

## AI Analysis

### Overview:

This report analyzes data from two separate surveys: one addressed to teachers and another to students, to examine the use of generative AI in middle and high school. The surveys were sent to an anonymous school in Lebanon. A total of 20 teachers and 282 students participated.

### Teacher Survey:

#### A. Participant Demographics:

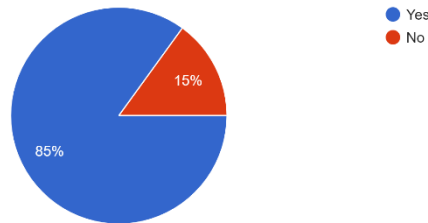
The teacher survey results showed that the highest number of participants teach the subject area of English and language arts (42.1%). This is followed by Mathematics (31.6%), Science (26.3%), Arts and Music (15.8%), Social Studies (10.5%), Foreign Languages (10.5%), Computer (5.3%), Physical Education and Special Education (0%).

Teachers from Cycles 2, 3 and Secondary grades were included. Some teachers teach more than one cycle, so they were able to select multiple options. As a result, each cycle is represented by 50% of participants.

In terms of teaching experience, most respondents (45%) have an experience of 11-20 years. As for the teaching experiences of 0-2 years, 3-5 years, and over 20 years, they all accounted for 15% of participants. Finally, the smallest group (10%) had 6 -10 years of experience.

Most respondents (90%) teach in private schools. The remaining 10% is equally divided

Section B: GenAI Adoption in Teaching Practices Generative AI or GenAI is a type of artificial intelligence that can create new content like text, ...ave you used GenAI tools in your teaching practice?  
20 responses



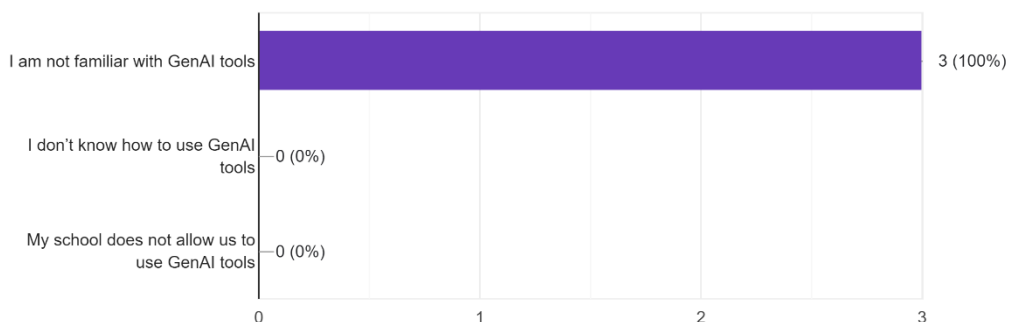
between teachers in public schools (5%) and teachers in both public and private schools. All participants teach in schools located in North Lebanon.

#### B. Main Findings: GenAI Adoption in Teaching Practices:

The survey indicates that most teachers (85%) have integrated GenAI tools in their teaching practices. This high rate shows the growing role of AI and technology in 21<sup>st</sup> century education. This suggests that teachers might have integrated it either because they recognize the importance of using AI in education, they are constantly exposed to and influenced by digital tools, or the school itself integrated AI and technology into the classroom.

The lower number of participants (15%) that did not use AI in their teaching practices explained that it was because they are unfamiliar with GenAI tools. This lack of GenAI use and familiarity does not seem to be connected to the number of teaching experiences of teachers.

