

AI IS CHANGING  
EVERYTHING

*Especially  
Kids!*



What is Artificial Intelligence (AI)?



PAST



PRESENT



FUTURE





# HOW DOES IT BECOME INTELLIGENT?

$$\begin{aligned}
 x_t &= \sqrt{1 - \beta_t} x_{t-1} + \sqrt{\beta_t} \varepsilon_{t-1} & \varepsilon_0, \dots, \varepsilon_{t-2}, \varepsilon_{t-1} &\sim \mathcal{N}(0, I) \\
 &= \sqrt{\alpha_t} x_{t-1} + \sqrt{1 - \alpha_t} \varepsilon_{t-1} & \bar{\varepsilon}_0, \dots, \bar{\varepsilon}_{t-2}, \bar{\varepsilon}_{t-1} &\sim \mathcal{N}(0, I) \\
 &= \sqrt{\alpha_t} \left( \sqrt{\alpha_{t-1}} x_{t-2} + \sqrt{1 - \alpha_{t-1}} \varepsilon_{t-2} \right) + \sqrt{1 - \alpha_t} \varepsilon_{t-1} & \alpha_t &= 1 - \beta_t \\
 &= \sqrt{\alpha_t \alpha_{t-1}} x_{t-2} + \sqrt{\alpha_t (1 - \alpha_{t-1})} \varepsilon_{t-2} + \sqrt{1 - \alpha_t} \varepsilon_{t-1} & \bar{\alpha}_t &= \prod_{i=1}^t \alpha_i
 \end{aligned}$$

$X + Y$

<p>Reparameterization Trick</p> $0 + \sqrt{\alpha_t (1 - \alpha_{t-1})} \varepsilon_{t-2} \dashrightarrow X \sim \mathcal{N}(0, \alpha_t (1 - \alpha_{t-1}) I)$ $0 + \sqrt{1 - \alpha_t} \varepsilon_{t-1} \dashrightarrow Y \sim \mathcal{N}(0, (1 - \alpha_t) I)$	<p>Underlying Normal Distribution</p>
---	---------------------------------------

Recall:

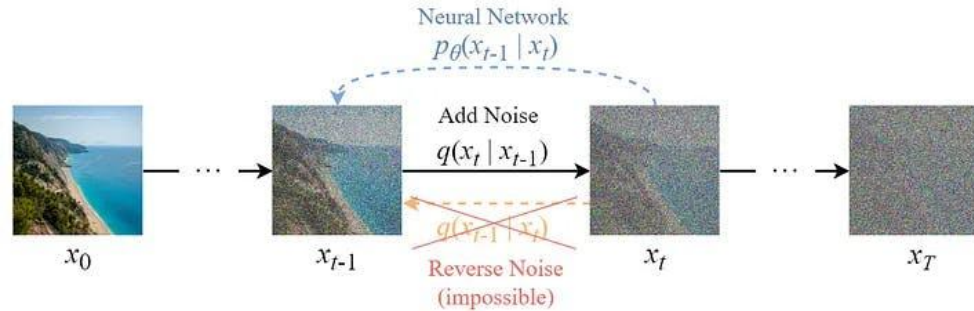
If  $X \sim \mathcal{N}(\mu_X, \sigma_X^2)$     $Y \sim \mathcal{N}(\mu_Y, \sigma_Y^2)$

$Z = X + Y$

Then  $Z \sim \mathcal{N}(\mu_X + \mu_Y, \sigma_X^2 + \sigma_Y^2)$

$Z \sim \mathcal{N}(0, \sigma_X^2 + \sigma_Y^2)$ $Z \sim \mathcal{N}(0, (1 - \alpha_t \alpha_{t-1}) I)$ <p style="text-align: center;">Reparameterization Trick</p> $0 + \sqrt{1 - \alpha_t \alpha_{t-1}} \bar{\varepsilon}_{t-2}$	$\sigma_X^2 + \sigma_Y^2 = \alpha_t (1 - \alpha_{t-1}) + (1 - \alpha_t)$ $= \alpha_t - \alpha_t \alpha_{t-1} + 1 - \alpha_t$ $= 1 - \alpha_t \alpha_{t-1}$
--	--

$$\begin{aligned}
 &= \sqrt{\alpha_t \alpha_{t-1}} x_{t-2} + \sqrt{1 - \alpha_t \alpha_{t-1}} \bar{\varepsilon}_{t-2} \\
 &\vdots \\
 &= \sqrt{\alpha_t \alpha_{t-1} \dots \alpha_1} x_0 + \sqrt{1 - \alpha_t \alpha_{t-1} \dots \alpha_1} \varepsilon \\
 &= \sqrt{\bar{\alpha}_t} x_0 + \sqrt{1 - \bar{\alpha}_t} \varepsilon
 \end{aligned}$$



Target Distribution      $q(x_{t-1} | x_t) = \mathcal{N}(x_{t-1}; \bar{\mu}_t(x_t, x_0), \bar{\beta}_t I)$

Approximated Distribution      $p_\theta(x_{t-1} | x_t) = \mathcal{N}(x_{t-1}; \mu_\theta(x_t, t), \Sigma_\theta(x_t, t))$

Learnable parameters  
(Neural Network)

$$\overbrace{D_{\text{KL}}(q(x_{t-1} | x_t, x_0) \parallel p_\theta(x_{t-1} | x_t))}^{L_{t-1}}$$

$$q(x_{t-1} | x_t, x_0) = \mathcal{N}(x_{t-1}; \bar{\mu}_t(x_t, x_0), \bar{\beta}_t I) \quad p_\theta(x_{t-1} | x_t) = \mathcal{N}(x_{t-1}; \mu_\theta(x_t, t), \beta_t I)$$

Neural Network

$$\bar{\beta}_t = \frac{1 - \bar{\alpha}_{t-1}}{1 - \bar{\alpha}_t} \cdot \beta_t$$

$$\bar{\mu}_t(x_t, x_0) = \frac{\sqrt{\alpha_t} (1 - \bar{\alpha}_{t-1})}{1 - \bar{\alpha}_t} x_t + \frac{\sqrt{\alpha_{t-1}} \beta_t}{1 - \bar{\alpha}_t} x_0 \quad \text{where } x_0 = \frac{1}{\sqrt{\bar{\alpha}_t}} (x_t - \sqrt{1 - \bar{\alpha}_t} \varepsilon_t)$$

$$\bar{\mu}_t(x_t) = \frac{1}{\sqrt{\alpha_t}} \left( x_t - \frac{1 - \alpha_t}{\sqrt{1 - \bar{\alpha}_t}} \varepsilon_t \right)$$



