# GAIO

## Teacher Toolkit

www.ai4education.eu

# Introduction

Welcome to the Teacher Toolkit, a resource developed specifically to support you as a teacher in integrating artificial intelligence (AI) into practice. In this toolkit, you will find handy tools to help you effectively use AI to improve your teaching, better support your students and explore new, innovative teaching methods. Whether creating personalised learning experiences, developing teaching materials or using AI for assessment and feedback - this toolkit will help you integrate AI into your everyday teaching in a responsible and practical way.

By embracing AI in your daily practice, you can not only enrich your teaching, but also facilitate peripheral processes and save time on administrative tasks. This allows you to focus on the core tasks of a teacher, such as guiding students, enhancing their learning experience and adapting your teaching methods based on their needs.

The way our GAIO "Guide for School Leaders" specifically targets school leaders to help them develop AI policies at the school level, the Teacher Toolkit is aimed at you as a teacher. Where our Guide for School Leaders focuses on policy-making and strategic choices, the Teacher Toolkit offers concrete tools and strategies for practice. You will not only gain insight into how to apply AI in your lessons, but also how develop your own digital literacy skills to guide your students in their engagement with this technology.

In addition, in our **Portfolio of Case Studies**, where you can find real-life examples of colleagues already working with AI in their teaching. These stories offer inspiration and show how others are using AI effectively apply, so you can get started yourself with the possibilities AI to offer.

**Wishing you much inspiration!**

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# Index of the GAIO Teacher Toolkit

# Chapter 1: Introduction

In this chapter, you will learn what AI (artificial intelligence) is, why it is relevant to education, and how to use this toolkit to effectively integrate AI into your teaching practice. We provide an of the topics covered and explain how this toolkit can support you in integrating AI for a better learning experience for your students.

# Chapter 1: Introduction

In this chapter, you will be introduced to artificial intelligence (AI) and discover why it is an increasingly important tool in education. AI offers numerous opportunities to improve learning and teaching, make it more efficient and more personalised. This chapter lays the foundation for the rest of the toolkit and shows how you, as a teacher, can use AI to enrich and innovate the way you work.

## 1.1 What is AI and why is it relevant to teachers?

Artificial intelligence, or AI for short, refers to systems capable of performing tasks that normally require human intelligence. This can range from recognising patterns in data to simulating conversations or solving complex problems. AI is not something of the future - it is already here and is increasingly being used in various sectors, including education.
In education, AI offers many benefits. It can help :

- **learning materials:** AI can analyse data to understand where students struggle and then provide personalised learning materials.
- **automate time-consuming tasks:** From reviewing assignments to managing administrative tasks, AI can take a lot of work off your hands, leaving you more time to focus on your students.
- **enhancing the learning experience:** AI tools can help improve learner-teacher interaction through interactive learning methods and adaptive technologies.

It is important that teachers not only understand the potential of AI, but also know how to effectively integrate AI tools into their daily practice. This chapter will help you lay the foundation for using AI in your classroom.

## 1.2 How this toolkit can help you integrate AI into your teaching

This toolkit is designed to support you as a teacher in the practical application of AI in your teaching. You will learn how to use AI tools to:

- **Personalise education for your students** so they learn in a way that them best.
- **Save time by using AI for administrative tasks**, giving you more time for teaching itself.
- **Improve interaction with your students**, for example through automatically generated questions, customised lesson plans or interactive feedback.

In the toolkit, you will also find examples of specific AI tools you can use. These tools will introduced throughout the book, with practical applications and examples of how they can be used in the classroom. Tools such as **Perplexity, Magic School, Eduaide.ai, QuestionWell, DeepEnglish, Gamma.app, Murf.ai** and
**NotebookLM** will help you integrate AI effectively into your teaching.

## 1.3 Overview of the Toolkit and how to use it

The Teacher Toolkit is divided into **practical chapters** that will help you implement AI in your practice step by step. Each chapter is designed with **practical use in** mind and contains examples, tips and tools that you can immediately apply in your lessons. The chapters cover such topics as:

- **Applications of AI in the :** How to use AI to innovate your teaching methods.
- **Responsible use of AI:** The importance of ethics and privacy in the use of AI in education.
- **Guiding students with AI:** How to effectively guide students when working with AI, and how to prevent abuse.
- **Edge processes with AI:** How to automate administrative tasks and save time.
- **Digital literacy for teachers:** How you can improve your own digital skills to make best use of AI.

The toolkit offers **concrete examples** of how to use AI tools such as **Perplexity** for search, **Magic School** for interactive learning, **Eduaide.ai** for automatically generating learning materials and **QuestionWell** for creating customised
questions you can use. You will discover how these tools can help you make your teaching more efficient, personal and effective.

## 1.4 What to expect from the other chapters

In the chapters to come, we will dive deeper into the different ways AI can be applied in your daily practice. Each chapter focuses on **practical applications** and helps you integrate AI into your daily teaching. We cover topics such as personalised learning, AI for administrative tasks, and how to guide students in using AI responsibly.

You will discover how tools such as **DeepEnglish** for language learning and **Murf.ai** for text-to-speech can support you in your teaching methods. Also  is **NotebookLM**, an AI tool that helps you generate notes and structure lesson content.

With the knowledge and tools you gain in this , you will be well prepared to dive further into the possibilities of AI and how to apply it in your own teaching. The toolkit is a practical guide to help you embrace AI in the classroom step by step, allowing you to improve your teaching while creating efficiency in your daily tasks.
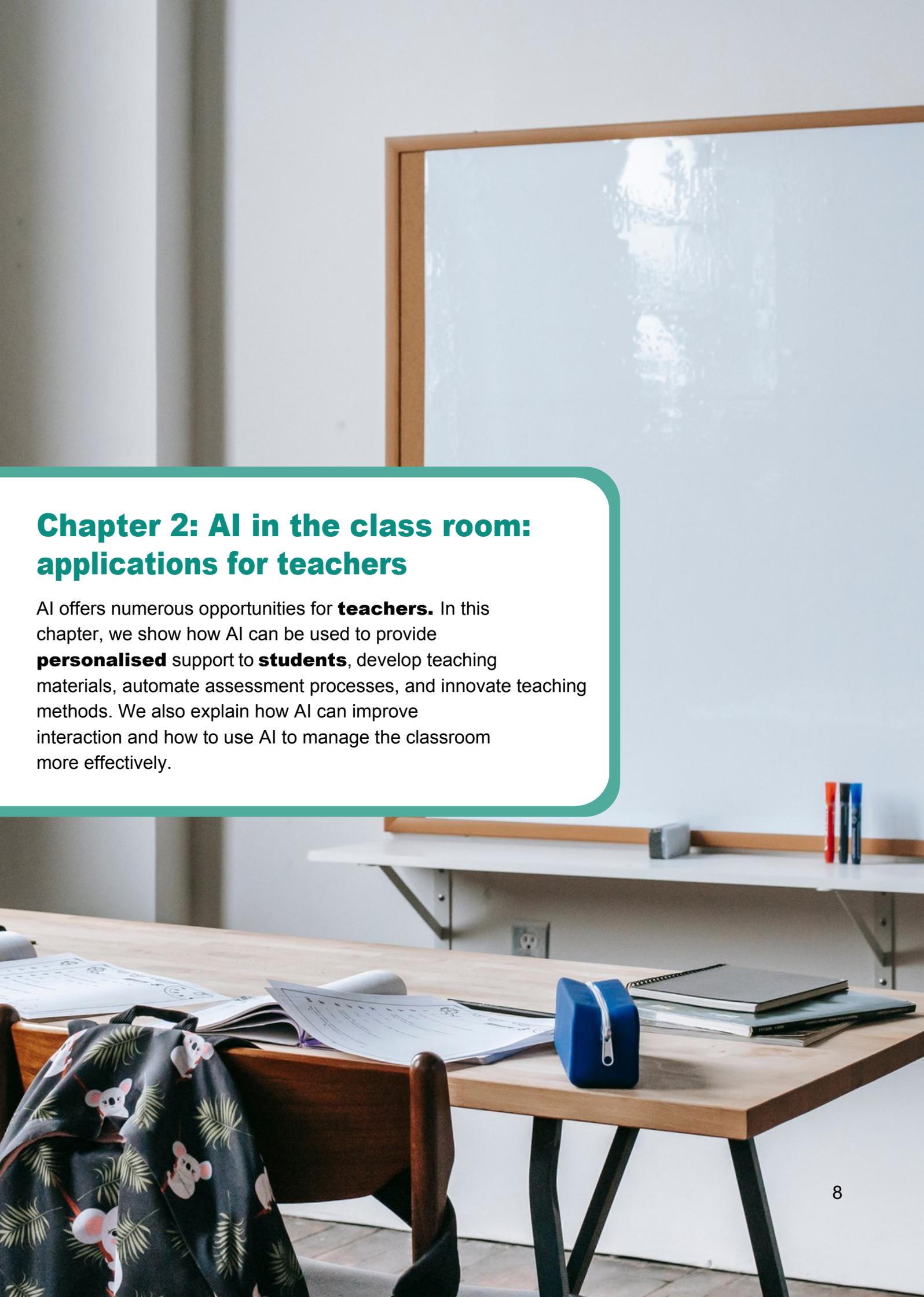
# Chapter 2: AI in the class room: applications for teachers

AI offers numerous opportunities for **teachers.** In this chapter, we show how AI can be used to provide **personalised** support to **students**, develop teaching materials, automate assessment processes, and innovate teaching methods. We also explain how AI can improve interaction and how to use AI to manage the classroom more effectively.

