

# THE USE OF ARTIFICIAL INTELLIGENCE IN SCHOOLS

Petra van Haren, based upon *Generative AI in the classroom: From hype to reality?* by Anna Pons, OECD, 2023

### # This card provides suggestions for the following questions:

- How do I make my team interested in using Artificial Intelligence (AI) in school?
- How do I support my team and give guidance on implementing AI in school?

### Why is it important to start the dialogue about AI in your school today?

Generative AIs like Chat GPT are entering the classroom, so it is necessary to face the major issues this raises and to develop a vision on the potential implications. The potential impact is likely to be in the direction of accelerating the shift of the teachers' role to facilitation of student learning. While the teachers' professional judgement on the sequencing of practice opportunities will remain essential, this could be a radical departure from one-size-fits-all teaching and learning where everyone is expected to progress at the same pace. It has the potential of changing not only classroom dynamics, but also the way in which students are grouped by ages and levels and even reshape what schools look like.

For a development that is going so fast it is important to find out what school heads and teachers need to learn and what they need to unlock the potential of GenAI while safeguarding against its potential pitfalls. Adapting to GenAI requires the self-efficacy of the school leader and the teachers (see HeadStart #7 Stimulating collective self-efficacy)

Teachers and school principals need to be trained in a systematic, evidence-informed way on how to use these tools in their different learning scenarios. The question of teacher support and preparation will be key in any system-wide response to GenAI and education. Collaborative models, peer support systems and networks can play a critical role in ensuring that classroom practice is able to swiftly and accurately adapt to the tools while keeping the three core values of education in focus. (see HeadStart #4 Value Compass for digital transformation of education.)

### Step 1) Start a dialogue in your school and explore what is needed to adapt to the developments that are emerging.

Together with your team list the questions for reflection on how your school responds to the opportunities and challenges of GenAI.

These questions could be:

- Are we aware when and where GenAI enters our school and how we respond to it?
- How can we effectively integrate AI language models such as ChatGPT in our curricula while maintaining a balance between human-led instruction and AI-driven learning experiences?
- How can we ensure that all of us are adequately trained to help students understand the difference between artificial and human Intelligence?
- What long-term implications might widespread adoption of AI language models have on the role of teachers, and how can we prepare ourselves for these changes?
- What measures can we take to ensure that AI language models do not inadvertently promote cheating or plagiarism among students, and instead encourage original thinking and creativity?
- How can we use GenAI effectively to support our work as professionals?
- How can AI language models be leveraged to support students with special needs, learning disabilities, or those from disadvantaged backgrounds or requiring additional support in the classroom?
- How can we involve parents in the understanding and implementation of GenAI (see HeadStart #6 Collaborating with parents)?
- How can we ensure equitable access to AI-driven educational tools for all our students, regardless of their socioeconomic background, geographic location or language proficiency?
- How can we involve students in a co-creative way to address issues around AI?
- Answer the questions together and use the outcomes as the basis for a joint vision and a plan for implementation.

## Step 2) Support in identifying the learning needs of yourself, the teachers and what to provide parents with.

The teaching profession is expected to be profoundly impacted by GenAI. Classroom interaction between teachers and students lies at the heart of pedagogy. Teachers use a variety of strategies to elicit student thinking, provide appropriate feedback and align instruction with students' levels of understanding. Each of these could be enhanced by GenAI and even transformed into personalized learning opportunities. It may also help teachers provide more regular and granular feedback to students.

GenAI can help teachers summarize recent research on education, provide additional resources and materials to develop, stay up-to-date with subject knowledge and give ideas on how to improve. It can also provide feedback by analyzing lesson plans, learning resources, homework assignments, assessments or

even lesson recordings. Making visible what tends to go unnoticed can help teachers design and enact more compelling learning experiences.

You can ask the following kind of questions:

- How skilled is each teacher in the necessary pedagogical-didactic practice and what knowledge do they need?
- Where does every teacher want to be in their development?

To answer these questions, teachers can use different learning activities (see step 3).

## Step 3) Support in undertaking learning activities.

School leaders and teachers can undertake various learning activities in a formal or informal setting. Some suggestions are listed below.

| LEARNING ACTIVITIES FOR YOURSELF AND YOUR TEACHERS   | PROVIDE LEARNING OPPORTUNITIES AS A SCHOOL LEADER  |
|--|--|
| <b>LEARNING THROUGH LEARNING ACTIVITIES</b>  | <ul style="list-style-type: none"><li>• Ask experts to provide targeted information</li><li>• Provide access to professional development courses, webinars, relevant conferences</li><li>• Provide access to professional literature</li><li>• Discuss developments</li></ul>      |
| <b>LEARNING THROUGH COLLABORATIVE SHARING OF THOUGHTS AND OBSERVING THE BEHAVIOR OF OTHERS</b> | <ul style="list-style-type: none"><li>• Show and observe experiments or good examples</li><li>• Stimulate mutual class attendance, giving each other feedback</li><li>• Create opportunities to share the challenges and counter the pitfalls</li></ul>                            |
| <b>LEARNING BY DOING AND EXPERIMENTING</b>   | <ul style="list-style-type: none"><li>• Set up an account and experiment with GenAI</li><li>• Stimulate research work</li><li>• Involve students, give room for try-outs</li></ul>   |
| <b>LEARNING THROUGH REFLECTION</b>   | <ul style="list-style-type: none"><li>• Ask reflective questions as a school leader</li><li>• Free up time to reflect</li><li>• Ask teachers to write a log</li><li>• Use external or video coaching</li></ul>   |
| <b>LEARNING THROUGH COLLABORATION</b>  | <ul style="list-style-type: none"><li>• Stimulate collaborative approaches to complement GenAI</li><li>• Ask teachers to collaborate on overcoming the limitations of GenAI</li><li>• Have teachers prepare lessons together</li><li>• Let teachers do research together</li></ul> |

## Step 4) Monitor the progress of developments and the learning processes.

It is crucial to allow yourself and your teachers reflection time to check how each of you has developed and what this means for the school organization as a whole. You can facilitate this by having regular progress meetings. This can be a guided discussion by the school leader or you can set aside time for this during work meetings. Make each person responsible for their

own learning. Keep focus on how the implementation of GenAI contributes to optimizing the students' learning and what it requires. Jointly determine whether additional learning activities and learning opportunities should be offered.

Taking up the implementation of GenAI benefits form a learning culture in the school. (See HeadStart #2 Stimulating teacher learning).