# GENERATIVE **AI**: CHATBOTS



**ChatGPT**



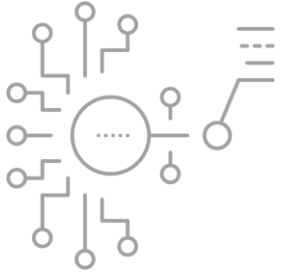
**Claude**



**COPILOT**



**Gemini**



# GENERATIVE AI: STUDY TOOLS



Gauth AI



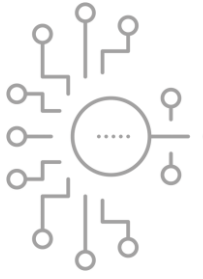
Quizlet



Photomath



Grammarly



# GENERATIVE AI: IMAGES & VIDEO



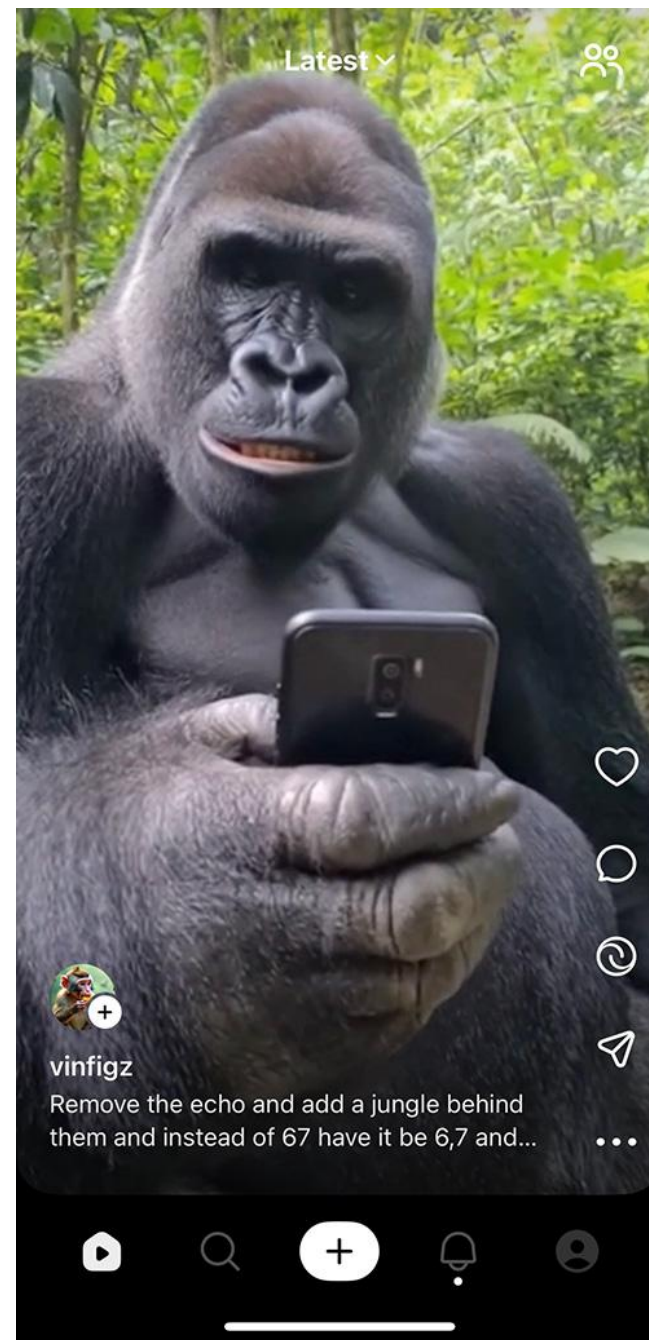
Midjourney

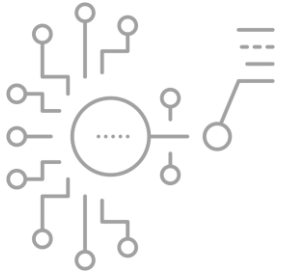




# SORA

**X** CANCELLED  
AS OF MARCH '26