# Chapter 2: AI in the class room: applications for teachers

In this chapter, you will discover how AI tools can help you improve your teaching and make it more personalised for your students. From developing teaching materials to providing personalised learning experiences and automating assessments, AI offers a wide range of opportunities to the learning process. You will also learn how to use AI to improve efficiency so you can spend more time interacting with your learners.

## 2.1 Personalised learning with AI

One of the main benefits of AI in education is its ability to provide **personalised learning**. Each learner has his or her own speed and way of , and AI can help tailor the learning process to the needs of each individual learner. AI tools can collect and analyse data on learners' learning to determine where they are in their learning journey and which topics they can better understand.

### Example:

With tools like **Perplexity**, you can offer personalised searches and information that match learners' levels and interests. This helps not only in getting more targeted information, but also in improving learners' knowledge in specific subject areas.
In addition, tools such as **Eduaide.ai** can help personalised
teaching materials. This platform allows you to automatically generate lesson plans and exercises based on the level of your students, allowing you to better tailor your teaching to their needs.

## 2.2 AI for learning materials and content development

AI can also play a valuable role in **developing teaching materials.** Using AI, you can automatically generate lesson plans, exercises and even tests, saving you time while increasing the quality of the material. AI tools can also help you customise learning materials to make them suitable for different learning styles.

### Example:

With **Magic** School, a platform that uses AI, you can create interactive and lesson plans tailored to the specific needs of your students. This allows you to apply innovative and engaging teaching methods that increase student engagement and motivation.

Moreover, **Gamma.app** can help you develop visual lesson content, such as infographics, that make information more accessible and appealing to your students. AI tools like these allow you to create materials quickly and efficiently without spending hours developing them.

### 2.3 Automating assessment and feedback

Assessing and giving feedback can be a time-consuming task for teachers. Fortunately, AI can **automate** these processes, easing your workload. AI can help with reviewing multiple-choice questions, open-ended questions and even essays, and can provide immediate feedback to your students so they learn quickly from their mistakes.

### Example:

**QuestionWell** is an AI tool that helps automatically generate questions for tests and assess answers. The tool can create customised tests tailored to students' learning needs and provide feedback automatically, saving you a lot of time when reviewing work.

With **DeepEnglish**, you can use AI to automatically improve the writing skills of students to assess. This tool analyses grammar, style and structure, and provides detailed feedback that helps students improve their writing skills.

### 2.4 Advancing teaching methods with AI

AI not only offers the ability to automate tasks, but can also help innovate **teaching methods**. It allows you to develop interactive, adaptive and even gamified teaching methods that actively engage students in the learning process. By integrating AI into your lessons, you can offer students a dynamic learning experience that challenges and motivates them.

### Example:

**Murf.ai** is a speech-to-text AI tool that can help develop interactive listening exercises and conversations. The tool enables the conversion of audio recordings into text, which can then be used for analysis or as a basis for creating interactive assignments.

Also **NotebookLM,** a tool that uses AI to generate and organise notes, can help teachers create interactive worksheets or study aids. This enables students to quickly access summaries of important lesson content and better manage their own learning.

### 2.5 How AI can improve teacher-student interaction

One of the main benefits of AI in education is **improving interaction.** AI can serve as a bridge between teacher and learner, interactive tools and personalised guidance that can complement the teacher.

**Example:**

With Murf.ai, students can make their own voice recordings of their answers or ideas and automatically convert them into text. This not only facilitates communication for students who have difficulties with writing, but also allows you as a teacher to provide feedback quickly and efficiently. AI thus helps you to spend more time on personalised tutoring of your students, instead of wasting time on administrative tasks.

**Summary**

AI offers numerous benefits for teachers who want to improve, personalise and make their teaching more efficient. In this chapter, we have discussed various ways AI can be used to develop teaching materials, automate assessment and feedback, and improve interaction with students. By **including AI tools such as Perplexity, Magic School, Eduaide.ai, QuestionWell, DeepEnglish, Gamma.app, Murf.ai, and NotebookLM** in your teaching practice, you can make your teaching more effective while spending more time on the core tasks of your role as a teacher.

In the following chapters, we explore ethical considerations, guiding learners in working with AI, and how you can further use AI to improve efficiency in your working practices.

# Chapter 3: Responsible use of AI in education

AI offers many benefits, but its responsible use is crucial. In this chapter, we cover **ethical considerations**, such as privacy and data protection, and give you tools to guide students in working with AI. We stress the importance of **transparency** and accountability when using AI in your teaching.

# Chapter 3: Responsible use of AI in education

In this chapter, we discuss ethical considerations, privacy issues and the responsible use of AI in education. The use of AI offers numerous opportunities, but it is important that, as a teacher, you think carefully about how you apply these tools and how you guide students in using technology responsibly. We address the challenges and provide guidance on how to use AI ethically in your working practices. This chapter also emphasises privacy and how to use AI safely, especially if you already work with **Microsoft Office** from your school account. If so, you most likely also have the Copilot feature!

## 3.1 Ethical considerations when using AI

AI offers powerful tools, but its use also raises ethical questions. As a teacher, it is important to understand how this technology works and the impact it can have on your students. Here are some important considerations:

- **Transparency:** It is essential that students know what AI tools you are using and How these help them in their learning. Be transparent about the goals of AI applications and explain how the technology will improve their experience.
- **Responsible use:** AI tools, when incorrectly, can cause certain cause bias or unintended consequences. For example, if an AI tool for assessment has insufficient data or is biased, it can negatively affect students' learning experience. So it is important to have a good understanding of how the technology works before applying it.
- **Equal access:** ensure that all students have equal access to the technology and that the deployment of AI does not create inequality. This could mean, for example, ensuring that all students have the necessary devices and access to the internet.

### Example:

An interesting AI tool that can be discussed in this context is **Turnitin,** a platform that uses AI to detect plagiarism in essays and assignments. It not only allows teachers to prevent plagiarism, but also ensures that students learn how to work ethically. The platform is transparent about how its algorithms work and can also help improve writing skills by providing detailed feedback.

## 3.2 Privacy and data protection

One of the key ethical issues in using AI in education is **privacy and data protection.** AI tools often collect data on learners to enhance their learning journey, but this raises questions about how this data is stored, shared and used. As a teacher, you are responsible for protecting your students' privacy and ensuring that you comply with regulations such as the **General Data Protection Regulation (GDPR).**

- **Data collection:** When you use AI tools, you collect data on student performance. Make sure you understand what data is collected, why it is collected and how it is used.
- **Consent and transparency:** Always seek consent from students or parents (if necessary) before using AI tools that collect personal data. Be clear about what happens to the data and make sure it is stored securely.
- **Security:** Make sure that the AI tools that you use meet the privacy guidelines and that students' data is well protected against unauthorised access. This includes the retention of user account data such as usernames and progress.

### Example

A large number of schools use **Microsoft Office 365**, and as part of this is **Copilot**, Microsoft's AI tool, integrated into apps such as Word, Excel and PowerPoint. When working within a **Microsoft 365 work or school account,** you can rest assured that student data protected, as Microsoft has strict privacy and security measures applies to these accounts.

### Shield icon

You will recognise that you are working within a **secure work or school account** by the **shield icon** that appears in Microsoft apps such as Word or Excel. This shield indicates that the data processed and stored are secure and comply with the privacy guidelines of the respective institution.

### Copilot logo

In Microsoft's apps, you will see the **Copilot logo**, which indicates that AI tools are active and that you can use advanced AI features such as automatic text generation, data analysis and more. The logo looks like a **circular icon** pointing upwards, and it becomes visible in the toolbar of apps such as **Word, Excel, and Outlook** when Copilot is available.



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### 3.3 Guiding students in a digital learning environment

As a teacher, it is important that you not only deploy AI tools, but also guide your students in the responsible use of AI. Students need to be aware of the possibilities and risks of AI, and you play a crucial role in helping them develop a critical attitude towards technology. Here are some you can guide learners:

- **Media literacy and digital literacy: Don't** just teach students how to use AI tools can use, but also how to evaluate and critically approach AI in their own lives. This helps them use technology in a conscious and responsible way.
- **Collaboration and interaction:** Encourage learners not to use AI tools as a substitute of their own creativity and learning, but as tools that support them. AI should be used interactively and collaboratively so that learners feel they are working together with technology.
- **Ethics and responsibility:** Discuss with your students the ethical questions that accompany the use of AI. This can include how AI is applied in different industries, as well as issues such as bias in AI systems and the responsibility users have when using technology.

### Example:

Kahoot!, although not fully AI-driven, uses gamification and provides a good opportunity to engage students in interactive, data-based teaching methods. You can discuss with your students how the platform tracks their progress and help them understand why certain choices are made by AI systems.

### 3.4 Tools for the responsible use of AI

Using AI can significantly improve the way you work, but only if it is done responsibly and transparently. Here are some key handles to ensure AI is deployed ethically and responsibly:

- **Training and professionalisation for teachers:** Ensure that you and your colleagues are well-informed about the AI tools you use. Developing digital skills and ethical awareness is essential to the success of AI in education.
- **Regularly evaluate AI applications**: Keep evaluating AI tools to see if they are effective and whether they produce the desired learning outcomes. Always ask yourself whether AI in your teaching contributes to better learning experiences for your students.
- **Involve parents and students:** Work with parents and students to understand How they view the use of AI. This will help you their concerns seriously and apply AI transparently.

