

EBOOK





Foreword

I am Dr. Katherine Tatarinov, co-founder at Hoja AI and Assistant Professor of Strategy at HEC Lausanne. As a parent to two children aged 10 and 12, I believe that if we do not shape how our children will be using artificial intelligence (AI), someone else will. This short e-book aims to empower you as a parent to ask the right questions about AI for learning.

As parents, we all want the best for our children, especially when it comes to their education. Today technology is playing a bigger role than ever in how kids learn and Al is at the heart of this revolution. But what does it really mean for your child's learning?

This guide will help you navigate the new landscape. We'll explore what AI is, how it's already shaping the way your children learn, and, more importantly, how you can work alongside these tools to support your child's education. From screen time management and online safety to understanding the benefits of personalized learning, we'll cover all the essential topics so you can feel confident guiding your child in this digital age.

Enjoy the read!

Katherine



Chapter 1: What is AI and How Does It Work in Education?

A Parent's Guide to Artificial Intelligence

Artificial Intelligence (AI) might sound like something out of a science fiction movie, but it is already part of your child's life—and likely yours as well. AI refers to computer systems that are capable of performing tasks that would normally require human intelligence. These include things like understanding natural language, recognizing patterns, and even learning from data to improve its performance over time.

Think of AI as a super-smart assistant. It can process huge amounts of information quickly and adapt based on what it learns, making it an ideal tool for personalizing education. While AI may seem complex, it is becoming more and more intuitive—designed to be easy for both children and adults to use.

How AI is Shaping Learning

In education, one way AI is used to create personalized learning experiences tailored to each child's needs. Gone are the days of one-size-fits-all lessons; now, with AI tools, learning can be adapted to suit each child's pace, strengths, and areas needing improvement. Platforms like **Hoja** use AI to power virtual tutors (like the AI Study Buddy) that adjust teaching styles and content based on your child's personality and learning preferences.

For example, if your child is a visual learner, AI can recognize this and suggest videos, infographics, or interactive games to help explain concepts. If they prefer reading and writing, the platform might offer text-based lessons or writing prompts. This kind of personalization ensures that every child gets the support they need, when they need it.

Your child may already be using AI, like Chat GPT. Many applications and games they interact with already use AI to enhance experiences—such as voice assistants like **Siri** or **Alexa**, or the way Netflix suggests new shows based on previous choices. Additionally, many popular educational apps and tools rely on AI to enhance learning. Here are some examples:

- Adaptive learning platforms: Tools like Hoja, Khan Academy, and DreamBox use Al to track student progress and adapt lessons to challenge them just enough—neither too hard nor too easy.
- **Virtual Tutors:** Al-powered tutors (like Hoja's Study Buddy) can provide real-time feedback, explain tough concepts, and even help with homework at any time of day.
- Language Learning Apps: Programs like **Duolingo** use gamification and AI to personalize lessons, ensuring that kids master each step of a language before moving on to the next challenge.

These tools are helping make education more accessible, personalized, and effective, but they also raise important questions about screen time, cybersecurity, data and outcomes.

Key Takeaways for Parents:

- Al is not replacing teachers, rather it is supporting them by providing tailored learning experiences for each child.
- Al adapts to your child's unique needs, offering learning materials that match their style and pace.
- Understanding how these tools work helps you make informed decisions about which apps and platforms are right for your family.



Chapter 2: The Impact of Screen Time and AI

Healthy Screen Time in the Age of Al

With AI-driven tools on the rise in education, managing screen time can be a challenge for parents. On the one hand, we want our children to take advantage of these technologies for learning. On the other hand, we know that too much screen time can lead to issues such as lack of physical activity, eye strain, or disrupted sleep patterns. So, how do we find the balance?

How Much is Too Much?

For most parents, managing screen time means finding a balance between productive and recreational use. Here are some key recommendations:

- For younger children (ages 5-12): Limit total screen time to 1-2 hours per day, ensuring that educational activities make up a significant portion of that time.
- For teenagers (ages 13-18): While more independence is expected, it is important to encourage regular breaks and ensure that screens are not taking time away from sleep, socializing, or outdoor activities.

Al Tip: Many smartphones come with built-in screen time management features that allow you to set time limits for specific apps or overall screen use. For example, both Android and iOS devices have Screen Time or Digital Wellbeing settings where you can:

- Set daily screen time limits.
- Restrict access to certain apps after a certain time.
- Monitor how much time your child is spending on different activities.

Using these built-in tools can help create healthy boundaries for tech use, ensuring that screen time does not get out of control.

Creating a Balanced Digital Diet

Rather than focusing solely on reducing screen time, aim to create a "digital diet" that includes:

- Educational apps and learning tools (e.g., Al-powered tutoring, adaptive learning platforms).
- Interactive creative time, such as coding games or digital drawing.
- **Social interaction**, like virtual study groups or communication with friends through monitored social platforms.
- **Physical breaks**: Encourage children to take regular breaks from screens to engage in physical play or outdoor activities.