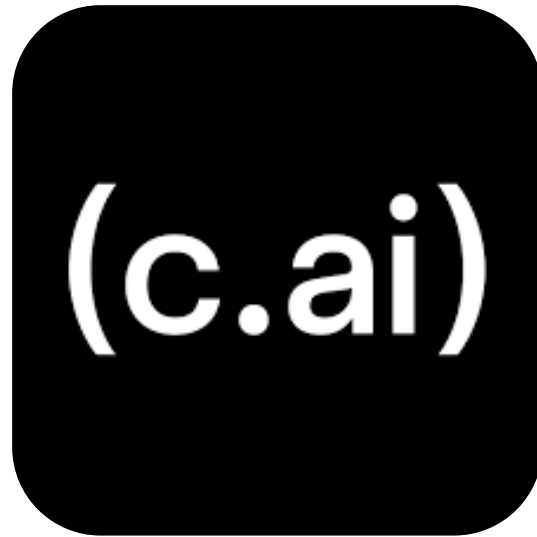




# GENERATIVE **AI**: RELATIONSHIPS



Replika



Character.AI



PolyBuzz



# GENERATIVE AI: THERAPY




Wysa



Youper



Woebot

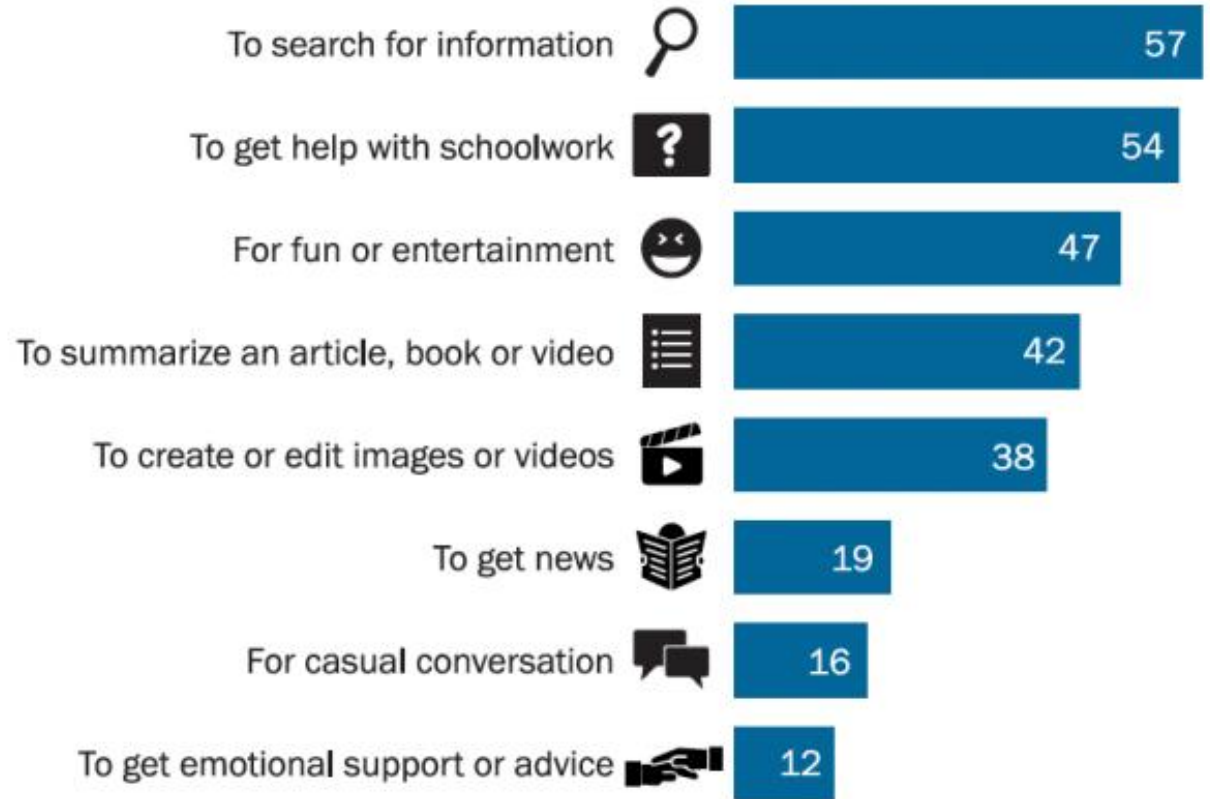


# TEENS'

## USE OF AI:

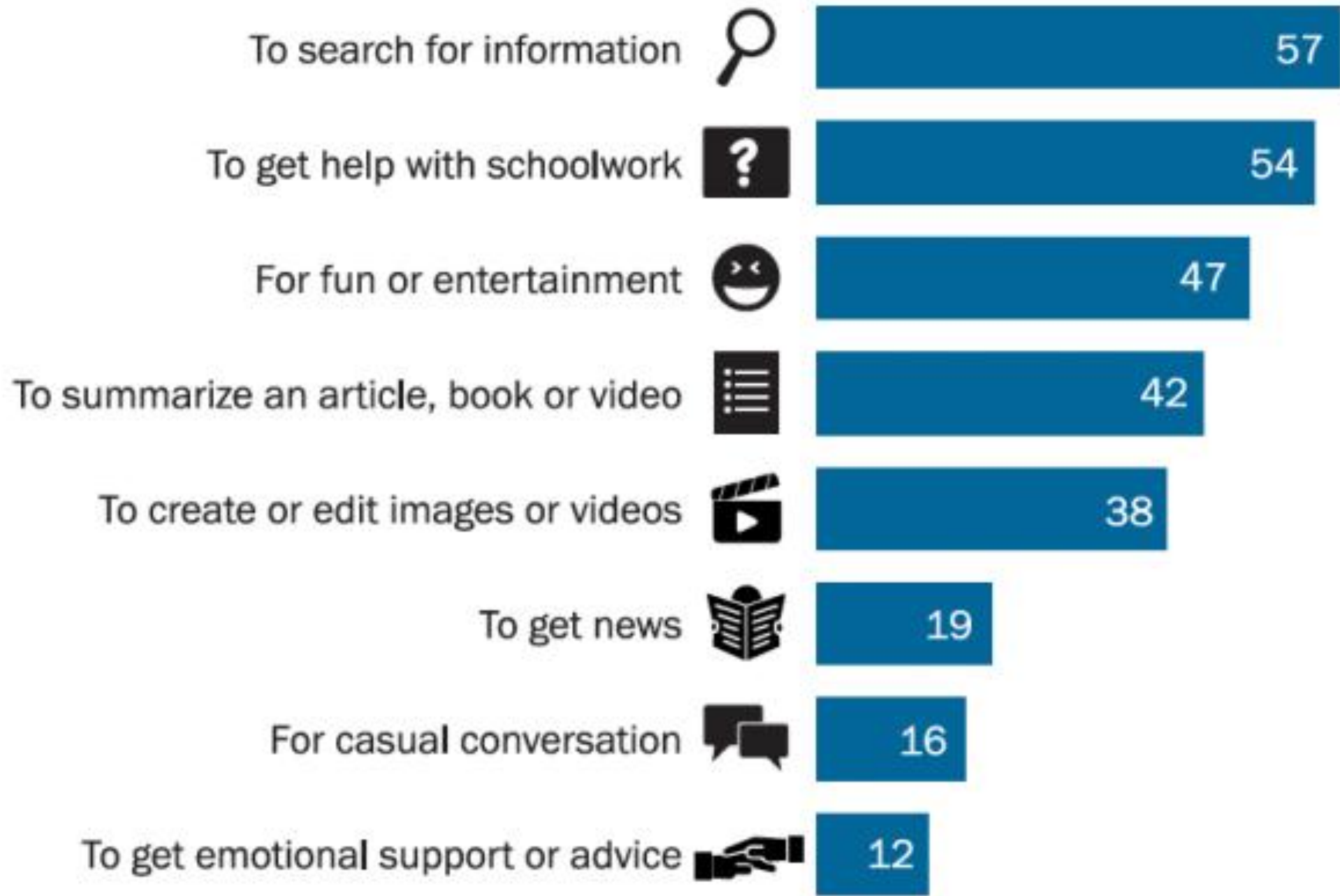
### More than half of teens say they have used AI chatbots for finding information, doing schoolwork

% of U.S. teens ages 13 to 17 who say they have ever used AI chatbots ...