In this chapter, we have discussed the ethical and privacy issues surrounding the use of AI and provided guidance on the responsible use of AI in education. As a teacher, it is important not only to apply AI, but also to develop a critical and ethical attitude towards the technology. In the following chapters, we explore the practical application of AI in the classroom and how to use it effectively to improve both your teaching and your students' learning experience.
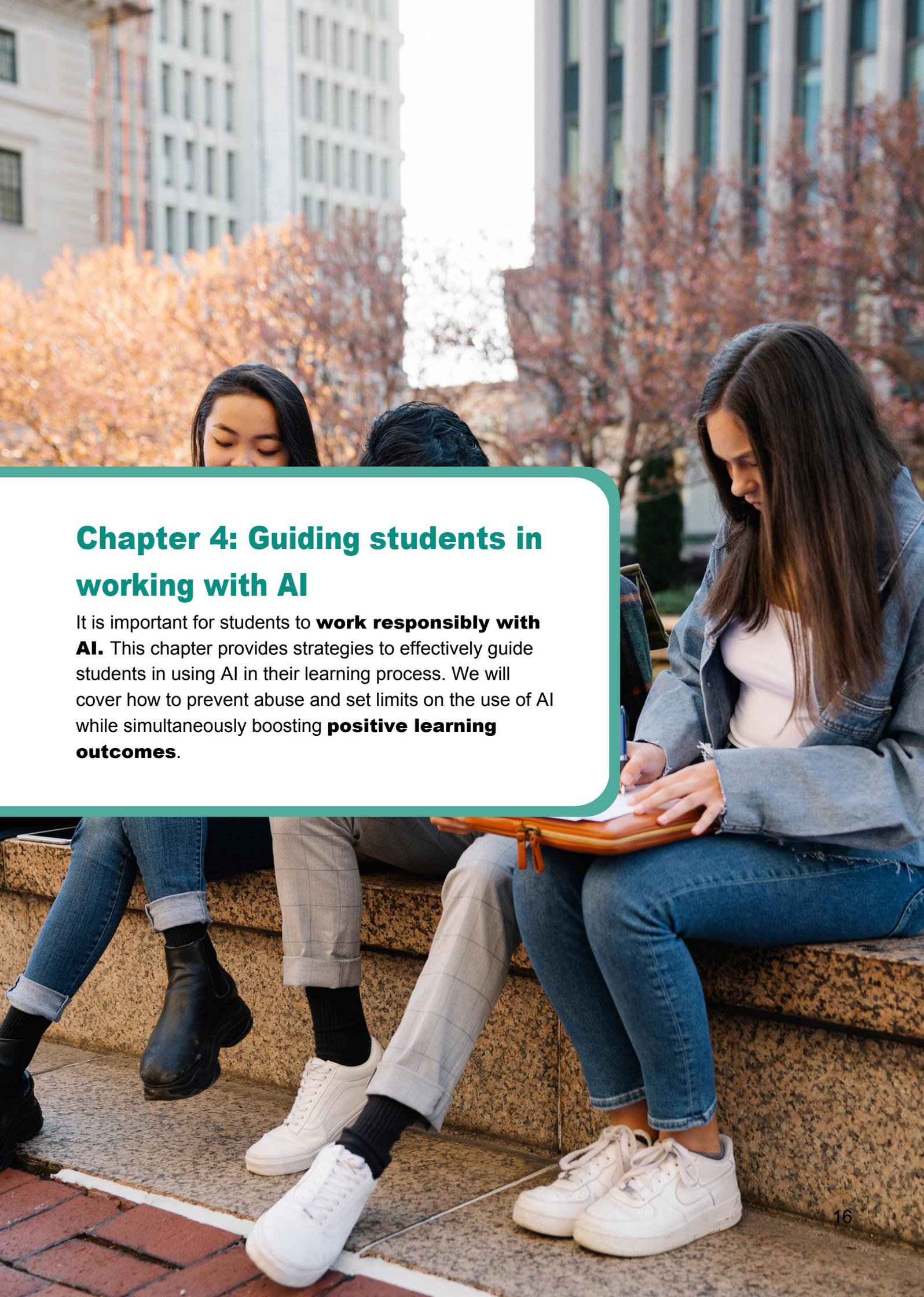
# Chapter 4: Guiding students in working with AI

It is important for students to **work responsibly with AI.** This chapter provides strategies to effectively guide students in using AI in their learning process. We will cover how to prevent abuse and set limits on the use of AI while simultaneously boosting **positive learning outcomes**.

# Chapter 4: Guiding students in working with AI

In this chapter, we focus on guiding students in working with AI tools and how to help them use this technology responsibly, critically and effectively. Using AI in the classroom offers students the opportunity to develop new skills, but it is important that they understand how to use these tools ethically and how to use the technology to enhance their learning. This chapter provides practical guidelines and examples of how to support students in their use of AI.

## 4.1 How students work effectively with AI in their learning

AI allows learners to optimise their learning and get tailored support, but it is important that they know how to use the technology effectively. Here are some ways you can guide learners on how to use AI:

- **Clarity on goals:** Start by explaining the purpose of the AI tools that you deploy in the classroom. Explain to your students how technology can help them achieve certain learning goals. This can range from improving their writing skills using tools like DeepEnglish to automating the learning process through QuestionWell for generating test questions.

- **Active engagement:** encourage students to use AI tools as support use, not as a replacement for their own work. AI can help them find information faster or understand complex concepts better, but they need to learn to actively  with the content themselves. For example, don't just let them rely on the AI answers, but also empower them to ask questions and investigate further on their own.

- **Step-by-step guidance:** give students clear guidelines on how to use AI tools need to use. This can be done, for example, by offering exercises in which they use AI as a tool, such as generating summaries with NotebookLM or improving texts with Murf.ai. The aim is not just to use technology, but to build it into their process in an instructive way.

## Example:

With Perplexity, an AI search tool, students can quickly find targeted information for their research assignments. As a teacher, you can guide them to formulate clear search questions and critically evaluate the results obtained. This helps them use AI in a targeted way in their learning journey.

## 4.2 Preventing abuse: limits to AI use in education

While AI tools can be powerful tools, it is important that learners learn when and how to **use this technology responsibly.** Misuse of AI can occur when, for example, learners simply copy-paste from AI-generated answers without doing their own work. It is essential to set clear boundaries and guide learners in using AI responsibly.

- **Understanding ethics and responsibility:** Explain to your students why it is important not to use AI to make tasks too easy, such as copying texts or automatically generating answers without their own effort. Discuss ethical issues such as plagiarism and the responsibility students have when using AI.

- **Developing critical thinking:** AI offers a lot of convenience, but it's important That students learn to think critically about the information they obtain. Teach them not only to rely on the answers AI provides, but also to analyse and verify them. This can help them develop a deeper understanding of learning and problem-solving skills.

- **Evaluation and reflection:** give students space to reflect on the use of AI in their work. This can be through self-reflection or group discussions in which they discuss what they have learned from working with AI and how it has helped them learn better.

## Example:

**Gamma.app** is an AI tool that helps generate visual presentation content, but it is important that students understand that the tool cannot help them  the concepts themselves. Encourage them to use the generated visuals to complement their own work and creative process, rather than simply adopting the final product.



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## 4.3 Guidance and supervision on students' use of AI

As a teacher, you have an important role in guiding and overseeing your students' use of AI. It is not only important to provide AI tools, but to ensure that students understand how to use this technology responsibly and ethically.

- **Rules and guidelines:** Set clear rules for using AI in your classroom. This might include, for example, using AI only for specific tasks (such as generating ideas or improving texts) and not for copying answers. Setting these boundaries helps students see technology as a tool rather than a shortcut.
- **Education and workshops**: Organise information or workshops in which you explain how AI works, what its benefits are, and how it can be used in an ethical way. This not only helps students become more with AI, but also aware of the risks AI poses, such as privacy issues and biases in systems.
- **Involving parents:** Make sure parents are also aware of how AI in your classroom is deployed. This can be done through, for example, parent evenings or newsletters, explaining what AI is, what tools you use, and how parents can support their children in using technology responsibly.

### Example:

For example, Murf.ai can help convert texts into spoken language, but learners need to understand when and how this is best applied. Instead of using the tool for every reading task, students can learn to use Murf.ai to listen to long passages of text or improve their pronunciation while doing the reading and comprehension themselves.

### Summary

In this chapter, we have discussed how to effectively guide students in using AI in their learning. From providing clear guidelines on how to use AI to preventing misuse and setting boundaries, it is to support your students and teach them how to use AI as a tool for their learning goals. In addition, as a teacher, it is important that you supervise and ensure that students are aware of the ethical and privacy issues involved in using AI.

