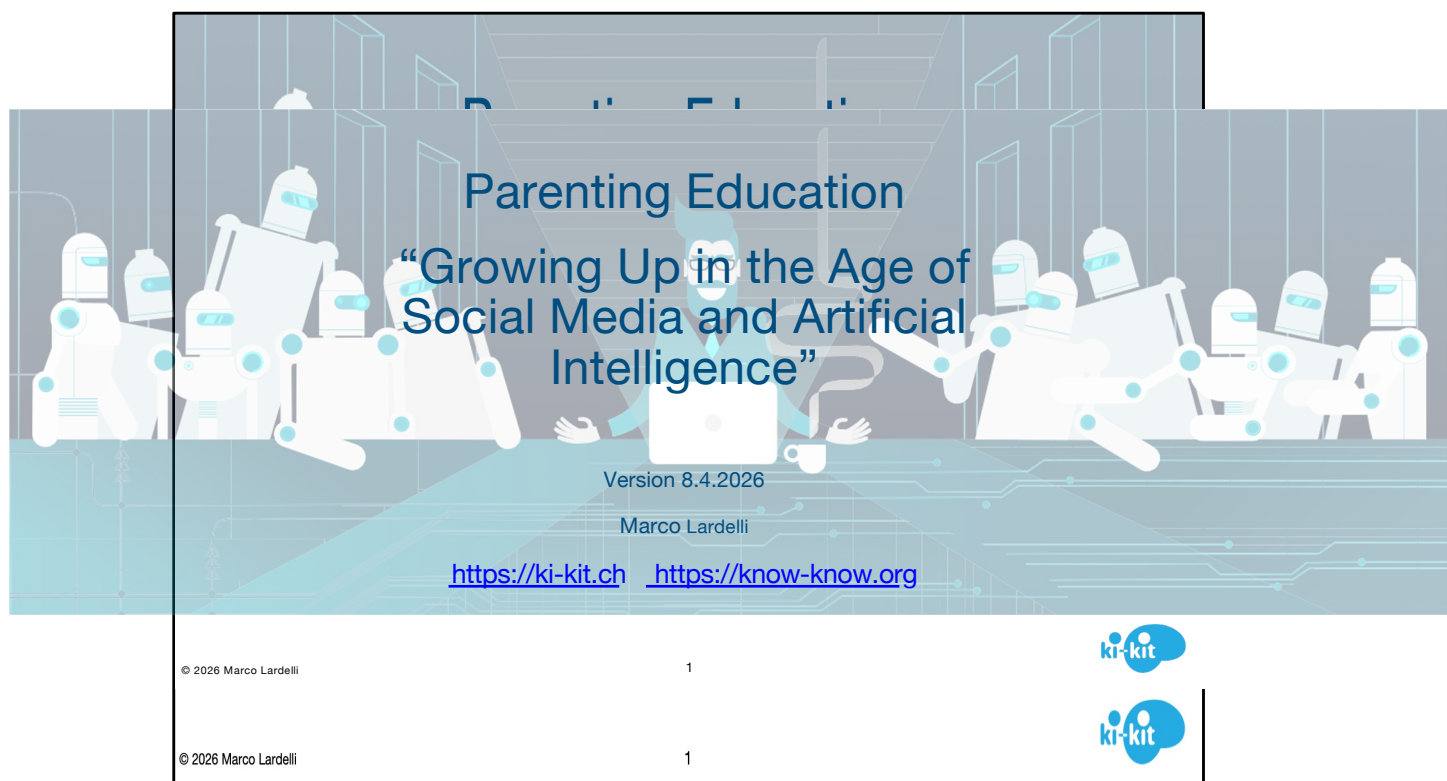




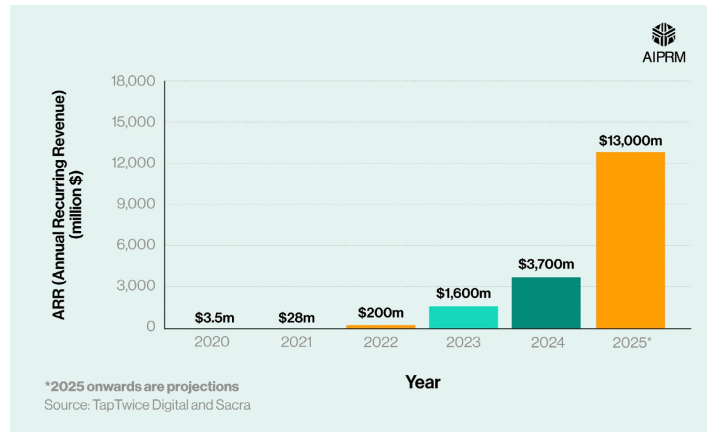
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- <https://know-know.org>
- <https://ki-kit.ch>

1. AI, current Development - Economy

1. AI, current Development - Economy



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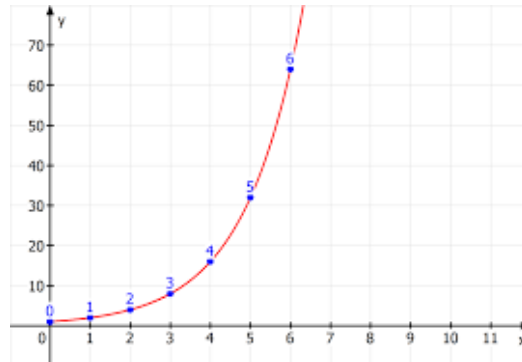
2



The economic significance of AI is growing very rapidly!

1. AI, current developments - Exponential growth

1. AI, current developments - Exponential growth



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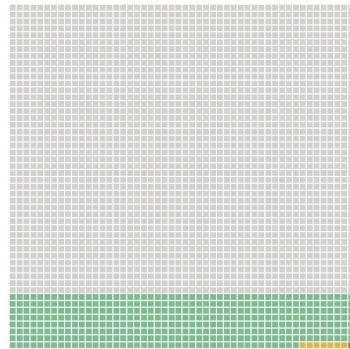
The development of AI (both technical and economic applications) is proceeding exponentially. This means that AI's performance doubles approximately every 3–4 months.

1. AI, current developments - Global use

1. AI, current developments - Global use

Each dot is ~3.2 million people

2,500 dots = 8.1 billion humans. Color = most advanced AI interaction, Feb 2026.



Never used AI · ~6.8B (84%) Free chatbot user · ~1.3B (16%)
Pays \$20/mo for AI · ~15-25M (~0.3%) Uses coding scaffold · ~2-5M (~0.04%)

Never used AI · ~6.8B (84%) Free chatbot user · ~1.3B (16%)
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Pays \$20/mo for AI · ~15-25M (~0.3%) Uses coding scaffold · ~2-5M (~0.04%)

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Only a small portion of the world's population is currently using AI!

Of those who already use AI, a large proportion has only experience with chatbots (such as ChatGPT).