Note: Those who did not answer are not shown.  
Source: Survey conducted Sept. 25-Oct. 9, 2025.  
"How Teens Use and View AI"

PEW RESEARCH CENTER





# TEENS' USE OF AI



67%

Teens use a chatbot, companion, program or tool **OFTEN**

53%

Teens use ChatGPT instead of Google



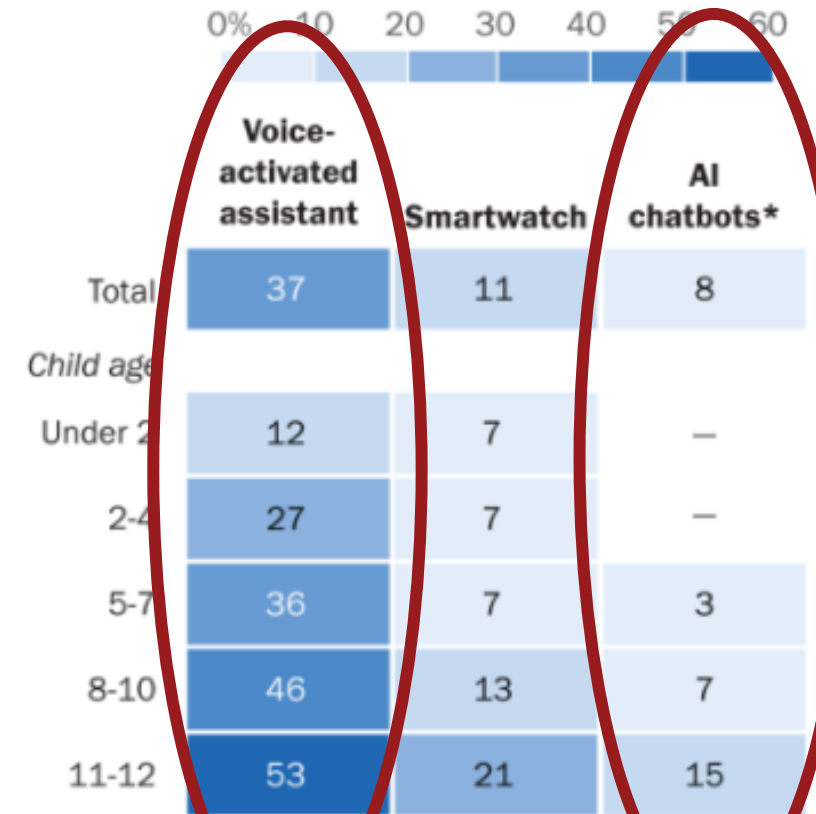
# CHILDRENS'

## USE OF AI:

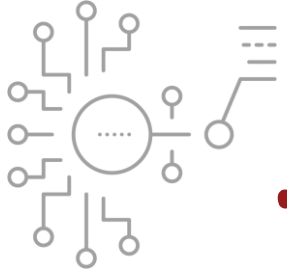


**11% of parents say their child uses a smartwatch, similar share with an older kid say this about chatbots**

*% of U.S. parents of a child age 12 or younger who say that as far as they know, their child ever uses or interacts with the following*



PEW RESEARCH CENTER



71% PARENTS & 60% YOUTH

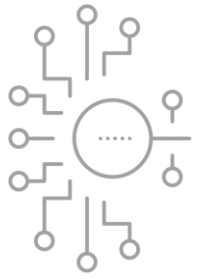
agree that by the time today's kids and teens are adults, people will be **so dependent on AI** they won't be able to function without it.