In the following chapters, we will elaborate on the responsible use of AI education, the impact on the teacher's work processes and how to use AI effectively to improve both your teaching and the learning experience of your students.
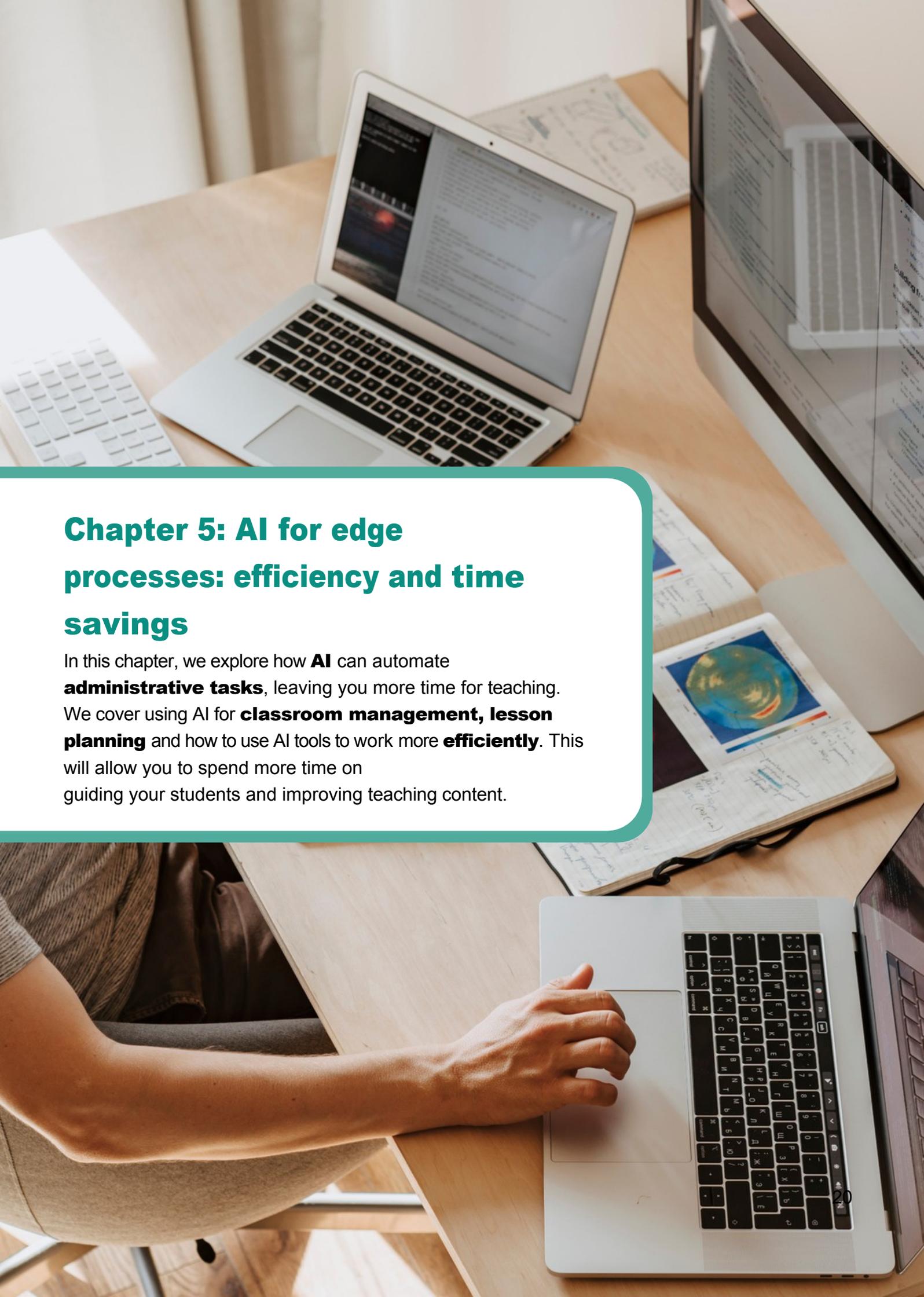
# Chapter 5: AI for edge processes: efficiency and time savings

In this chapter, we explore how **AI** can automate **administrative tasks**, leaving you more time for teaching. We cover using AI for **classroom management, lesson planning** and how to use AI tools to work more **efficiently**. This will allow you to spend more time on guiding your students and improving teaching content.

# Chapter 5: AI for edge processes: efficiency and time savings

In this chapter, we focus on how AI can help automate peripheral processes in your daily workflow, saving time and allowing you to focus more on the core tasks of teaching. AI tools can ease many of the administrative burdens, such as reviewing assignments, planning lessons and managing student progress. By using AI, you can streamline your work processes while spending more time on what really matters: interactively supporting your students and enhancing their learning experience.

## 5.1 Automating administrative tasks

One of the biggest advantages of using AI in education is the ability to automate administrative tasks. This allows you to save time and focus on interacting with your students. AI can be used for tasks such as reviewing tests, analysing learning performance and generating conceptual reports.

- **Automating tests and feedback:** AI can contribute significantly to efficiency of reviewing tests and providing feedback. Tools like QuestionWell help generate test questions, offering the ability to automatically grade answers and provide immediate feedback to your students. This saves you time when reviewing work, but it is important to stress that the teacher always remains ultimately responsible for the content and final approval of the report. The AI can only play a supporting role in the process, and the teacher should always check the final version before it is shared.

- **Pupil reports**

  Generating progress reports is one of the biggest advantages of using AI. Tools like Eduaide.ai offer the ability to analyse student performance and generate draft reports based on collected data. This can speed up the process, but final reports should always be checked by the teacher to ensure they are accurate and appropriate for the students in question. As a teacher, it is crucial that you prepare the report yourself, even if AI facilitates data collection and analysis.

**Note:** Using AI for reports and assessments can be a sensitive issue for school leaders, parents and students, as trust in the correctness of automated systems can still be a concern. Make sure you clearly communicate that AI is only used as a supporting tool and that human review and final responsibility always lies with you, the teacher.

### Example:

**Murf.ai** is a tool that converts speech to text, making reviewing oral assignments, presentations or group discussions easier. This not only saves time, but also ensures that you have more focus on providing targeted feedback, rather than administrative processing of assignments.

### 5.2 AI for classroom management and planning

Another aspect of education in which AI can play a significant role is classroom management and scheduling. AI can help organise your classes, manage timetables and track individual students' progress. This means you spend less time on administrative tasks and have more space to focus on the teaching itself.

- **Lesson planning:** AI tools can help you create lesson plans that are
  tailored to the specific needs of your students. This can be done, for example, by using Magic School, a tool that automatically generates interactive lesson plans based on your students' learning objectives and progress.
- **Class schedule and time management:** AI also allows you to manage your class schedules more efficiently.
  Tools like NotebookLM can help you organise notes, plan lesson components and structure your teaching materials, making it easier to keep track of progress and focus areas for your students.

### Example:

**Gamma.app** not only provides visual support for creating lesson materials, but can also help structure your lessons based on the learning objectives you have set. This makes planning your lessons easier and ensures that you don't waste time on administrative tasks that would otherwise distract your attention from teaching itself.

### 5.3 Save time and focus on core tasks

One of the main benefits of using AI is that it allows you to save time. When AI takes over repetitive and administrative tasks, you can focus more on the core tasks of your role as a teacher: guiding students, enhancing their learning experience and providing personalised feedback.

- **Efficiency in your work process:** AI tools can do routine work such as reviewing automate assignments, managing documents and generating reports. This not only helps save time, but also ensures that your work is done more efficiently, allowing you to focus on the teaching itself.

- **Better use of time:** By using AI for time-consuming tasks, you can use the time you save for more interaction with your learners. Instead of spending time on administrative tasks, you can use this time to get to know your students better, guide them in their learning and support them where necessary.

### Example:
Again, Murf.ai offers a practical solution for converting text to speech, allowing you to quickly generate audio recordings of teaching material or notes. This saves time that you would otherwise spend preparing audio sessions or repeating texts. Integrating AI into this process gives you more time to interact with your students.

### 5.4 Integrating AI into your daily work process
Now that we have discussed how AI can help automate administrative tasks, classroom management and scheduling, it is important to think about how to effectively integrate these tools into your daily work process. The goal is not only to save time, but also to use technology in such a way that it helps you improve your teaching.

- **Use AI as a supplement, not a replacement**: AI should a tool, not a substitute for your own expertise and personal interaction with your students. Use AI to facilitate your work processes, but keep yourself as a teacher actively involved in your students' learning process.
- **Evaluating the effectiveness of AI tools:** It is important to regularly Evaluate whether the AI tools you are using are effective. Are you getting the desired results? Are your learners getting better support? If yes, you can integrate the tools further. If not, you can find other solutions that better suit your teaching needs.

### Example:
By using QuestionWell in your classroom to generate customised tests, you can quickly create tests that specifically target your students' weaknesses. This saves time and ensures the tests are relevant and effective for their learning journey.