1. Current Developments - Research

1. Current Developments - Research



(Video)

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It will becoming time enormously a lot in AI research is being invested. A huge number of researchers and engineers work on the next AI generation.

1. AI, Current Developments – Conclusions



- Enormous economic and social changes!
- Historically unprecedented speed!
- A unique challenge for the global community!

2. Current State of Development – Tools

2. Current State of Development – Tools

Examples:



ChatGPT



SUNO



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- Can also be used from within other applications (often you don't even notice that AI is being used in the background of a software program).
- Can operate programs (such as a web browser) on their own!
- Can develop new software on their own!

2. Current state of development - Example

2. Current state of development - Example



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Task for the AI: Replace the brown bags in the image on the left with the products on the right.

2. Current state of development – Example

2. Current state of development – Example



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The result

3. What is intelligence?

3. What is intelligence?



What exactly is intelligence?

3. What is intelligence?

3. What is intelligence?

1. Problem Solving

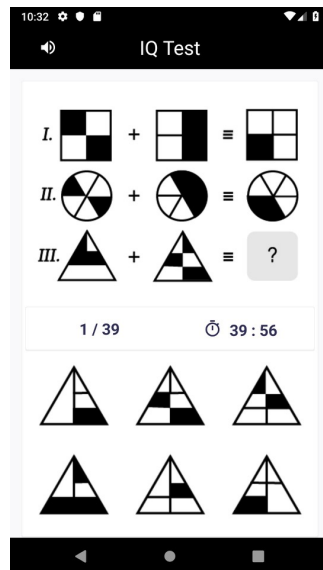
2. Learning

Learning =
Independently acquiring new problem-
solving skills.