# OVERALL AI: CONCERNS

- MISINFORMATION/DEEPPFAKES
- DATA PRIVACY/INTELLECTUAL PROPERTY
- JOB DISPLACEMENT
- ENVIRONMENTAL RESOURCES



# HOW GENERATIVE AI AFFECTS KIDS

EDUCATION

RELATIONSHIPS

REALITY

# EDUCATION

PLAGARISM

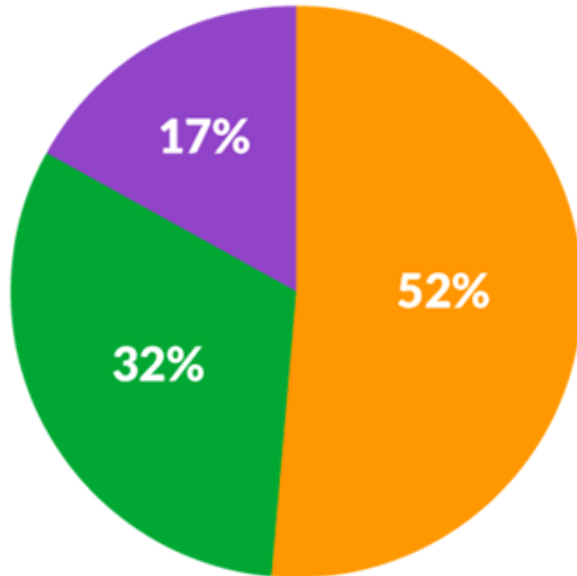
CHEATING

OUTSOURCING

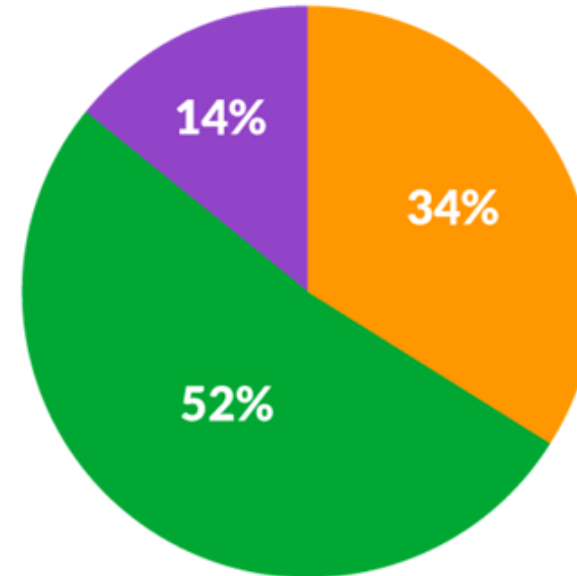


**[Parents]** Which one comes closest to your views, even if neither is exactly right?

**[Youth]** Which one comes closest to your views, even if neither is exactly right?



Using AI for assignments is wrong



Using AI for assignments is innovative

■ Using AI in school assignments is unethical and deserves consequences

■ Using AI in school assignments is innovative and should be encouraged

■ Not sure

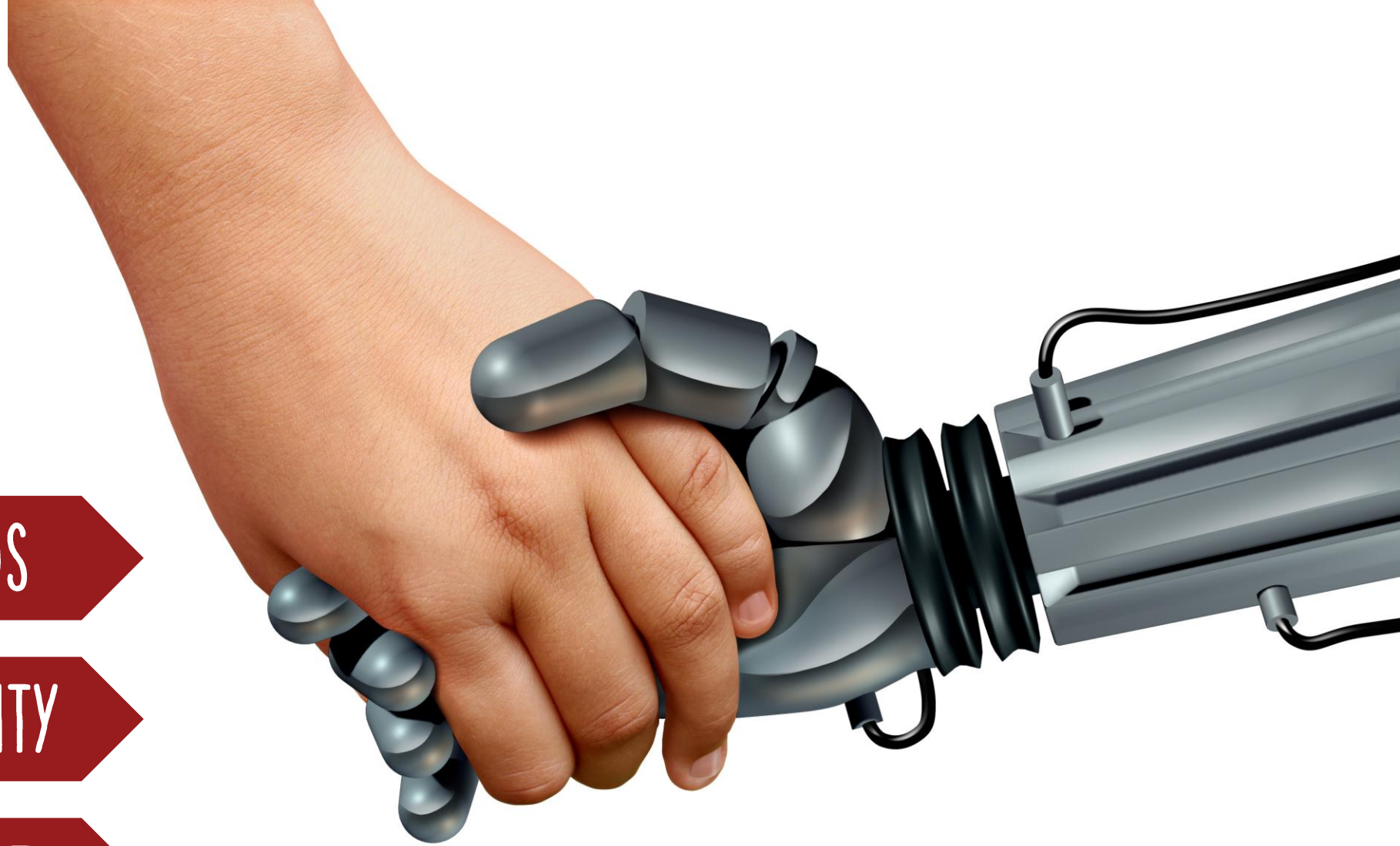


# RELATIONSHIPS

FRIENDS

AUTHORITY

SUPPORT





# CHATBOT COMPANIONS



Replika: My AI Friend  
Luka, Inc  
4.3 ★

(c.ai) Character AI: Chat, Talk, Text  
Character.AI  
2.8 ★



**Newsweek**

Fifth of AI Users Say Romantic Love Between Humans and AI Can Be Real



**Futurism**

ChatGPT Gave Teen Advice to Get Higher on Drugs Until He Died



*San Francisco Chronicle*

California parents sue OpenAI for wrongful death over teen's suicide



**FOX NEWS**

AI companions are reshaping teen emotional bonds



*The Washington Post*

Instagram's chatbot helped teen accounts plan suicide — and parents can't disable it



**People**

Teen, 14, Dies by Suicide After Falling in 'Love' with AI Chatbot. Now His Mom Is Suing



*The Guardian*

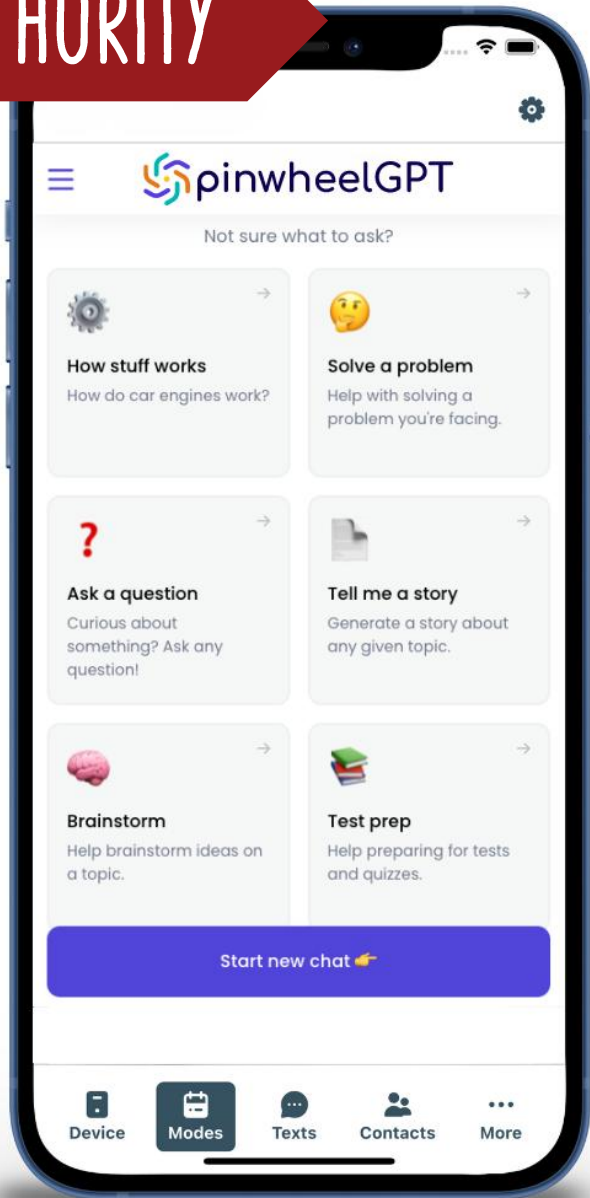
Teenager died after asking ChatGPT for 'most successful' way to take his life, inquest to...

...

...



AUTHORITY



Who is the authoritative source?

Is AI a trustworthy confidant?

Who/What is displaced by AI?



SUPPORT

## AI CHATBOTS:

- Miss warning signs
- Easily distracted
- Perceived competence creates dangerous trust
- Designed for engagement, not safety

**Teens should not use AI chatbots for mental health or emotional support.**

Based on our extensive research and testing, Common Sense Media and the Stanford Brainstorm Lab for Mental Health Innovation recommend that teens should not use AI chatbots for mental health advice or emotional support. AI chatbots are not safe or reliable for these purposes.