### Summary
In this chapter, we have discussed how AI can contribute to efficiency in the way you work by automating administrative tasks, optimising classroom management and saving time. The time you save on administrative tasks can be spent on your core tasks as a teacher.
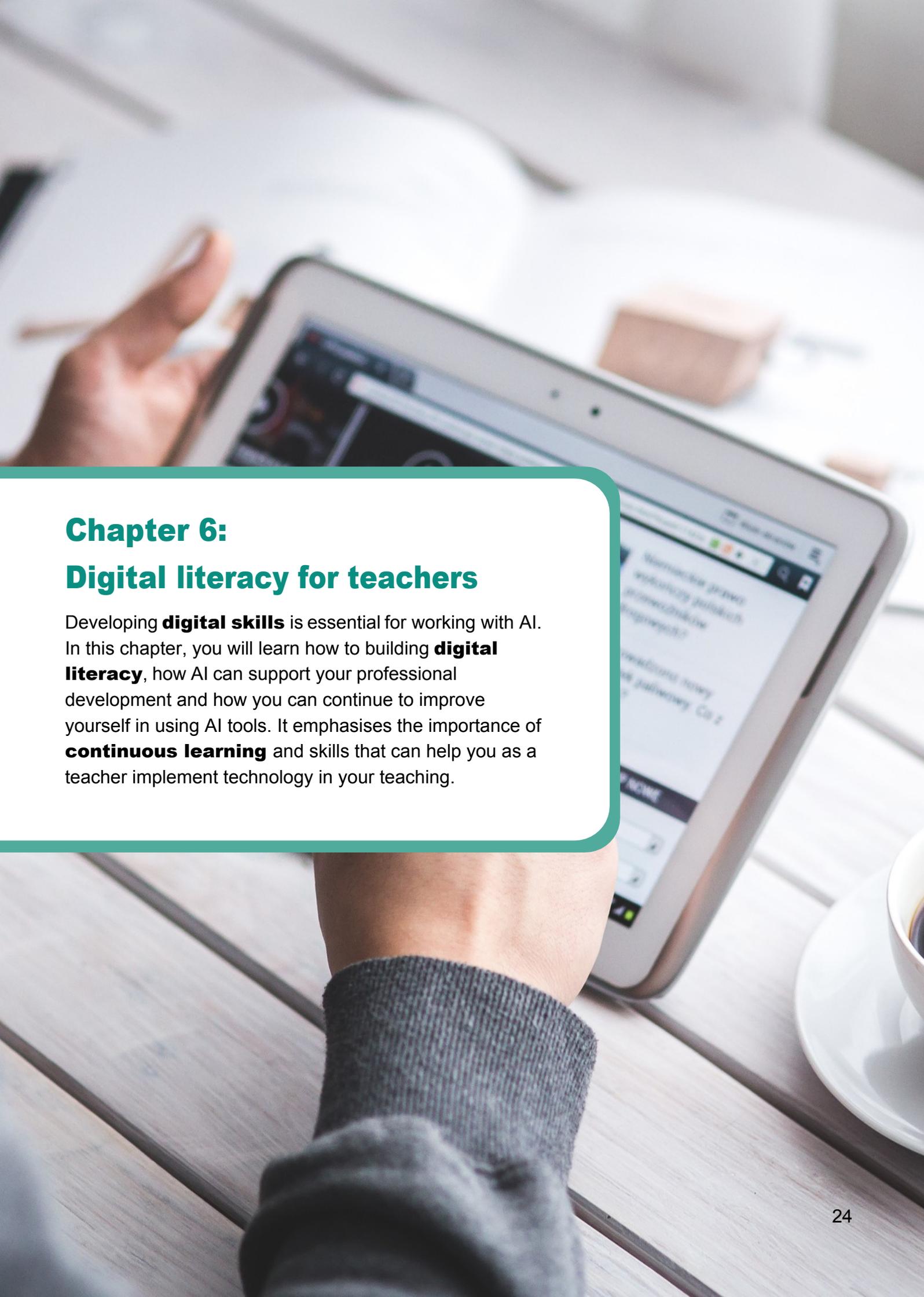
# Chapter 6:
# Digital literacy for teachers

Developing **digital skills** is essential for working with AI. In this chapter, you will learn how to building **digital literacy**, how AI can support your professional development and how you can continue to improve yourself in using AI tools. It emphasises the importance of **continuous learning** and skills that can help you as a teacher implement technology in your teaching.

# Chapter 6: Digital literacy for teachers

In this chapter, we focus on developing **digital literacy** for teachers, an essential component for the effective use of AI in education. Digital literacy is more than just being able to use technology; it is also about understanding the impact of technology on your way of working and developing the skills to use it responsibly. This chapter helps you develop the **knowledge and skills** needed to use AI tools effectively in your teaching, and provides you with the tools to use AI confidently and ethically.

## 6.1 Developing digital skills

The digital skills you need as a teacher are the foundation for the successful use of AI in your teaching. It is important to understand not only the technology, but also the **impact** AI can have on your students' learning experience and your own practices. Digital literacy thus encompasses a combination of technical knowledge, critical thinking skills and the ability to use technology **responsibly**.

- **Basics of AI:** Start by understanding the basics of AI. What is AI? How does it work? What applications are there in education? For example, AI can be used to provide students with personalised learning experiences, but it is important to understand how AI creates these experiences so that you can use it effectively and ethically.

- **Using AI tools in the :** Once you understand the basics of AI, you can learn how to integrate **specific AI tools** into your lessons. This can range from using **Murf.ai** to provide spoken feedback, to applying **QuestionWell** to automatically generate test questions. Developing practical skills to use AI tools is essential for integrating technology into your daily work.

- **Independent digital skills:** Developing digital skills goes also about improving your own **independence** when working with technology. This means being able to explore AI tools independently, adapt them to your specific needs and use them effectively in your teaching.

## Example:

By using NotebookLM, you as a teacher can easily organise your notes, lesson plans and materials. By becoming familiar with using such tools, you can improve your digital literacy and spend more time teaching and supporting your students.

## 6.2 How AI can support your own professional development

AI is not only a tool for improving your students' learning experience, but it can also support your own professional development. For example, AI can help improve your **practices** by providing you with **feedback and insights** on your teaching methods and your students' learning. By using AI, you can **continuously improve** yourself as a teacher.

- **AI for self-reflection:** Some AI tools offer the ability to reflect on your own working methods
  analyse and feedback. This can be done, for example, through tools that help you analyse how effective your teaching materials are or how well students understand certain concepts. These tools can provide valuable insights that can help you adjust your teaching methods.
- **AI in professional networks:** AI can also be used in **professional networks** to make connections with other teachers, share experiences and learn from each other. Platforms like **LinkedIn Learning** use AI to offer personalised learning paths for teachers, based on your learning needs and career development.

### Example:

**Gamma.app** can not only help you develop visual learning materials, but also offers ways to improve your own work and digital creativity. By integrating AI tools like this into your own professional development, you can increase your digital literacy and discover new ways to improve the way you work.

## 6.3 AI tools for personal and professional growth

Besides using AI to improve your education, various **AI tools** can also help with your **personal and professional growth.** These tools can support you in planning your career, improving your teaching skills, and gaining new knowledge.

- **Personalised professional development:** AI can **personalise** your professional development by recommending specific learning materials that match your interests and needs. Tools such as **LinkedIn Learning** and **Coursera**
  use AI to make tailor-made course recommendations that help you, the teacher, develop your skills further.
- **AI for time management:** AI can also help you manage your time and tasks, allowing you to focus on the most important aspects of your work. Tools like **Notion** and **Todoist** use AI to help you organise your work, manage deadlines and complete projects more efficiently.

### Example:

With **Perplexity**, an AI search tool, you can quickly access relevant articles, research and resources that can help you expand your knowledge in fields that interest you. This facilitates your access to new knowledge and enables you improve your skills faster.

### 6.4 The importance of ongoing digital literacy

In a rapidly changing digital world, it is important that digital literacy is not a one-off training, but an ongoing process. Technology, and specifically AI, is constantly evolving, so as a teacher it is essential that you keep your digital skills up to date and keep learning how to integrate new AI tools into your teaching.

- **Keeping up with technological changes:** make sure you stay up to date of the latest developments in AI and education technology. New tools are constantly becoming available that can improve the way you work, so it is important to keep up with regular training and update your knowledge.
- **Community and collaboration:** collaborating with other teachers and sharing of experiences can help you share knowledge and learn new AI applications. Joining digital communities can help you develop your own digital literacy.

### Example:

By participating in online AI education webinars or local teacher networks, you can learn from others who have successfully implemented AI tools in their classrooms. This is a valuable way to get new ideas and further strengthen your digital skills.

### Summary

In this chapter, we have discussed the importance of digital literacy for teachers and how AI can contribute to your professional development. From understanding the basics of AI to using AI tools for personal and professional growth, this chapter helps you as a teacher to strengthen your digital skills. By developing these skills, you will be able to use AI more effectively in your working practices and continue to continuously improve yourself as a professional.
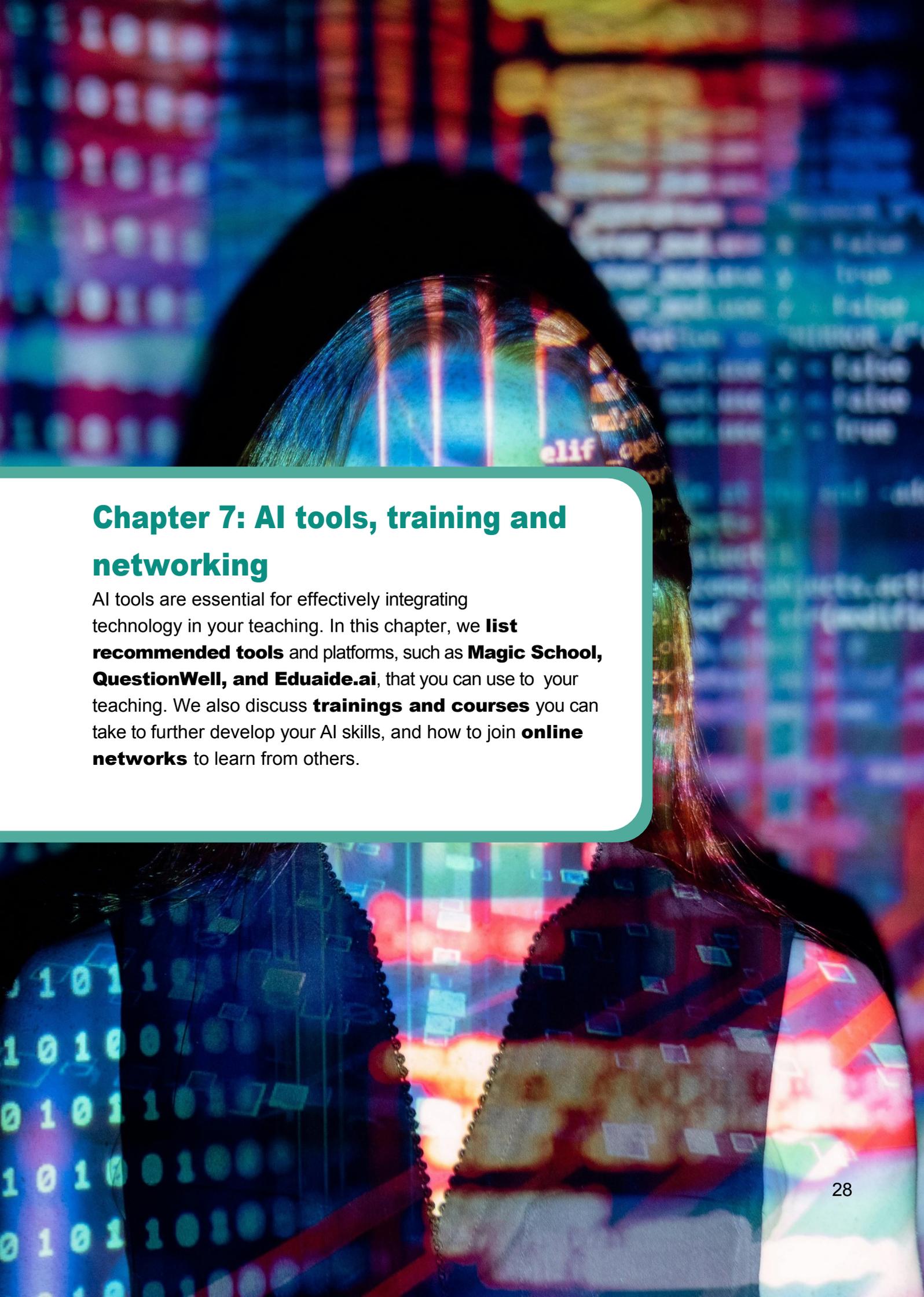
# Chapter 7: AI tools, training and networking