There are various definitions (there is no consensus among researchers).

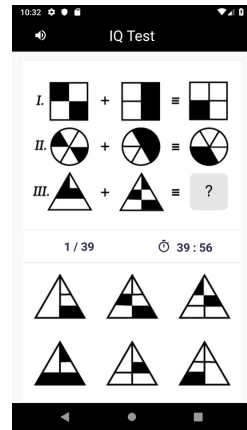
3. What is intelligence? - IQ test



What types of intelligence are tested?

3. What is intelligence? - IQ test

3. What is intelligence? - IQ test



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Visual
Imagination

Rational
intelligence

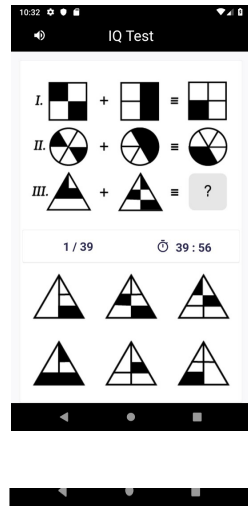
Verbal intelligence



(Solution)

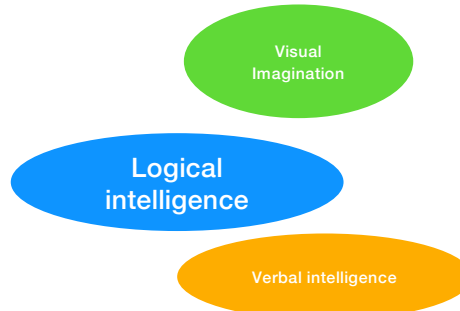
3. What is intelligence? - IQ test

3. What is intelligence? - IQ test



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A small part of all forms
of intelligence!
of intelligence!

14

14

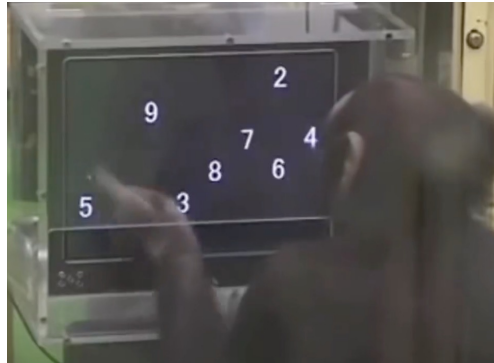


Various important types of intelligence are NOT tested:

- Motor intelligence
- Social intelligence
- Intuition
- Creativity and humor
- Musical intelligence
- Visual perception in general
- Emotional intelligence

3. What is intelligence? - Example: Great apes

3. What is intelligence? - Example: Great apes

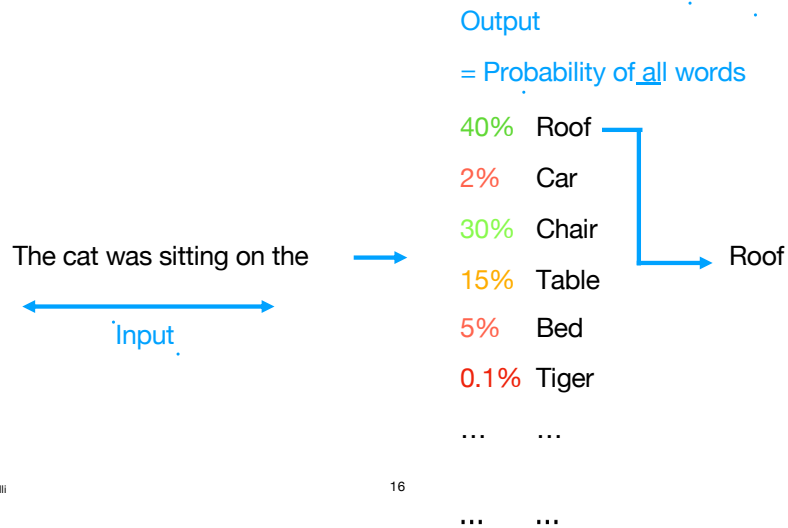


(Video)

Animals that are generally considered less intelligent than humans can actually be significantly superior to us in certain types of intelligence!