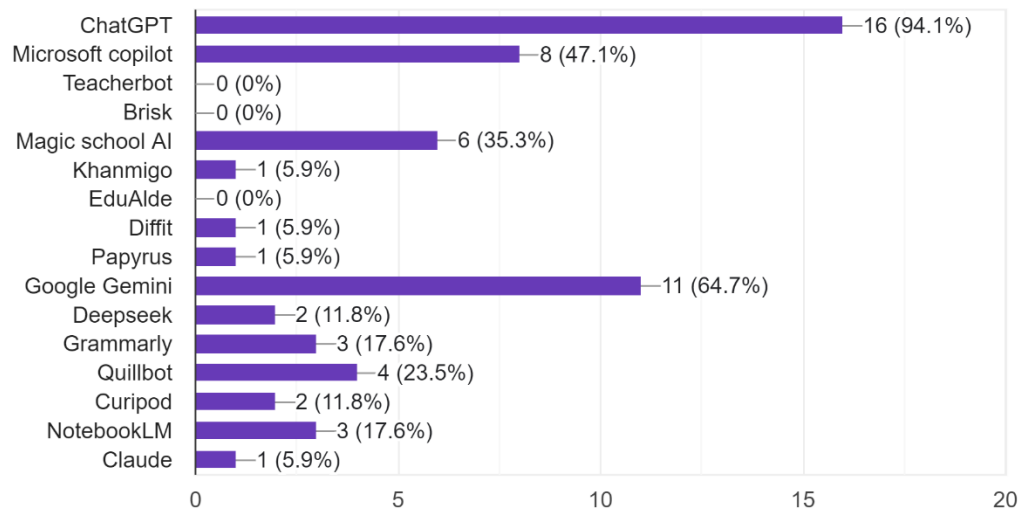
I haven't used GenAI tools because (select all that apply):  
3 responses



This is because each of the three participants had a different number of experiences, with one being 0 to 2 years, another 11 to 20 years and the last one being over 20 years.

Which GenAI tools have you used? (Select all that apply)

17 responses

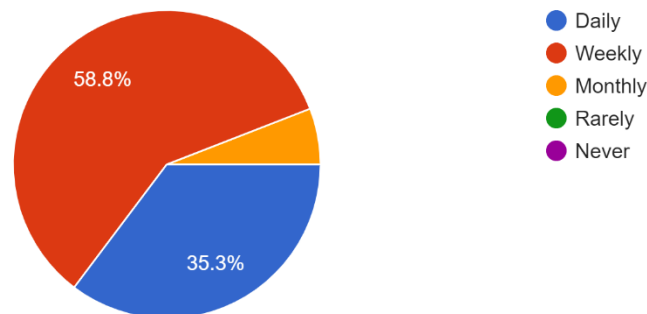


In terms of digital tools used, participants were required to select all that applied. Most teachers (94.1%) reported using ChatGPT. The use of other tools dropped sharply, with Google Gemini (64.7%) after ChatGPT, followed by Microsoft Copilot (47.1%) and Magic School AI (35.3%). As for the rest, they were used by fewer than 24% of participants. So far, it seems in education it is still not the trend to use technologies supported by AI but rather AI-powered tools. This might be because AI feels more “human-like” and is simple and quick to use. As a result, it seems that teachers are drawn to tools that automatically simplify their work, instead of having to handle every task manually within the tools that only support AI in limited ways. Giannakos (2024) supports this analysis and explains that teachers find such tools helpful in saving time instead of searching different resources while they can only get all-the information, they need from one tool. Teachers tend to use tools that don’t require advanced technical skills

in order to prepare quizzes, visuals, and videos easily. This suggests that their technology use might be more driven by convenience rather than intentional pedagogical integration. Another reason could be due to a training gap in using technological tools. ChatGPT, and Google Gemini have become well-known and popular over the past year so most teachers might already know how to use these tools. Thus, maybe the lack of knowledge about other tools drives them to use the GenAI tools. Nonetheless, these results are limited because of the small number of participants that all work in the same school.

How frequently do you use GenAI tools in your teaching?

17 responses



The survey indicated that most participants (58.8%) use GenAI tools weekly in their teaching. 35.3% use it daily and only 5.9% use it monthly. This suggests that most teachers mainly rely on AI tools for lesson planning, creating activities, and assessment preparation purposes and not necessarily use it in the classroom. However, it seems that some of them (35.3%) who use it daily, might possibly be integrating it into the classroom as part of their day-to-day teaching. A small number of teachers use it monthly, only 5.9%, which indicated that they rarely use GenAI maybe just for tackling challenges they are facing in the school to get some advice. All in all, these results indicate that in this school, GenAI is mostly used among

teachers, but it has not reached the level of daily class integration yet. It seems to be more of a planning tool for teachers.