AI tools are essential for effectively integrating technology in your teaching. In this chapter, we **list recommended tools** and platforms, such as **Magic School, QuestionWell, and Eduaide.ai**, that you can use to your teaching. We also discuss **trainings and courses** you can take to further develop your AI skills, and how to join **online networks** to learn from others.

# Chapter 7: AI tools, training and networking

In this chapter, we will give an overview of **AI tools and platforms** you can use as a teacher to improve the way you work. Today, there are numerous AI solutions that can help generate teaching materials, improve students' learning experience, and optimise your work processes. This chapter provides a list of **recommended AI tools** designed specifically for education that you can integrate directly into your daily work. We will also look at additional resources that can further help you learn how to use AI in your teaching.

## 7.1 List of recommended AI tools and platforms

There are many AI tools available that can help you  your teaching more efficient and effective. Below are some of the best AI tools specifically suited for secondary school teachers.

• **Perplexity**

Perplexity is a powerful AI search tool that can help you quickly find relevant information for your lessons and research assignments. It provides targeted search results based on complex queries, making it easy to find reliable sources to enrich your teaching. This is especially useful when developing teaching materials or preparing assignments for your students.

• **Magic School**

Magic School is an AI-driven platform that automatically generates interactive lesson plans based on your students' learning goals and progress. It provides personalised learning paths for students and ensures that lesson content is perfectly tailored to their needs. It can also help create adaptive learning materials that keep learners motivated and engaged.

• **Eduaide.ai**

Eduaide.ai is a tool focused on generating practice assignments, quizzes and tests. It offers an AI-driven solution for quickly creating test materials and automatically grading answers. This saves time and allows you to quickly respond to your students' learning needs.

• **QuestionWell**

QuestionWell is an AI tool that facilitates the creation of test questions. It can automatically generate questions specifically tailored to your students' learning materials and progress. The tool also allows you to quickly and easily evaluate tests and provide feedback, significantly reducing teachers' administrative workload.

• **DeepEnglish**

DeepEnglish is an AI tool specifically aimed at improving learners' language skills, especially English. It offers automated grammar and writing assessments, and provides real-time feedback on the quality of the texts students write. This helps your students improve their writing skills and grammatical knowledge.

• **Gamma.app**

Gamma.app is a visual tool that allows you to easily create graphs, charts and other visual elements for your lessons. It uses AI to generate visual content aligned with learning objectives, allowing you to create lesson materials faster and more efficiently. This helps you convey lesson content to your students in a more accessible and engaging way.

• **Murf.ai**

Murf.ai is a speech-to-text and text-to-speech AI tool. It can be used to generate audio files from text or convert text to speech, making it easier to provide lesson materials for students who have reading difficulties. This can improve the accessibility of your teaching materials and ensure that all students can benefit from the lesson content.

• **NotebookLM**

NotebookLM is a tool that uses AI to generate, structure and organise notes. It can help in keeping lesson notes and organising lesson plans. This makes it easier to organise important concepts and lesson content and helps you as a teacher to plan and execute your lessons.

## 7.2 Training and courses for further deepening

There are several Dutch-language trainings and courses available that allow you to deepen your knowledge of AI and learn how to use these tools effectively. Here are some recommended resources:

• **AI course for Education Professionals**

The Dutch AI course for Education Professionals at www.onderwijs.ai-cursus.nl is a practical training course that helps teachers integrate AI tools effectively into their teaching practices. This course covers topics such as the use of AI for lesson planning, assessment, and student supervision. It offers teachers a chance to learn about the potential of AI for teaching and strengthen their skills.

• **AI in Education - KnowledgeNet**

Kennisnet offers a digital training course for teachers who want to learn how use AI tools in their methods. The training covers various AI applications and teaches teachers how to integrate AI into the classroom in an ethical and practical way.

• **AI for Education - Open University**

The Open University offers an AI course for teachers, covering the basics of AI, its impact on education and practical applications of AI in teaching. This course focuses on developing skills for the responsible use of AI tools in the classroom.

• **Howest - AI for Education**

Howest (the Hogeschool West-Vlaanderen) offers an AI-for-education programme guiding teachers in the use of AI technologies in  classroom. The programme covers both theoretical knowledge and practical applications of AI in education, and is designed to help teachers integrate the technology responsibly and efficiently. It offers both online and physical courses, depending on the teacher's preference.

## 7.3 Online communities and networks for teachers

The community of AI in education is growing rapidly, and there are many networks and online communities where you can connect with other educators, technology experts and innovators. By joining these networks, you can share experiences, discover new tools and learn from others.

- **AI in Education (AIED)**

The AIED community is a global network of teachers, researchers and developers focused on researching and implementing AI in education. Here you can follow discussions on the latest AI developments and learn how other teachers are using AI in their classes.

- **EdTech Communities**

There are many EdTech communities where educators come together to share knowledge about technology and AI. Platforms such as EdSurge, The EdTech Hub, and EdTech Europe offer valuable resources and connections that can help you improve your teaching with AI.

- **LinkedIn GroupsOp**

LinkedIn there are several groups focused on AI in education. By joining groups such as "AI in Education" or "EdTech Innovators," you can follow updates on the latest trends, events and discussions in the world of AI and education.

## Summary

In this chapter, we have discussed a number of **AI tools** and platforms you can use as a teacher to improve your teaching and optimise your work processes. In addition, we have shared a number of **Dutch-language trainings and courses** you can use to deepen your digital skills, and mentioned online **communities** where you can learn from other teachers and experts. By using these resources, you can further develop yourself in the field of AI and strengthen your practice, so that you are better prepared to integrate AI effectively into your teaching. In the following chapters, we will explore in more detail how to apply these tools in your working methods.
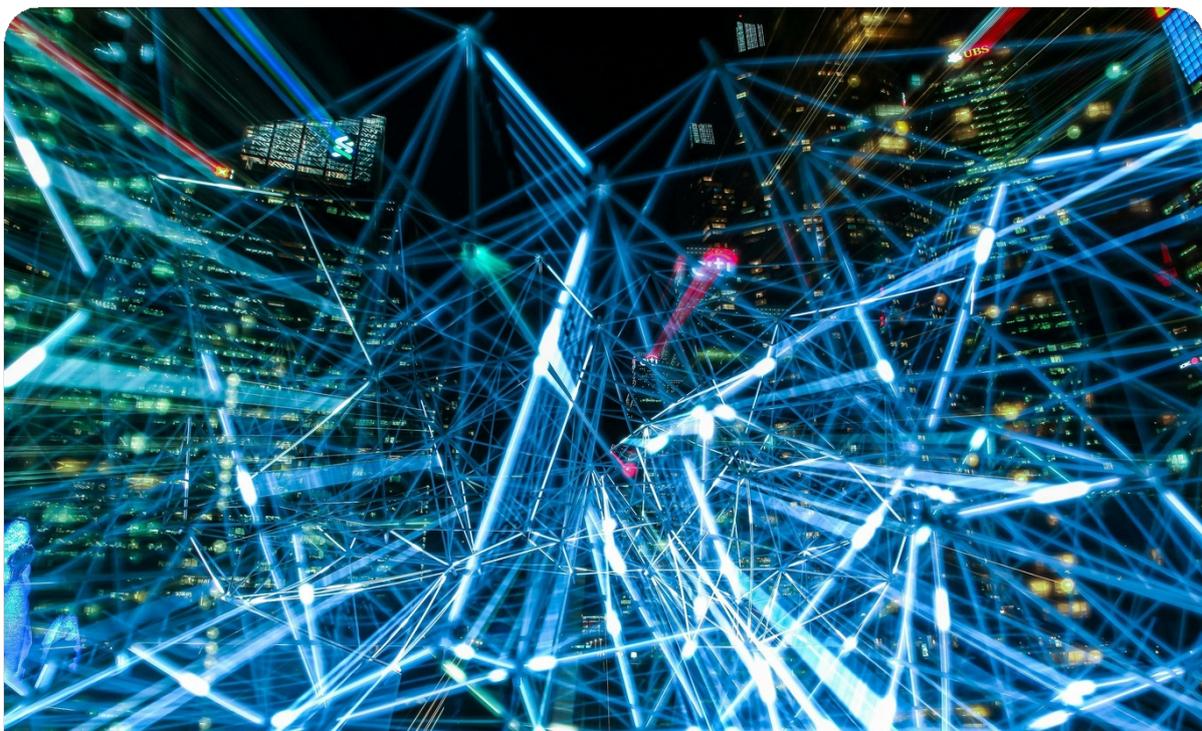
# Chapter 8: Integrating AI into your way of working

In this chapter, we take a closer look at how to actually **integrate** AI **into your teaching.** We give **strategies** for using AI in your teaching, such as how AI can contribute to **differentiation** and improving **learning outcomes.** We also discuss how to use AI to complement your teaching practices and how to implement it ethically and effectively.