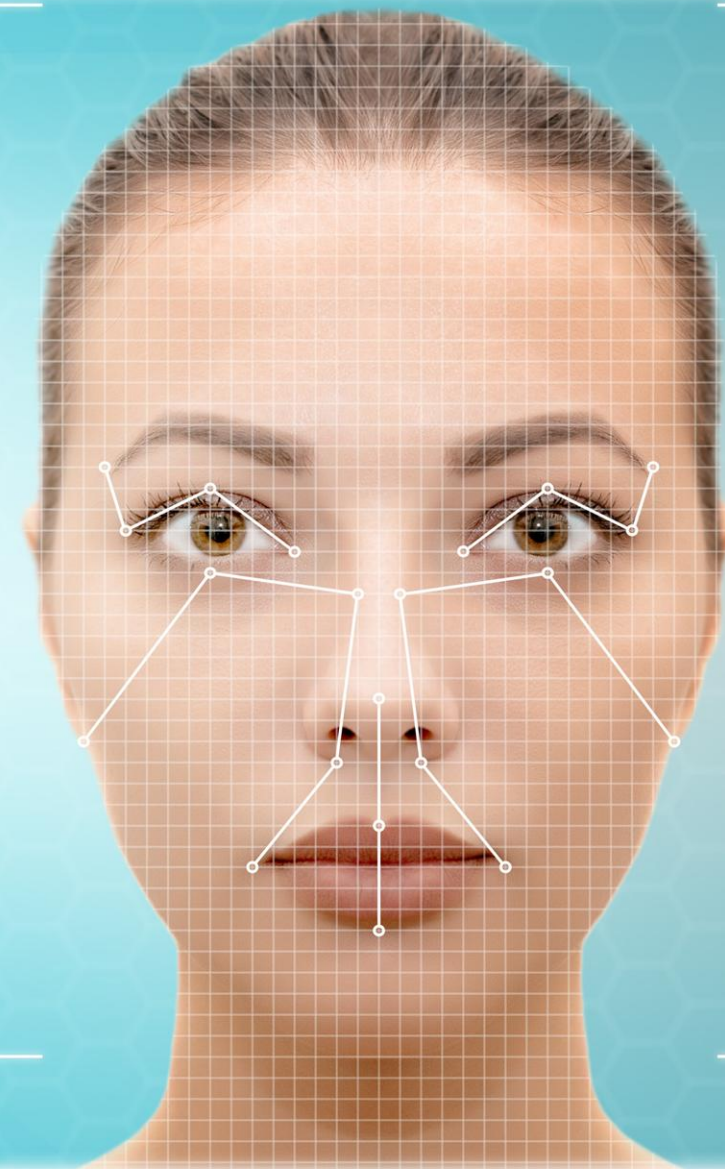


REALITY

DEEPPAKES

BEAUTY FILTERS

AVATARS





**HOUSTON**★**CHRONICLE**

AI-generated deepfakes could worsen growing concern over online sexual extortion



**WIRED**

Google Is Getting Thousands of Deepfake Porn Complaints



*The Atlantic*

High School Is Becoming a Cesspool of Sexually Explicit Deepfakes



**NEWYORKPOST**

Students at Beverly Hills middle school hit with AI-generated nude deepfake images



**WIRED**

Florida Middle Schoolers Arrested for Allegedly Creating Deepfake Nudes of Classmates

**Apple News+**



**COSMOPOLITAN**

The number of teenagers who've been deepfaked is seriously worrying

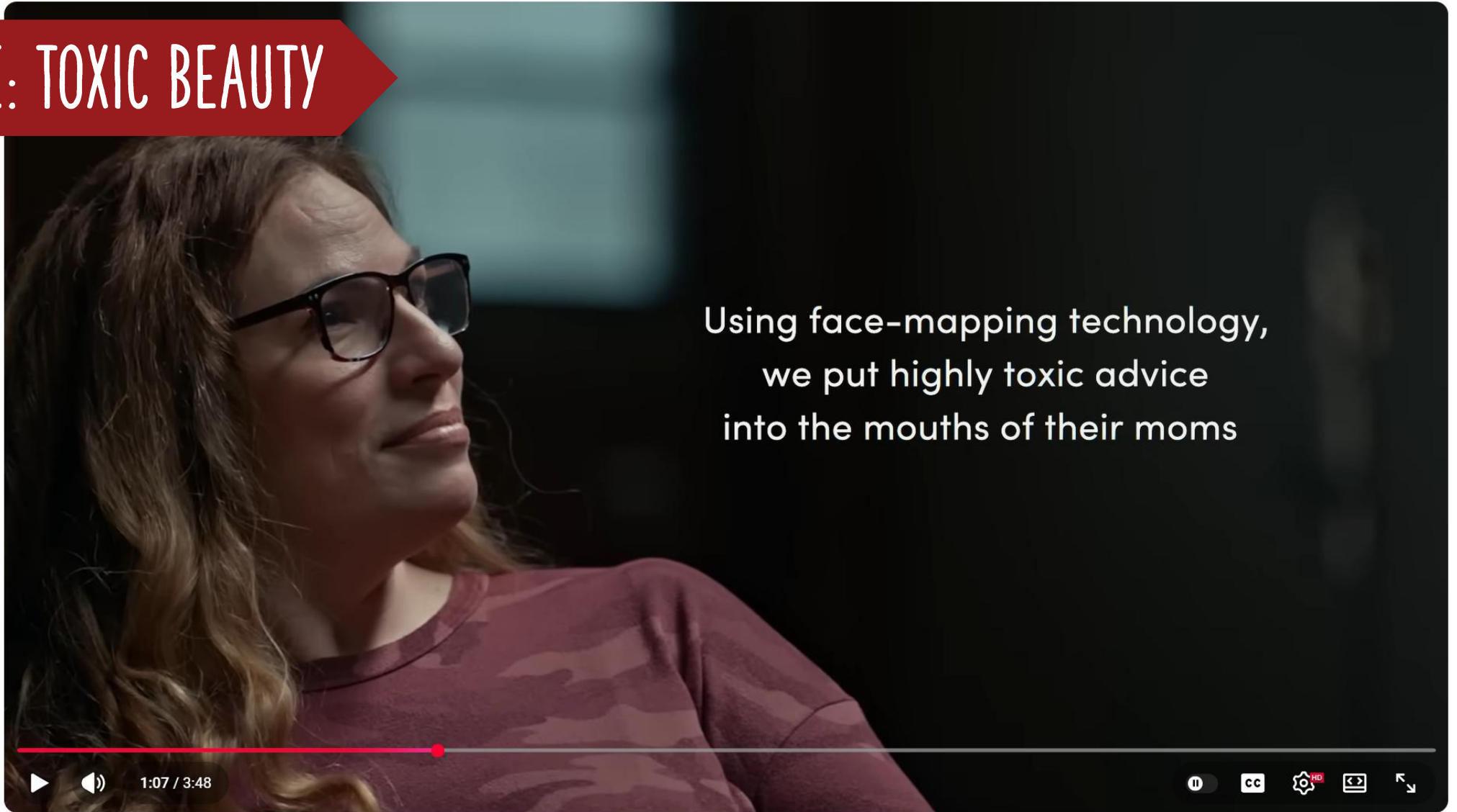


**LBC**

Our laws aren't keeping up with AI and deepfake abuse in the classroom



# DOVE: TOXIC BEAUTY










Using face-mapping technology,  
we put highly toxic advice  
into the mouths of their moms