Which of the following best describes your current use of GenAI tools in teaching?

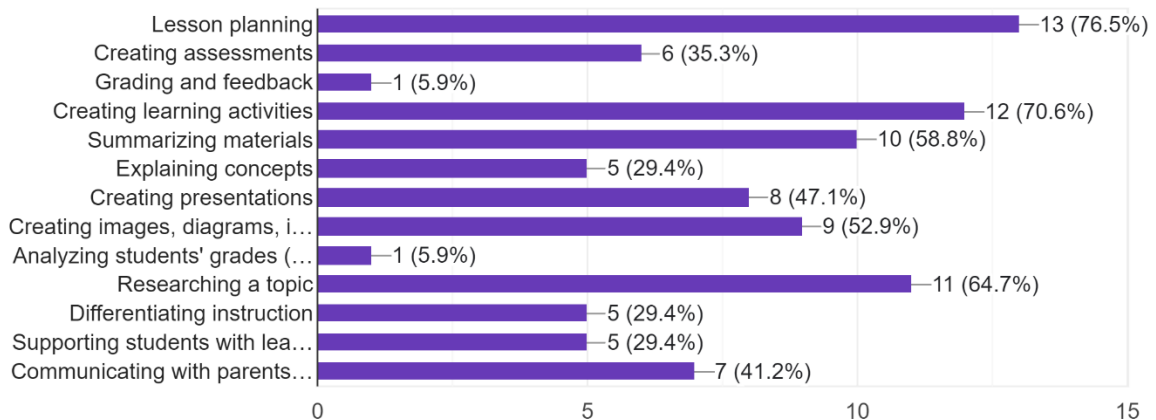
17 responses



The majority of participants reported that they actively experiment or have experimented with new GenAI tools before other teachers started using them. This suggests that most teachers are aware of the digital trends and are curious enough to follow them and

In which areas have you utilized GenAI? (Select all that apply)

17 responses



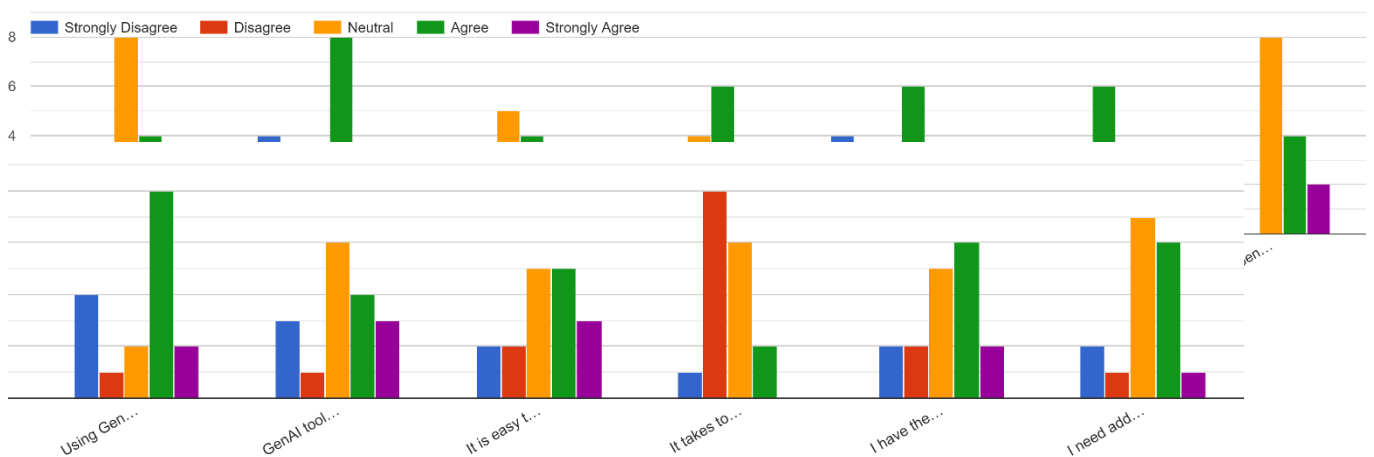
integrate them. 29.4% of teachers reported that they adopted GenAI tools after seeing others successfully using them suggesting that they were influenced by their colleagues after watching them use it. However, there is a noticeable gap between the number of teachers who experiment independently and those influenced by others to use GenAI which suggests that either the communication and collaboration in the school is somewhat low, that the teachers who actively follow digital trends choose to keep the information to themselves, or simply that not all educators who watched their co-workers use AI decided to do the same. A small group of 11.8% participants recently adopted GenAI tools because they have become commonly used. This suggests that even a small number of teachers are influenced by their environment and feel the need to adapt their teaching techniques to changes around them. One of the teachers seems to be against AI integration in education because she reported that she avoids using GenAI tools as long as possible. None of the participants reported adopting GenAI tools under pressure or when it becomes unavoidable which indicates that either the school did not force its teachers to use technological tools or that they are all on board with the idea of using AI because of the shared school vision.