# Chapter 8: Integrating AI into your way of working

In this chapter, we focus on practically integrating AI into your way of working. We look at how you can use AI tools to your educational goals, and how you can effectively use AI to enhance your students' learning experience. We also look at strategies and best practices to integrate AI responsibly, taking into account ethics, privacy and the specific needs of your learners.

## 8.1 The role of AI in education

AI is playing an increasing role in education, but it is important to understand that AI is only a tool to improve your teaching. It is not a replacement for the human aspect of teaching, but offers support in optimising learning processes. AI can help teachers make teaching more personalised, for example by offering adaptive learning tools tailored to students' progress.

- **Differentiation:** AI can help enable differentiation, meaning you can adapt your teaching to the different levels, interests and learning styles of your students. Tools like Magic School help you create personalised learning paths that fit the needs of each student.

- **Feedback and support:** AI can provide immediate feedback to learners, which helps them learn faster and their understanding of lesson material. This allows your role as a teacher to focus more on guiding and supporting students, rather than on repetitive tasks such as reviewing work.

- **Efficiency in administration:** AI can reduce administrative workload for teachers by automating tasks such as assessments and reporting. This gives teachers more time to interact with students and further develop teaching materials.

## Example:

**Eduaide.ai** lets you automatically generate practice assignments tailored to your students' level, and **QuestionWell** can help you generate test questions that precisely match their learning needs. These AI tools help you provide efficient and targeted learning materials.

## 8.2 Strategies for integrating AI into your lessons

Integrating AI effectively into your teaching requires a well thought-out strategy. In this , we will discuss some key strategies you can follow to apply AI responsibly and successfully in your way of working.

- **Choose the right tools:** Not every AI tool is suitable for every purpose.

  It is important to choose AI tools that best fit your educational goals and the specific needs of your learners. Think about what you want to achieve with AI: do you want to provide more personalised learning experiences, save time in your work process, or increase student engagement?

- **Use AI to complement, not replace:** AI should be used as a
  complement to your working methods, not replace your role as a teacher. Student interaction and personal support remains essential.

- **Engage students in using AI:** Students need to understand how to use AI and
  be able to use tools responsibly and ethically. This means guiding students on how to use AI so that they not only trust the technology, but can also critically evaluate it. This helps them reap the benefits of AI while being mindful of the technology.

### Example:

By integrating **Perplexity** into your lessons, you can help students quickly find reliable information for their research assignments. It is important to also encourage students to critically evaluate the information they find, so that they do not rely solely on AI.

## 8.3 Responsible use of AI in the classroom

Using AI in the classroom raises ethical and privacy issues that teachers should not lose sight of. In this section, we discuss how to use AI responsibly, taking into account privacy and the needs of your students.

- **Privacy and data security:** AI tools often collect data on the
  learners' learning to improve their progress. It is essential to ensure that this data is stored securely and used only for its intended . Work with AI tools that comply with privacy laws, such as the AVG, and be transparent to pupils and parents about the use of these tools.

- **Ethical use of AI:** AI must be used ethically.
  This means ensuring that AI tools do not lead to discrimination or bias. It is important to use AI to promote equality and equity in education, and not to reinforce existing inequalities.

- **Clear communication with parents and students:** Make sure you communicate clearly about the use of AI in your teaching. Explain how AI is deployed, what data is collected, and how the technology enhances your students' learning experience. Transparency is crucial to build trust and address potential concerns.

### Example:
If you use **Murf.ai** to spoken feedback to your students, make sure students and parents are aware of the data that is collected and how it is used. Provide clear information about the privacy settings of the tool and where the data is stored.

### 8.4 Best practices for implementing AI
Implementing AI into your way of working can take some time and effort. In this section, we share best practices to make the use of AI smooth and successful.

- Start small: Start by integrating one or two AI tools into your teaching practice. This will make it easier to evaluate the effectiveness of the tools and adapt them to your teaching style. Over time, you can implement more AI tools as you become more familiar with them.
- Learn from others: There are many teachers who already have experience using AI in their teaching. Share experiences with colleagues or use online networks and communities to exchange tips and ideas.
- Keep evaluating: Regularly evaluate how AI affects the way you work. Is it helping you achieve your goals? Does it improve your learners' learning experience? Keep adjusting and improving the tools based on student feedback and the results you get.

### Example:
If **you** use **NotebookLM** to structure your teaching notes, you can evaluate how it reduces your preparation time and whether your teaching material is better organised. This will help understand whether the tool actually supports you in your daily work.

### Summary
In this chapter, we have discussed how to effectively integrate AI into your day-to-day operations. From understanding the role of AI in education to choosing the right tools and implementing best practices, AI offers numerous opportunities to improve your teaching. By using AI to complement your teaching, deploying it responsibly, and always being mindful of your students' ethics and privacy, you can successfully integrate AI into your classroom.
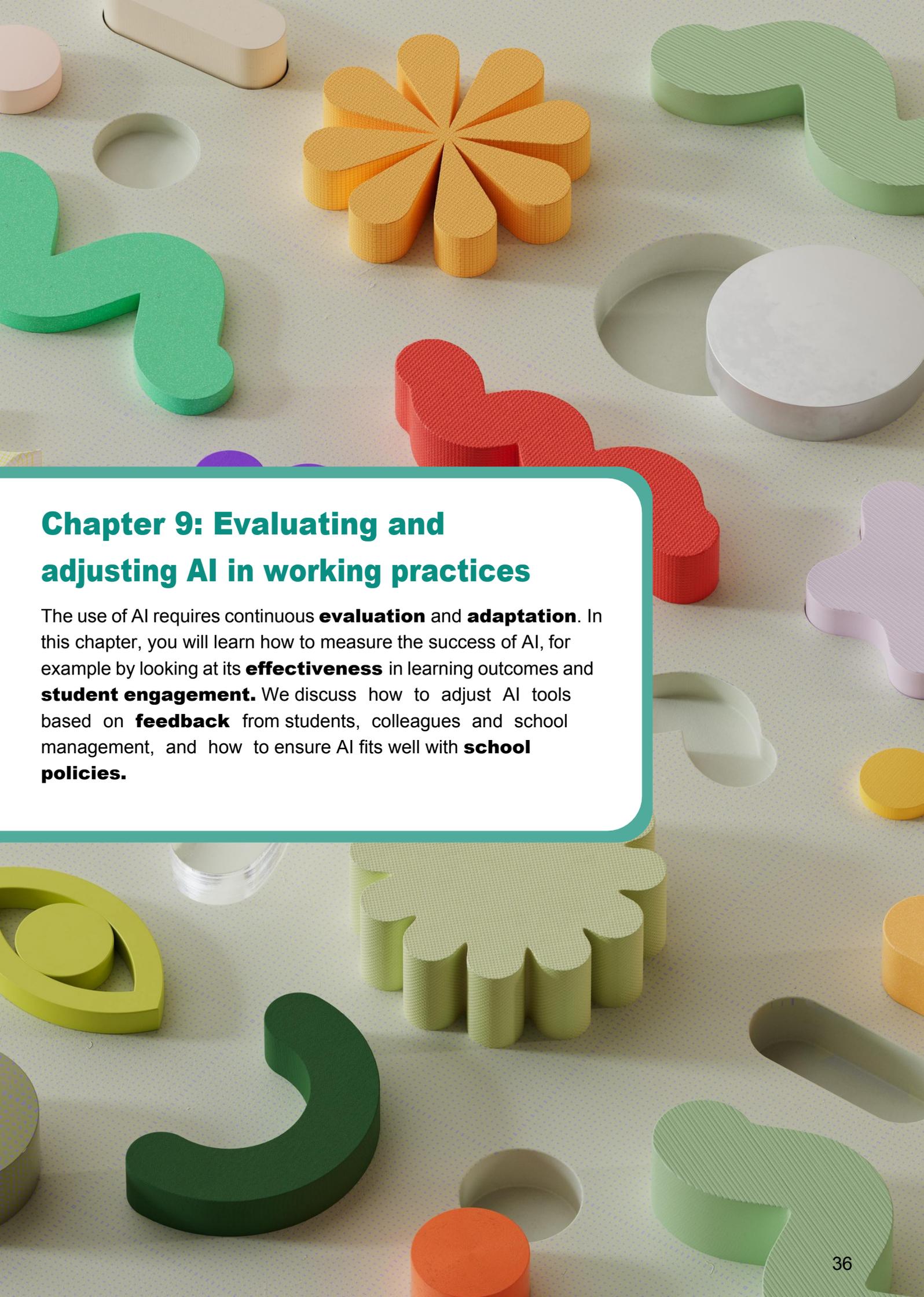
# Chapter 9: Evaluating and adjusting AI in working practices

The use of AI requires continuous **evaluation** and **adaptation**. In this chapter, you will learn how to measure the success of AI, for example by looking at its **effectiveness** in learning outcomes and **student engagement.** We discuss how to adjust AI tools based on **feedback** from students, colleagues and school management, and how to ensure AI fits well with **school policies.**

# Chapter 9: Evaluating and adjusting AI in your working practices

In this chapter, we focus on **evaluating and adjusting** the use of AI in your practice, looking specifically at how this evaluation fits within the broader framework of **school policy, collaboration with colleagues, and alignment with school leadership.** Integrating AI into teaching is not just a responsibility of individual teachers, but requires a collaborative approach within the school. This chapter provides tools for monitoring the impact of AI, adjusting your approach when necessary, and **involving colleagues and school leadership** in the evaluation process.