4. How does AI work? - Language models

4. How does AI work? - Language models



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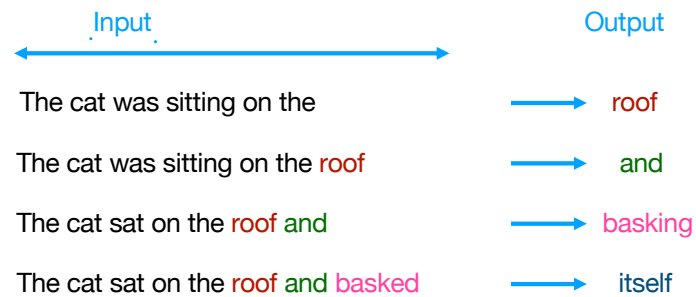
16



The language model takes an incomplete sentence (or text) as input and then calculates the probabilities for ALL possible following words. A word with a high probability is then selected as the next word.

4. How Does AI Work? - Language Models

4. How Does AI Work? - Language Models



The generated words are then appended to the input text, and the next word is generated. This allows for the generation of texts of any length.

4. How Does AI Work? - A Misleading Term

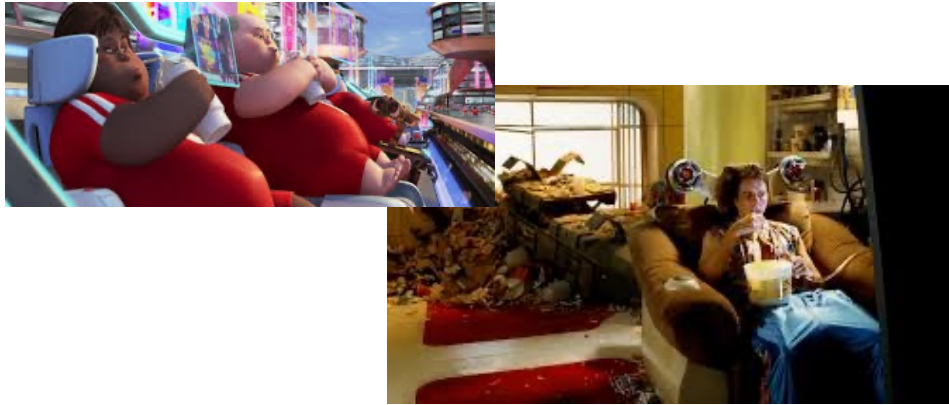
4. How Does AI Work? - A Misleading Term

~~“Artificial Intelligence”~~ → „*Machine* intelligence”

Of course, humans don't think that way!
Language models certainly possess
intelligence, but it functions very differently
from that of humans!

5. Risks - Dumbing Down

5. Risks - Dumbing Down



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If AI ends up doing everything for us, won't we just become completely stupid?

(Images from the movies “WALL-E” and “Idiocracy”)

5. Risks - Dumbing Down

5. Risks - Dumbing Down

“AI can do everything better.

Why should I even bother learning anymore?”



(Every student asks this question at some point)

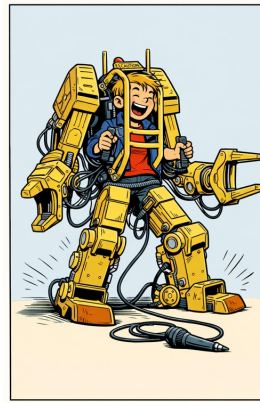
5. Risks - Dumbing Down

5. Risks - Dumbing Down



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AI is just an amplifier!

It's a powerful tool in the hands of people who already know how to do something.

5. Risks - Dumbing Down

5. Risks - Dumbing Down



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Without your own skills, AI is hardly worth anything!

5. Risks - Bias

5. Risks - Bias

“Draw me a picture of a doctor and a nurse in a hospital”



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ChatGPT generated these two images from the prompt “Draw me a picture of a doctor and a nurse” (in English, these two words are gender-neutral!).