In terms of the specific reason for using GenAI, teachers were asked to select all that applied. The top three uses were closely matched: Using AI for lesson planning (76.5%), creating learning activities (70.6%), and researching topics (64.7%). A significant number of teachers also use AI to summarize materials (58.8%) and to create images and diagrams (52.9%). All other uses fell below 50%, with creating presentations at 47.1%, communicating with parents at 41.2%, and explaining concepts, differentiating instruction, and supporting students with learning disabilities all at 29.4 % each. Finally, grading and feedback, and explaining concepts were the least used functions, selected only by 5.9% of teachers.

These results confirm the earlier interpretation that teachers who use GenAI weekly primarily use it for planning and activity creation purposes. As for the previous assumption that a large number of teachers use it for assessment purposes, it is less supported because only 35.3% reported using it to do so. Moreover, the data highlights that teachers are drawn to GenAI because it simplifies their work. To elaborate, 64.7% of participants use it to quickly research a topic instead of having to search through different resources on Google. Also, 58.8% use it to summarize their work for them. Moreover, 52.9% use it to generate images based on their specific needs instead of searching for them. Additionally, 47.1% use it to generate “ready-to-use” presentations, and 41.2% use it to communicate and write emails to parents on their behalf.

The analysis of monthly users is also consistent with prior interpretations: 29.4% use AI to differentiate instruction, support students with learning disabilities, and explain challenging concepts. In contrast, grading and feedback, and analyzing student grades, seem to be rarely done by teachers through AI tools with only 5.9% of participants selecting these functions. This might show the teachers’ desires to maintain control over student grades or concerns about privacy.

To what extent do you agree with the following statements?



Most teachers selected “neutral” when asked if observing their colleagues using GenAI encouraged them to use it as well. This shows that the school does not strongly promote teacher collaboration. As a result, teachers may feel that there is not enough collaboration to determine whether observing others has had an impact, and they are unsure of their peers’ influence due to the limited exposure. This further supports previous data indicating that teachers at this school do not collaborate and communicate enough.

The majority of respondents agree that the benefits of AI are evident to them. This suggests that teachers are aware of the major and growing role of AI in education and view it as a positive addition to learning. This further supports the previous interpretation, which concluded that most teachers see AI as a helpful assistant rather than a threat to their professional role. Their positive view of AI is further reinforced in the data, as most teachers agreed that GenAI tools can personalize learning experiences for students, it reduces their workload by creating teaching material for them, and it improves their teaching efficiency. Moreover, a significant number of respondents agreed that using AI tools fits well with their teaching styles. This suggests that teachers are adapting their teaching to the demands of today’s digital age, approaching AI not as a threat but positively, and integrating it into their practice.