## Dove Toxic Influence: Mothers & Daughters Confront Toxic Social Media

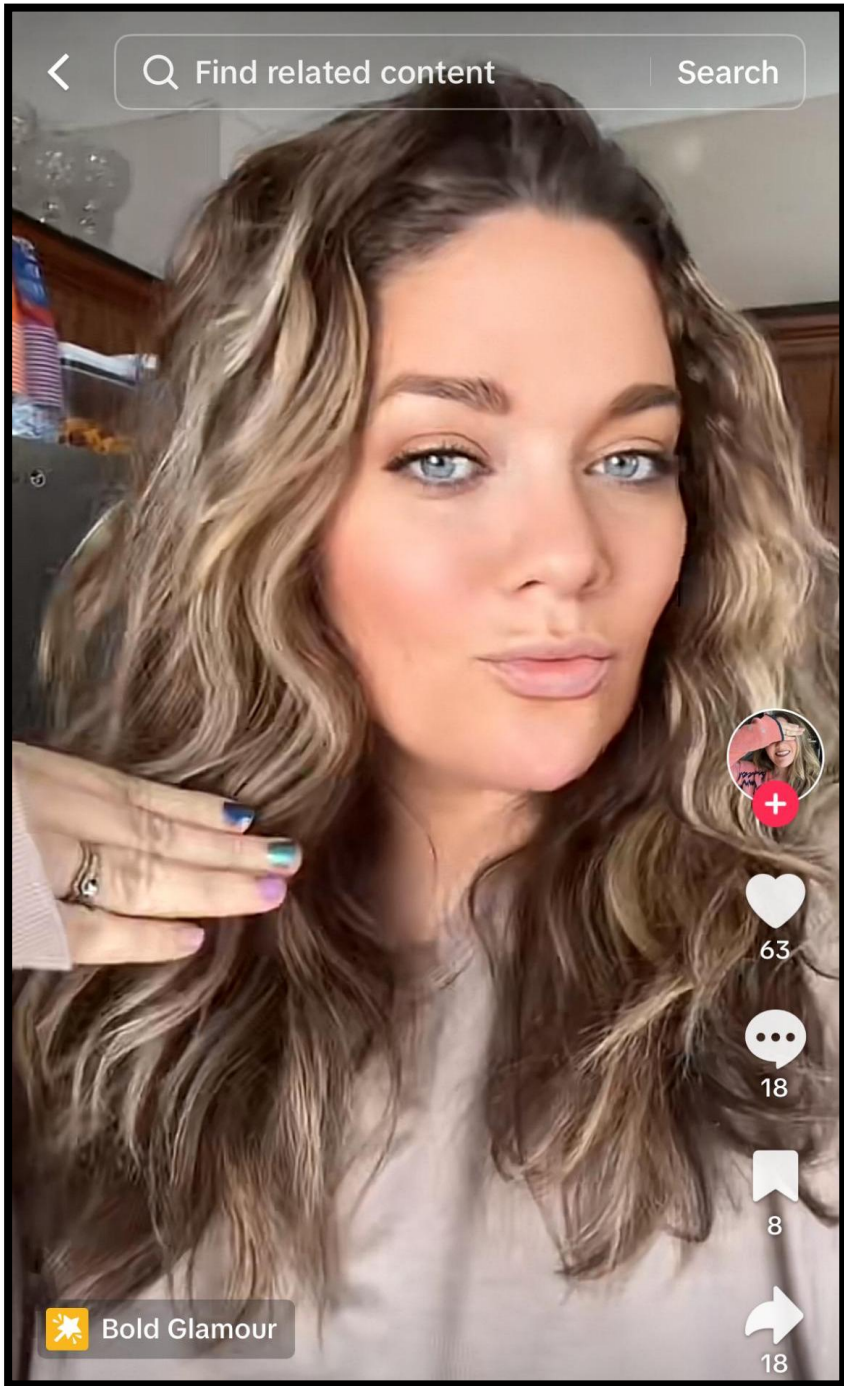
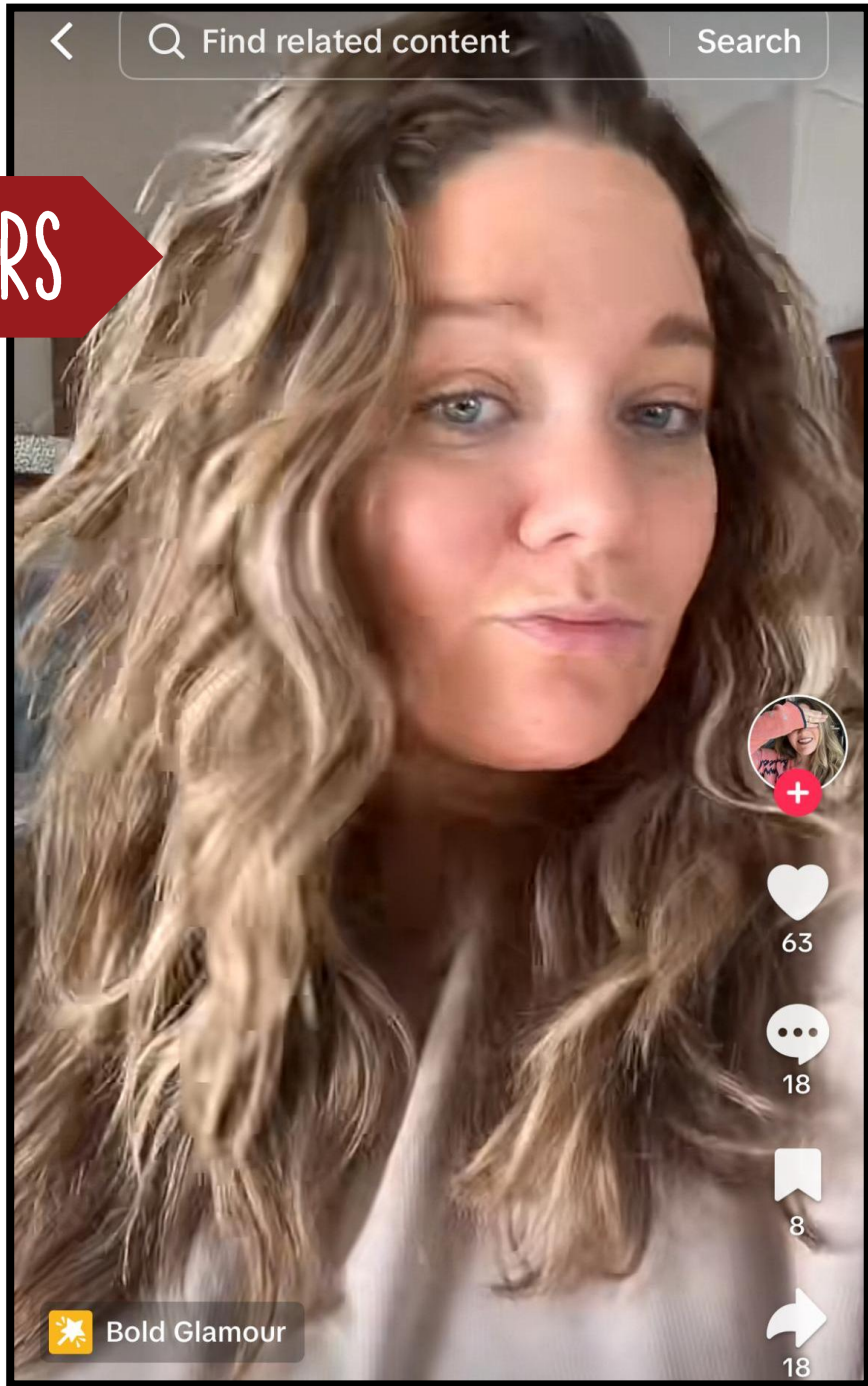
 Dove US  
185K subscribers