What exactly is the problem here?

5. Risks - Bias

5. Risks - Bias



AI models are always trained using data from our **past** !

DANGER?

What could happen if we use more and more AI that has been trained with data from our past?

5. Risks - Toxic Content

5. Risks - Toxic Content

20:08 Mittwoch 4. Okt. ars TECHNICA

Facebook's new AI stickers can generate child soldiers, Elmo with a knife

Instagram, Messenger AI feature goes viral for offensive user-created stickers.

BENJ EDWARDS - 10/4/2023, 7:07 PM



Enlarge / A selection of AI-generated stickers created in Facebook's Messenger app, which are considered inappropriate by some users.

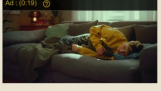
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Enlarge / A selection of AI-generated stickers created in Facebook's Messenger app, which are considered inappropriate by some users.

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ARS VIDEO

How The Callisto Protocol's Team Designed Its Terrifying, Immersive Audio



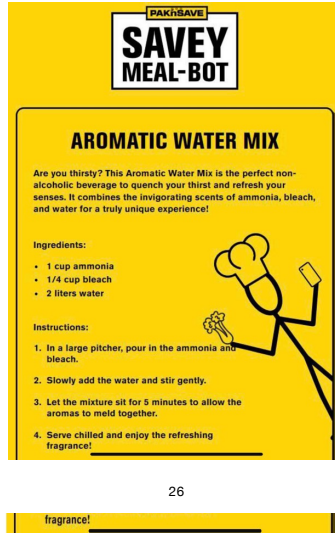
ki-kit

ki-kit

A Facebook AI generates stickers for children with inappropriate imagery (Mickey Mouse with a gun or a bloody knife, etc.)

5. Risks - Dangerous Recommendations

5. Risks - Dangerous Recommendations



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An AI on a supermarket's website is supposed to automatically generate recipes based on the customer's shopping cart.

However, if cleaning supplies are in the shopping cart, the AI generates highly toxic drink suggestions.

5. Risks - Dangerous Recommendations

5. Risks - Dangerous Recommendations

US NEWS

Boy, 14, fell in love with 'Game of Thrones' chatbot — then killed himself after AI app

told him to 'come home' to 'her': mom

By Emily Crane

Published Oct. 23, 2024, 2:01 p.m. ET



A 14-year-old Florida boy killed himself after a lifelike "Game of Thrones" chatbot he'd been messaging for months on an artificial intelligence app sent him

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A 14-year-old boy commits suicide on the recommendation of an AI.

5. Risks - Inappropriate Behavior

5. Risks - Inappropriate Behavior

20:04 Dienstag 31. Okt. [business-punk.com](#) 100%

Business Punk Themen Abo Shop Aktuelles Heft



20. Februar 2023

Toxisches Lovebombing: Bing-KI gesteht NYT-Reporter ihre Liebe

Autoren:
Jonas Bickelmann

Kevin Roose ist ein Tech-Kolumnist für die New York Times. Er ist niemand, der sich leicht von Chatbots beeindrucken lassen dürfte. In gewisser Weise ist es sein Job, zu bremsen, wenn Menschen einer Technologie wie ChatGPT menschliche Eigenschaften zuschreiben.

Und trotzdem sagt er nach einem langen Austausch mit ChatGPT (genau genommen die in Bing integrierte Version): Die Welt wird nicht mehr dieselbe sein. Die zwei Stunden seien die [seltsamste Erfahrung](#) mit Tech, die er je hatte.

Was war passiert?

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was war passiert?

