one's own position.				
2. Content The essay provides a clear thesis statement and an appropriate variety as well as balance of arguments (pro/con). The arguments are convincing and easy to understand.				
3. Language and Style The essay employs clear, precise language with varied sentence structure as well as correct grammar and spelling. The style is appropriate and meets the criteria of an essay.				
4. Sources & Citations The sources and forms of citations are well-chosen and are in accordance with the content/argument provided. The internet links are working and accessible.				

Positive aspects that are helpful for one's own text production:

Negative aspects that need to be improved:

W2 Planning and Writing an Argumentative Essay

B Individual text production

Based on your evaluation of the AI-generated text and its arguments, collect different arguments (pro/contra) on the question of whether students should use an AI-chatbot for essay writing. Pre-structure your arguments thematically (either as a block: first the contra-arguments, then the pro-arguments, or alternately point-by-point).

With the help of your list, write your own argumentative essay (approx. 500 words).

| Discussion question: Should students use an AI chatbot for essay writing?	
PRO (advantages)	CONTRA (disadvantages)

C Discussion: Writing Conference

1. Get together in small groups and read out the texts you have produced to each other.
2. Take notes on aspects of the others' texts that you liked, that convinced you and/or that might need to be improved.
3. Share your feedback after everyone has read out their texts.
4. Optional: Within your group, choose one text that you would like to share in class and justify your choice(s).

TR 1 Advanced AI? Using an AI Chatbot for Writing an Essay
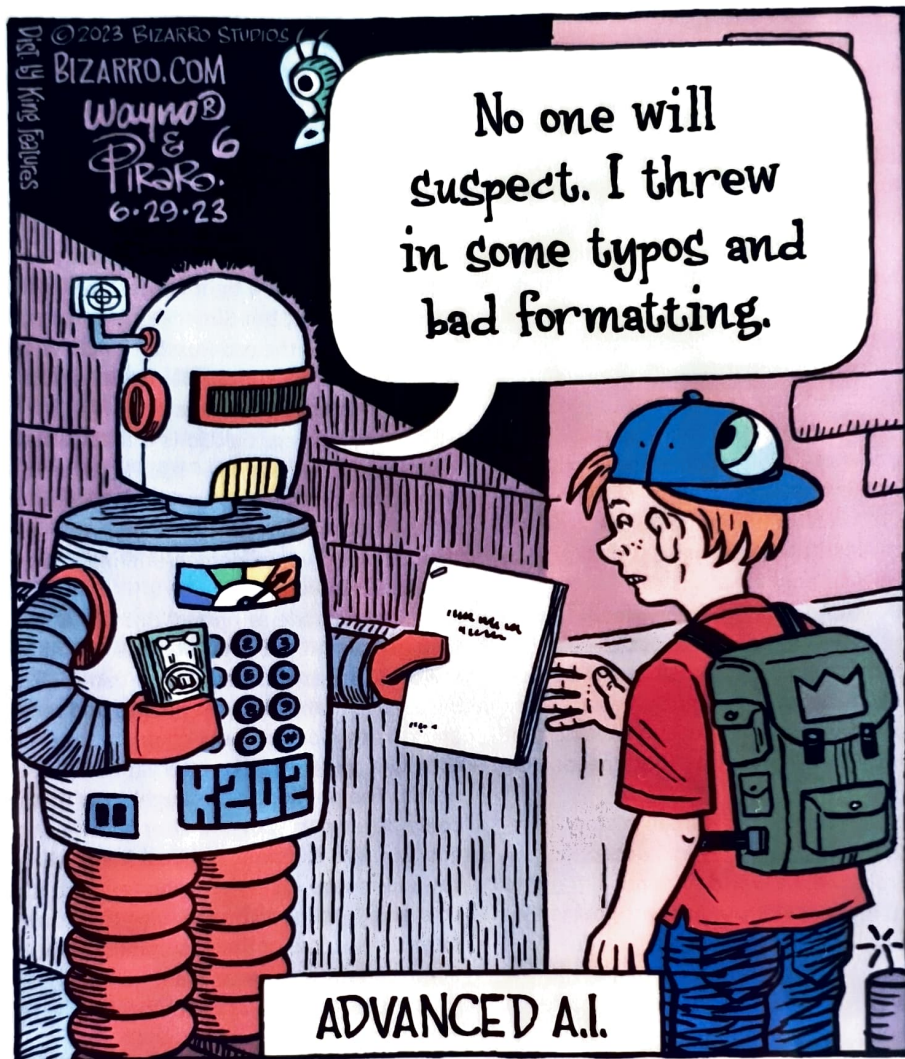
Assignments (partner work)
A Dialogue with a partner: Description of the cartoon

Talk to your partner and describe the cartoon as precisely as possible.

B The Cartoon's message

Discuss the message of this cartoon and agree on one interpretation.

C Positioning (group work)

Based on your individual interpretations, discuss the following questions with your group members:
1. *Do you agree or disagree with the cartoon's message?*
2. *To what extent could this scenario happen in real life?*
3. *What about your own experiences? Have you ever used AI chatbots? How often do you use them and for which purposes?*
Be prepared to share your ideas in class.