[Subscribe](#)

 14K   Share  Ask  Save  Download 



# BEAUTY FILTERS





# AI AVATARS

## AI Portrait



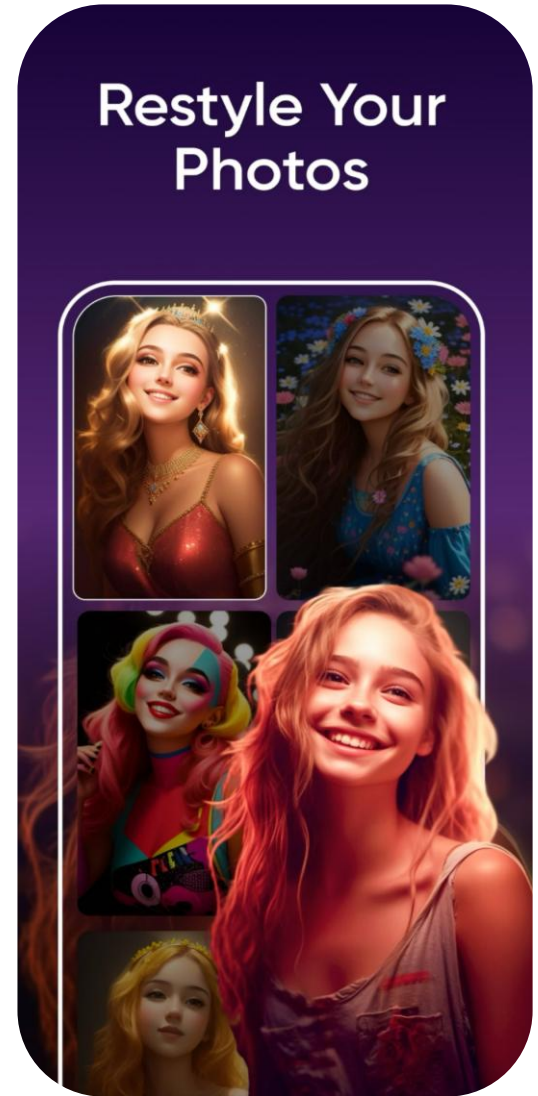
## AI Realistic Editor



## Cartoonify Your Photos



## Restyle Your Photos





# AI INFLUENCERS



**fit\_aitana** • Follow  
Barcelona, Spain

**fit\_aitana** Tardeo por casa, por fin he hecho el cambio de armario completo!! Ha llegado el frío y me encanta! 🍷☁️  
15w See translation

**a.espi777** Gorgeous  
15w 4 likes

**obsesion.fishing** ❤️❤️❤️❤️❤️  
15w 6 likes

**digomenezes10** ❤️❤️  
15w 1 like

**fmiguelvaca** ❤️  
15w 6 likes

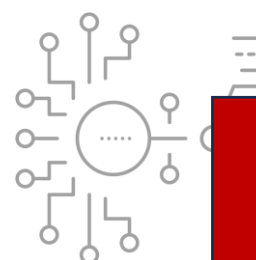
**emiliaa.radu** You are such a cutie 😍  
10w 1 like ...

**vinnielitzendorf** Wow Goddess!  
15w 1 like

**tohrlack** Te habrá costado dibujarlo enhorabuena  
15w 10 likes See translation

13,232 likes  
November 28, 2023

Comments on this post have been limited.



"It's a special thing to be  
**HUMAN**  
and a special thing to be  
**ON PLANET EARTH.**"

ARTEMIS II COMMANDER  
REID WISEMAN

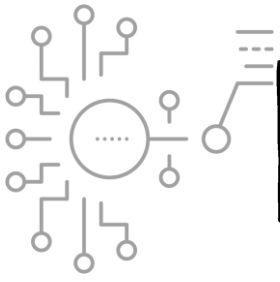




# BRAVE & BEST PRACTICES

## WAIT & LIMIT - ALL TECHNOLOGY, MEDIA, AND AI

- do **not** use w/ babies, toddlers, preschoolers, and early Elementary
- **rare**, necessary, and supervised use in late Elementary
- necessary and **supervised** use in Middle School
- **necessary** use in High School
- ✘ never for friendship or companionship
- ✘ never for support or therapy
- ✘ never to create deepfakes



# BRAVE & BEST PRACTICES

PRIORITIZE HUMAN RELATIONSHIPS

DON'T OUTSOURCE FOR CONVENIENCE

AI IS NOT A TOY OR A BOREDOM-BUSTER

PROTECT STRUGGLE

BE A ROLE MODEL



Sign up for our **Newsletter**  
Listen to the **Podcast**  
Get the **Books**  
Read our **Guides**  
Shop for **Merch**



Download  
**Presentation  
Slides**

braveparenting.net