Nonetheless, most teachers answered with “neutral” to the statements that GenAI tools meet their classroom teaching needs and that GenAI tools boost student engagement and participation. This suggests that teachers might be relying on AI more as a support for lesson preparation rather than for direct classroom use with students. Therefore, it seems that teachers might not have enough knowledge or training on how to integrate AI into their daily

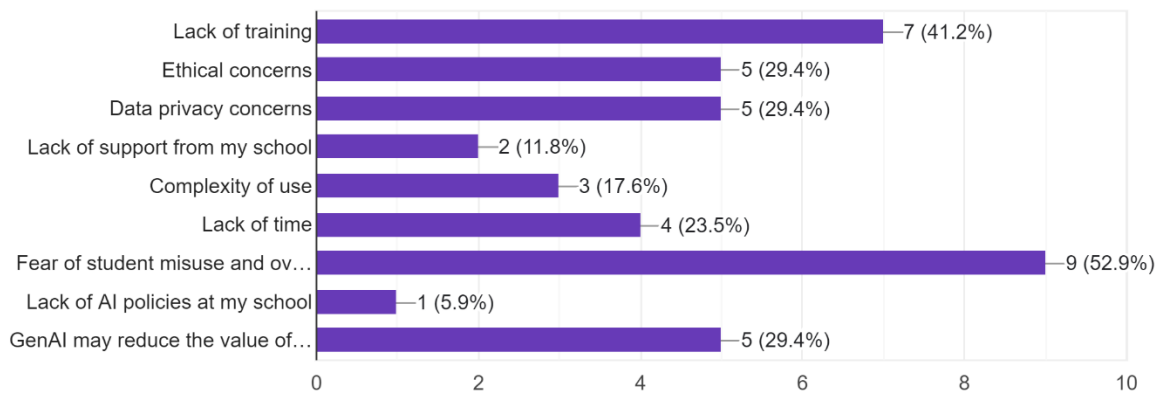
class activities. Which may explain why they feel unsure about its benefits for classroom use and student engagement.

Most teachers answered with “neutral” to the statement that they feel the need to learn how to use AI because students are using GenAI. This shows that teachers may be unsure whether students’ use is the main reason for their own integration of AI. They likely see the importance of using AI not just because students are, but also based on their own observations and experiences. Thus, teachers might feel that both their own perspective and students’ use have influenced their adoption of AI.

In regards to teacher knowledge and confidence in AI use, the data suggests that most teachers feel sufficiently competent. This is because most teachers agreed that they do not need additional support to use GenAI, they have the right level of technology skills to use it,

Identify which of the following are your most significant concerns regarding GenAI in education (Select up to 3).

17 responses



they find it easy for them to learn how to use it, and it does not take them too much time to understand how it functions. Overall, this further supports the idea that most teachers are adapting positively to AI integration. However, the second most selected answer was “neutral”,

which suggests that while most teachers feel confident, a notable number are unsure of their skills and might need additional support and guidance in using AI effectively.

In regards to the teachers' most significant concerns about GenAI in education, the majority of teachers (52.9%) fear students' misuse and over reliance on AI. This suggests that teachers might already be noticing differences in the students' academic work compared to pre-AI years. Maybe they are seeing a drop in critical thinking and problem-solving skills, or noticing a mismatch between the quality of students' homework and their actual performance in class. These gaps could be making their fear even stronger.

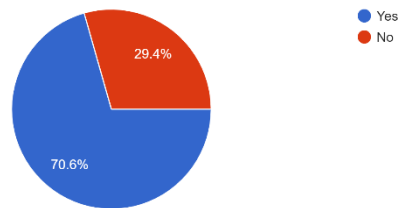
Moreover, this indicates that teachers might need clearer school-level rules on AI use, along with more training so they can guide students toward using AI in an active, meaningful way that does not harm their learning. This is supported by the fact that the second greatest concern (41.2%) is the lack of training, which means teachers may not be receiving enough professional development and feel unsure about how to properly integrate AI.

The data also shows that a significant number of teachers are concerned about AI and ethics. If the percentage of ethical concerns (29.4%) and data privacy concerns (29.4%) are combined (58.8%) into one category related to AI ethics, it becomes clear that some teachers worry about student privacy and the data students are exposed to. Even though only 5.9% mentioned a lack of AI policies at their school, the high concern around ethics suggests that students might not be receiving enough awareness about digital citizenship, and that ethics in AI may not be a major topic of discussion with students.

It also seems that the school is providing adequate support for teachers when it comes to AI use, because only 11.8% expressed concern about the lack of support. This idea is further reinforced by the fact that only 17.6% of teachers find AI too complex to use.