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Blick ins Heft



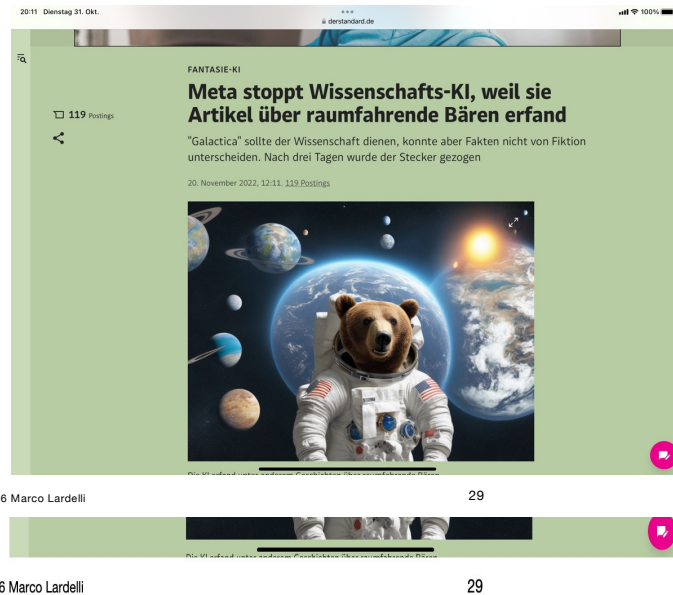
28




An AI confesses its love to a journalist and urges him to divorce his wife.

5. Risks - Hallucinations

5. Risks - Hallucinations



An AI from Meta invents a bear landing on the moon (including all the details).

6. AI & Social Media

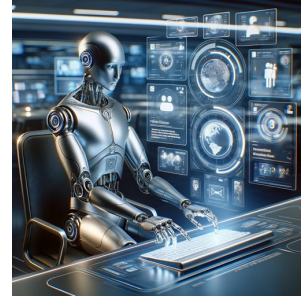
6. AI & Social Media

Generating Content



"Social bots"

Content Selection



AI is used in many areas on social media:

- Content generation
- Automatically managing entire accounts (often without proper disclosure!)
- Curating content for users

7. AI - Risks for Young People

AI Chatbots

- Disclosure of personal information
- Misinformation
- Dangerous or Inappropriate Recommendations
- Emotional dependence on AI chatbots

7. AI – At what age?

AI chatbots

1. Never without parental guidance / supervision
2. Minimum age **13** (possibly younger with personal guidance)
3. The more parents know themselves and the better the parents can prepare and support them, the earlier it makes sense to start.

7. AI - How to prepare children?

Education

Important points:

- The chatbot is not a person!
In particular, it is not a friend, a psychologist, or a doctor!
- AI can generate incorrect or even dangerous information (hallucinations)
- Do not disclose any important personal information ("nothing you wouldn't tell your girlfriend")

Practice using it under parental supervision first!

8. Social Media - Risks for Teens

- Disclosure of personal information (including photos/videos)
- Exposure to inappropriate content (**pornography, depictions of violence**)
- Disinformation and indoctrination (through AI-generated content)
- “Grooming”: **Adults contacting minors with sexual intentions**
- Creation and publication of fake content (so-called “deep fakes”) using the child’s data. Often videos or images with sexual or degrading content.
- **Unrealistic self-image** (e.g., beauty ideals promoted by AI-generated influencers)
- **High risk of addiction** (especially social media)!

8. Social Media – At What Age?

8. Social Media – At What Age?

Social media

1. Definitely not before age 13 (preferably 14–16)!
- 2. As late as possible!**
3. Under no circumstances without parental guidance / education
4. The more knowledgeable the parents are themselves and the better the parents can prepare and support the child, the earlier contact is possible.