By diversifying the way your child uses their screen time, you can ensure they are gaining positive experiences while avoiding some of the negative effects associated with excessive screen use.



Chapter 3: Cybersecurity and Digital Safety

Keeping Kids Safe in the Digital World

As children spend more time online, digital safety is a growing concern for parents. From data privacy to cyberbullying, it is essential that parents teach children how to navigate the internet safely, especially when using AI tools that collect data.

Privacy Concerns with AI

Al platforms often collect information about a child's learning patterns, progress, and sometimes personal data. While this helps tailor learning experiences, it also means parents need to ensure their child's data is secure.

Here are some key steps to take:

- **Understand the privacy policies** of the platforms your child uses. Ensure that the Al tools your child engages with are compliant with GDPR or similar regulations, which protect user data.
- Check how data is used beyond the app: Ask whether your child's data is being shared beyond the application, especially if it is being used for training purposes on the wider internet. Make sure the data stays within the app's ecosystem and is not being used by third parties without consent.
- **Enable parental controls**: Most educational platforms offer privacy settings that allow you to control what data is shared and how it is used.
- Teach your child about personal information: Make sure they understand not to share personal details (e.g., address, school name, phone number) with anyone online, even when using AI-powered tools. A good rule of thumb when sharing anything online is to tell your child that whatever they share or put online, they must be ready to make public.

Monitoring and Managing Online Behavior

In addition to privacy, it is important to monitor your child's online activity to protect them from inappropriate content, online predators, or cyberbullying. Here is how:

- **Use parental monitoring apps**: Tools like **Bark** or **Qustodio** can help parents track what their kids are doing online without being overly intrusive.
- **Check-in regularly**: Create an open line of communication with your child about their online experiences, so they feel comfortable coming to you with any concerns.
- **Encourage responsible behavior**: Teach your children the principles of digital citizenship—how to behave kindly and respectfully in digital spaces.

Teaching Cybersecurity Basics to Kids

A few simple lessons can go a long way in keeping kids safe:

- **Create strong passwords**: Teach your child how to create and use strong, unique passwords for each account. A good password should be at least 12 characters long and include a mix of uppercase and lowercase letters, numbers, and special symbols (e.g., !, @, #). Encourage them not to use easy-to-guess information like birthdays or pet names.
- **Password Managers**: Use apps like **LastPass** or **1Password** to securely generate and store complex passwords. These tools create long, random passwords and store them safely, so your child only needs to remember one master password.
- **Two-Factor Authentication (2FA)**: Enable 2FA on accounts whenever possible. This adds an extra layer of security by requiring a second form of identification (like a text message code or authenticator app) in addition to the password.
- **Recognize phishing scams**: Explain how to spot suspicious emails or messages that ask for personal information or encourage clicking on links.
- **Emails asking for personal details**: They may get an email that looks like it is from their school or a game they play, asking them to "confirm your account" by providing a password or other personal information. Explain that legitimate companies will never ask for sensitive info via email.
- **Urgent messages**: Scammers often create a sense of urgency. For example, an email might claim, "Your account will be locked unless you click here!" Help your child understand that urgent, pressure-filled messages are a red flag.
- **Suspicious links**: Teach them to hover over links (on a desktop) to see where they actually lead. Scammers often disguise harmful links behind real-looking text like "Click here for your prize." If it looks suspicious or unfamiliar, they should not click it.
- **Misspelled or unusual senders**: Emails from scammers often have odd email addresses (e.g., customer.support@xyz123.com) or contain poor spelling and grammar. Teach your child to spot these signs before engaging with the message.
- **Use secure networks**: Ensure your child knows to use only secure, password-protected Wi-Fi networks, especially when accessing educational platforms.



Chapter 4: Best Practices for Using AI in Learning

Using AI to Support, Not Replace Human Interaction

Al is a powerful tool, but it is important to remember that it works best when it complements—rather than replaces—human interaction. Kids still need guidance, socialization, and the human touch in their learning journey. Here are a few tips for using Al in a balanced way:

- **Combine AI with real-world activities:** Use AI-powered tools to reinforce learning but encourage hands-on experiences like field trips, creative projects, or real-life problem-solving.
- **Encourage collaboration:** While AI tools can provide individualized feedback, children still need to work with peers and engage in group projects. These interactions foster essential social and communication skills that AI cannot replace.
- **Regular check-ins:** Do not let AI do all the teaching. Have regular discussions with your child about what they are learning, what challenges they face, and what they enjoy. This keeps you involved and allows you to guide their education effectively.

Collaborative Learning with AI

While AI can create personalized learning experiences, parents still play an important role in guiding their child's education. Here are some ways to work together with your child and AI:

- **Set goals together**: Use AI tools to set personalized learning goals and track progress. For example, a math app may adapt lessons to target areas your child needs to work on
- **Encourage independent learning**: Al tools can empower children to take charge of their learning, allowing them to explore subjects they are passionate about at their own pace. As a parent, you can guide them to use these tools responsibly and encourage curiosity.