## 9.1 The importance of evaluation within school policy

Evaluation is crucial for the success of AI in education, and such evaluation should be embedded in school policy. This means that evaluation takes place not only at the level of the individual teacher, but also within the broader context of the educational institution. It is essential that AI projects are regularly evaluated by school leaders and that the results of the evaluation are shared and discussed with colleagues to implement improvements.

- **Measuring success:** As indicated in the GAIO School Leader Guide, it is important to set clear measurable goals for the use of AI in education, and integrate them into broader school policies. This could include, for example, measuring student learning outcomes, but also identifying the effectiveness of the AI tools used. School leaders should ensure a structural evaluation cycle in which both pupils and teachers are actively involved. Collecting feedback from pupils, teachers and parents on the use of AI is very important here.

- **Alignment with school management:** School management plays a crucial role in the Align AI initiatives with the school's broader educational goals and strategies. This means that school leaders must ensure that AI deployment is aligned with the school's educational vision and that sufficient resources are available to implement AI effectively. As the GAIO School Leader Guide highlights, supporting school leaders is essential for creating organisation-wide acceptance and embedding AI within education policy.

As a school leader, you can use Magic School and Eduaide.ai to generate regular reports that provide insight into the progress of students using AI-assisted learning tools. This provides both teachers and school leaders with valuable information on the effectiveness of these tools and their impact on learning outcomes.

## 9.2 Measuring success: evaluating at school level

Measuring the success of AI in your practice requires not only the evaluation of individual performance, but also a broader perspective that focuses on school policy and educational objectives. It is important to put in place evaluation systems that can be used school-wide to determine whether AI actually contributes to educational improvement.

- **Learning outcomes and performance:** It is important to look at quantitative data, such as grades and test results, and qualitative data, such as feedback from students and teachers on their experiences with AI tools. This information can help measure progress and identify the tools that work well. School leaders should ensure that this data is collected and analysed in a  that is user-friendly for teachers.
- **Learner engagement:** Measuring pupil engagement with AI tools can be an important indicator of success. Students who actively participate in AI-driven education, for example by using QuestionWell or Perplexity, show higher motivation and better results. School leaders should also ensure that pupils are involved in evaluating AI initiatives so that their experiences and ideas can feed into future improvements.

### Example:

With **Gamma.app**, visual tools such as graphs and charts can be generated that visually represent student performance. This makes it easier for teachers and school leaders to evaluate and adjust the effectiveness of the tools used based on concrete data.
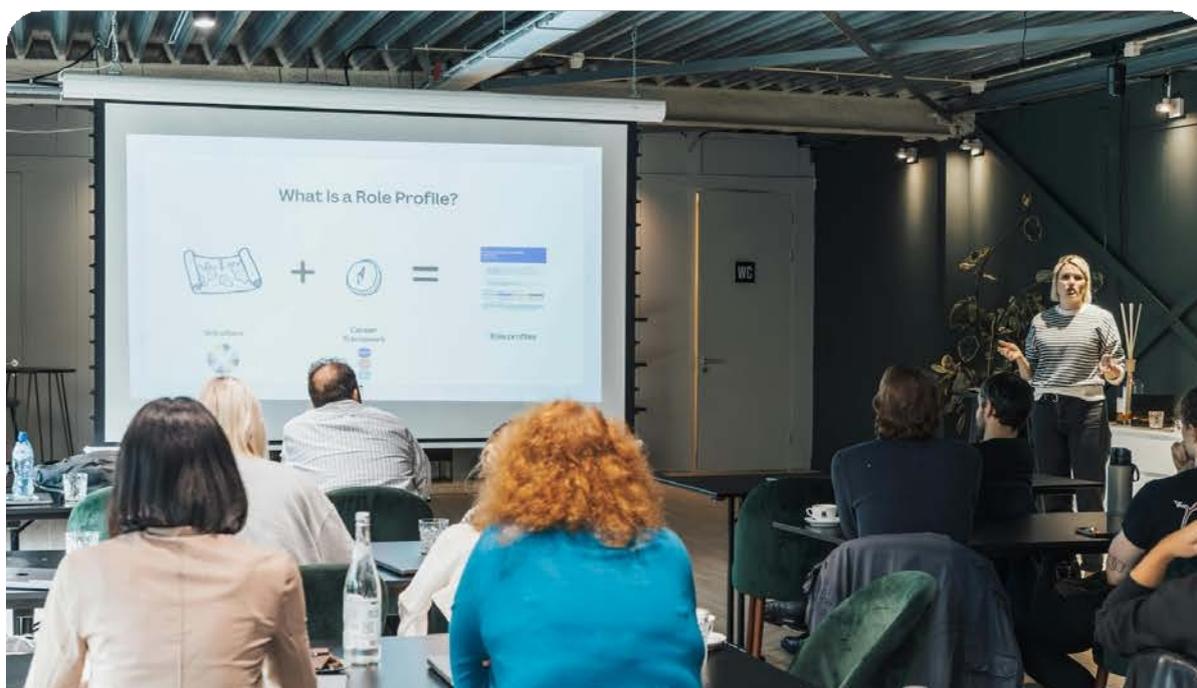
### 9.3 Adjusting the deployment of AI within the school

Evaluation is not only about measuring success, but also about adjusting the use of AI to increase effectiveness. This is a joint responsibility of both teachers and school leaders. Feedback loops should be built into this process in which teachers, school leaders and students provide continuous input on the deployment of AI tools and their experiences with them.

- **Adapt and evaluate tools:** If a particular AI tool does not have the desired effect, it is important to experiment with alternatives or the way the tool is deployed. The GAIO School Leader Guide emphasises that school leaders play a facilitating role in testing and optimising AI tools. They can do this by organising regular feedback sessions in which teachers discuss with school leaders which tools work well and which do not.

- **Peer collaboration:** The success of AI initiatives depends heavily on collaboration among colleagues. It is important that teachers not only use AI tools, but also share experiences and brainstorm together on their application. School leaders should facilitate collaboration by, for example, organising peer reviews or professional learning communities where teachers can share their experiences with AI and learn from each other.


### Example:

If you use **NotebookLM** for structuring notes and lesson plans, you can evaluate with your colleagues how the use of this tool differs in their working methods. By sharing experiences, you can improve the use of the tool and tailor it to your students' needs.


### 9.4 Involving parents, pupils and colleagues in evaluation

Involving parents, students and peers in the evaluation process is essential to the success of AI initiatives. Creating an open communication channel helps build trust and ensures that all stakeholders feel heard.

- **Parent interviews and communication:** School leaders should ensure that parents are informed about the use of AI in education and that their feedback is collected. This can be done during parent evenings or through digital channels, for example. It is important that parents understand what AI tools are used, how they contribute to their children's learning, and how the school handles privacy and data security.

- **Learner feedback:** regularly ask learners for feedback on how they experience A and to what extent it helps them in their learning. This feedback should be taken into account not only by the teacher but also by the school management in order to optimise the use of AI school-wide.

- **Peer collaboration:** Schools that successfully integrate AI often do not do so at individual basis, but through collaboration and coordination between different teachers and school leadership. School leaders should ensure that there is a culture of knowledge sharing and collaboration in which AI initiatives are jointly evaluated and adjusted.

The **GAIO School Leader Guide** recommends regular meetings where teachers reflect together on their experiences with AI tools. This ensures that everyone is on the same page and makes it easier to implement joint improvements.

## Summary

In this final chapter, we have discussed how **to effectively evaluate** and adjust **AI** in your practice, both at individual and school level. It is important to embed evaluation in school policy and work with colleagues, students and parents to successfully integrate AI initiatives. By regularly evaluating, collecting feedback and making adjustments, you can continue to use AI responsibly and ensure that it contributes to improving education. The insights and recommendations from the **GAIO School Leader Guide** can
help with this, especially when it comes to **cooperation and coordination** within the school. In the following chapters, we further explore the **practical applications** of AI in the classroom and how you can use AI to improve your students' learning experience.

# Final word

The world of **artificial intelligence (AI)** is changing at a rapid , with it the way we teach and receive education. AI offers huge opportunities to improve education, both for students and teachers.
From improving administrative processes to creating more
personalised learning experiences for your students, the possibilities are endless.

At the same time, it is important to realise that the **world of AI** is constantly evolving. New tools, applications and insights are constantly becoming available, which means That we, as teachers, need to constantly learn and adapt. This requires from us not technical knowledge, but also an open mindset and a willingness to experiment and reflect.

It is essential that we see AI not just as a technological addition, but as a **change in the way we understand and deliver education.** It requires constant coordination with **colleagues, school leadership,** and **students** to ensure that AI is used responsibly and **ethically**. This
toolkit is intended as a starting point, but the real work begins once you start applying and evaluating these tools in your own teaching context.

The role of the teacher remains essential in creating a learning environment in which technology is used to support human interaction, critical thinking and personal development. As you get started with AI, stay curious, stay open to new ideas, and always keep your learners' needs at the forefront of your mind.

Thank you for reading this toolkit. We hope you are inspired and well prepared to integrate AI into your teaching practice to support your students in their learning journey. The future of education is digital, dynamic, and full of possibilities - and you have the chance to play an important role in it!

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