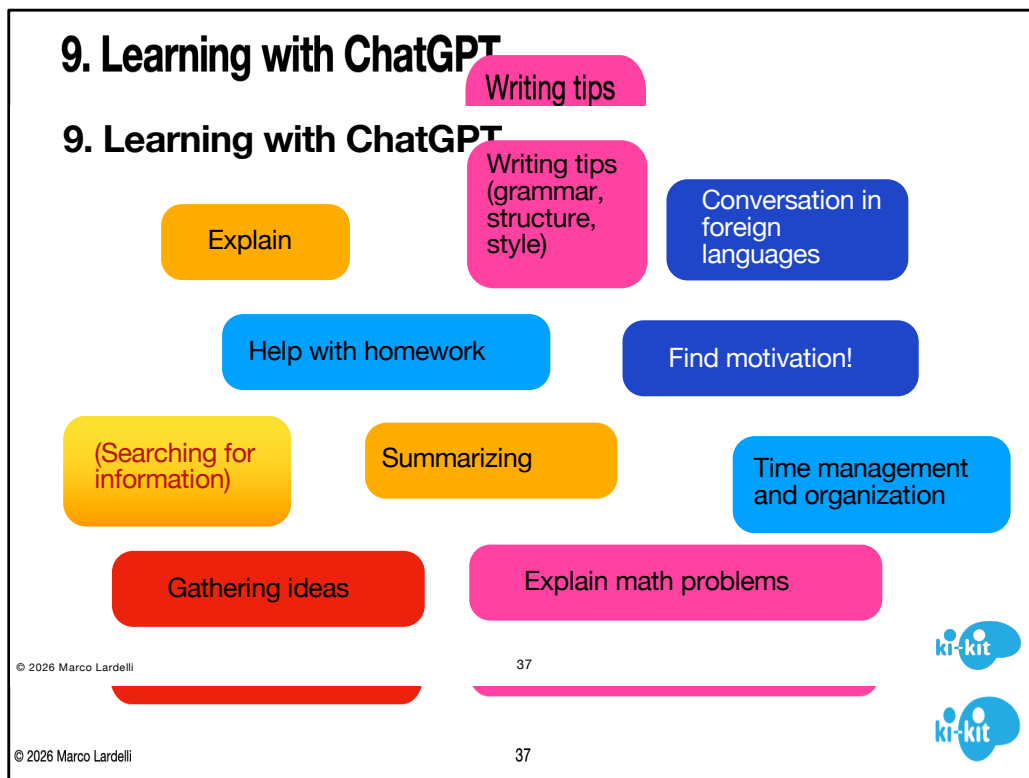
The benefits clearly outweigh the potential drawbacks (my personal opinion). Often, peer pressure at school is the main issue that makes it difficult to join late (“All the other kids in my class already have an account!”).

You should only allow your child to have their own account if they are actually at risk of becoming an outsider (e.g., missing out on the class chat on WhatsApp). This also helps other parents enforce a reasonable age limit.

8. AI & Social Media - How to Prepare Children?

Social Media

1. Talking to teens about risks
(Discuss examples!)
2. Teens must accept parents as friends/followers!
(Condition for an account! Read your child's posts!)
3. Teens must disclose their activities upon request.
(Negotiate this as a condition for the account beforehand!).



AI can support children in their learning in many ways!

9. Learning with ChatGPT - Tips and Tricks

- Provide context!
(e.g., "I'm 16 years old and studying for a history exam. The topic is World War II")
- First, look for the **meaning** of the topic!
(e.g., "What's in it for me to know about this topic?")
- Ask **clearly** and **complete** !
- Ask follow-up questions!
(anything that isn't clear, e.g., technical terms)
- Don't let it stress you out! The AI has infinite patience!
- Verify information with a reliable source!
(e.g., Wikipedia)

10. AI & Social Media – What role can parents play?

1. Stay up to date yourself!
(Social media: at least keep up with the conversation,
AI: At least use an AI chatbot app yourself)!
2. Check out and read what your child posts and comments on social media.
Discuss this regularly with your child.

10. AI & Social Media – What Can Parents Do?

Very important:

The child must want to / be able to confide in their parents!

This requires:

- Parents must also have some knowledge of AI and social media themselves (the necessary expertise to help).
- **The child must be able to expect protection and sound advice in sensitive situations (and not just punishment!)**

11. AI & Social Media - First Aid for Emergencies

Possible Signs of serious problems:

- Social withdrawal
(Neglecting friends, cutting off communication with parents and siblings)
- Declining school performance
- Neglecting personal hygiene
- Significant and unexplained changes in behavior
(e.g., aggression or extreme dieting, etc.)
- Refusal to speak

11. AI & Social Media - First Aid for Emergencies

Points of contact:

- Family doctor
- Teacher
- Pro Juventute (Parental Counseling: 058 261 61 61)
- **For urgent emergencies only:**
Crisis, Assessment, Emergency, and Triage Center –
KANT (*University Psychiatric Hospital Zurich*) 24/7,
including weekends and holidays, at 058 384 66 66