• **Use AI for interactive family learning**: Explore subjects together using AI tools. For example, let your child teach you something new they've learned through a personalized learning app, or take part in AI-powered quizzes as a family.

Personalizing Learning with AI

One of the most significant benefits of AI is its ability to personalize learning. AI adapts lessons to each child's pace and style, which can be especially helpful for children with different learning preferences or those who may struggle in a traditional classroom setting. Here are ways you can take full advantage of personalized AI learning:

- **Monitor progress together:** Al-powered platforms often provide detailed analytics on your child's learning. Use these insights to have discussions about their progress, strengths, and areas for improvement.
- **Set personalized goals:** Work with your child to set short-term and long-term learning goals based on the feedback from AI tools. For example, if an AI platform identifies a gap in math skills, set a goal to work on that specific area with tailored exercises.
- **Encourage reflection:** After using AI-powered tools, encourage your child to reflect on what they have learned. Ask questions like, "What did you find most interesting?" or "How can you use what you've learned in real life?" This will help deepen their understanding.

Creating a Routine for AI Learning

Consistency is key when using AI in education. Here are some tips for integrating AI into your child's daily or weekly routine:

- **Designate specific times for AI learning:** Set a schedule that includes time for using AI-based learning platforms. This ensures your child is using the tools regularly without overwhelming their schedule.
- **Mix it up:** Keep things fresh by rotating between different types of AI tools (like language learning, STEM apps, and creative apps). This variety helps keep your child engaged and prevents boredom.
- **Balance screen time:** Balance AI learning with other forms of education and play. Encourage outdoor activities, reading physical books, or engaging in art projects to maintain a healthy balance of activities.

Teaching Your Child to Use AI Responsibly

It's important to teach kids not only how to use AI but also how to use it responsibly. Here's what parents can do:

- Explain how Al works: Help your child understand that Al tools are designed to assist and enhance learning, but they should be mindful of how they rely on them. Discuss the difference between using Al as a learning aid versus depending on it to do all the work.
- **Teach critical thinking:** Encourage your child to think critically about the information they get from Al. Teach them to question answers, do further research when necessary, and apply their own judgment. For example, ask them to break down how an answer that is given by an Al tool such as ChatGPT may be improved.
- **Set boundaries:** Establish guidelines for when and how AI tools can be used. For instance, AI can help with homework, but it should not be used to look up answers without trying first. There are tools tailored for children such as Hoja that will walk them through finding the answer on their own rather than just telling them the answer as a regular LLM might do.



Empowering Parents and Children in the AI Era

The world of education is evolving, and AI is at the forefront of this transformation. While it may feel overwhelming at times, AI offers incredible opportunities to personalize and enhance your child's learning journey. As a parent, you play a crucial role in guiding your child through this new landscape.

By understanding how AI works, setting clear boundaries, and engaging with your child in their learning process, you can help them make the most of AI-driven tools without losing sight of the importance of human interaction and hands-on learning.

This guide has provided you with strategies for managing screen time, ensuring cybersecurity, collaborating with your child in using AI, and creating a balanced, healthy approach to digital learning. As AI continues to advance, staying informed and involved will empower both you and your child to thrive in the digital age.



Resources: Al Tools and Websites for Parents and Children

Here are some helpful AI-powered tools and websites that can enhance your child's learning experience:

Al Learning Platforms:

1. Hoja Al Study Buddy

- o Provides personalized, real-time study assistance across multiple subjects.
- o Website: <u>Hoja.ai</u>

2. Khan Academy

- Free, Al-powered platform offering personalized learning paths in math, science, and more.
- o Website: KhanAcademy.org

3. **Duolingo**

- o Al-driven language learning app that adapts lessons based on progress.
- o Website: <u>Duolingo.com</u>

Parental Monitoring and Safety Tools:

1. Qustodio

- Parental control app to manage screen time, monitor online activity, and ensure safe internet use.
- Website: <u>Qustodio.com</u>

2. Bark

- A monitoring app that detects and alerts parents to potential risks like cyberbullying, inappropriate content, and more.
- o Website: Bark.us

Recommended Reading:

1. "Al Superpowers" by Kai-Fu Lee

• A book on Al's global influence and how it shapes the future, including education.

2. "The Fourth Education Revolution" by Anthony Seldon

o Explores the role of AI in education and how it can transform the way we learn.

Websites on AI and Education:

1. Common Sense Media

- o Offers reviews and advice on the best apps, games, and technology for children.
- o Website: Commonsensemedia.org

2. Edutopia

- Provides resources for parents and educators on how to incorporate technology into learning effectively.
- Website: <u>Edutopia.org</u>

Parent-Child Discussion Prompts:

- 1. How do you feel about using AI tools for learning? What do you like or find challenging?
- 2. What topics are you most interested in that we can explore together using an Al tool?
- 3. How do you think AI can help you with things you find difficult at school?

By using these resources and strategies, you can confidently guide your child's learning in a world that increasingly integrates AI into everyday education. This eBook is your roadmap to understanding, managing, and thriving in the world of AI-powered learning.