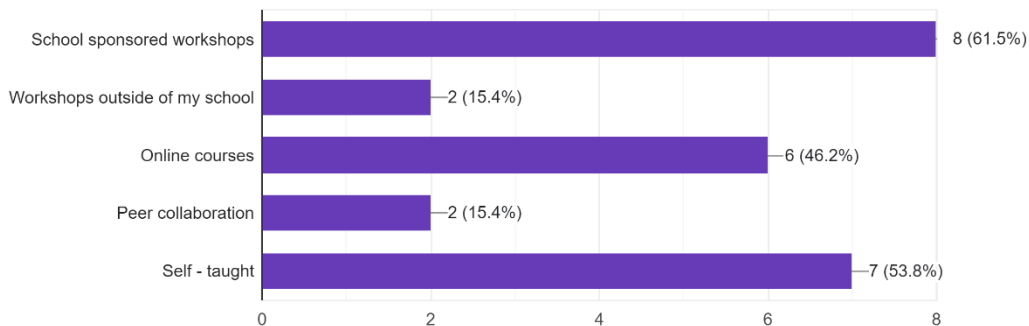
Finally, teachers appear confident in the value of their role, even with AI advancements since only 29.4% were concerned that it may reduce the value of their expertise. Thus, this suggests that teachers generally view AI as a helpful assistant to their work rather than a threat to their professional identity.

Section D: Professional Development Needs Have you received any training on using GENAI in education?  
17 responses



When asked if they received training on using GenAI in education, the majority (70.6%) selected yes and only 29.4% selected no. Even though there is a significant difference in data results, this might still suggest that the school either did not organize training sessions or did not oblige teachers to attend them. Otherwise, all teachers would have selected yes.

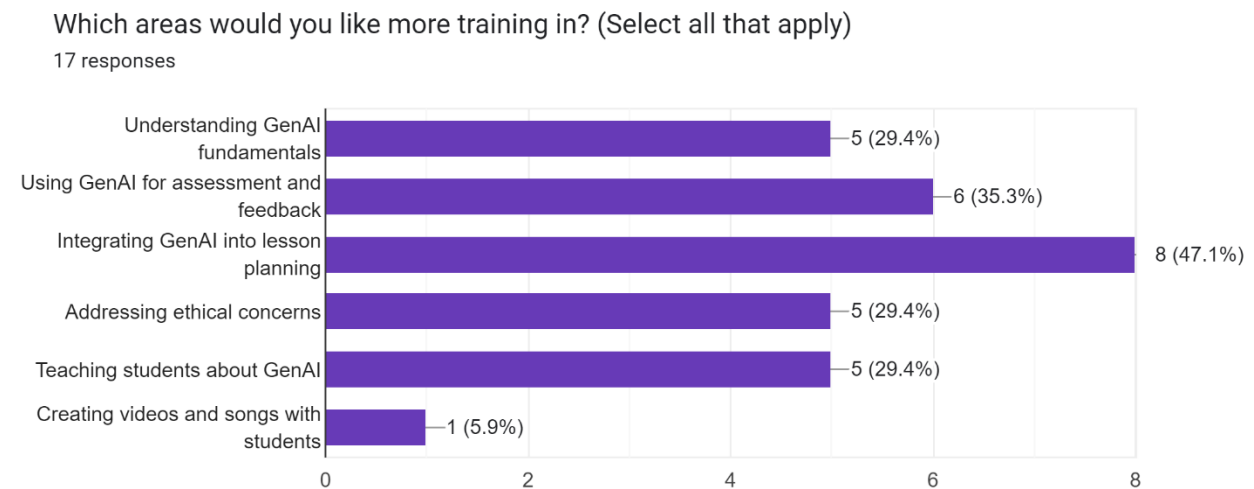
If yes, what was the nature of the training? (Select all that apply)  
13 responses



In regards to the nature of the training received, 61.5% of teachers mentioned that they attended school-sponsored workshops. This supports the idea mentioned previously that the school did organize sessions, but maybe they were not obligatory for teachers.

A significant number of teachers (84.6%) relied on themselves to learn about AI, either through workshops outside the school (15.4%), online courses (15.4%), or by independently learning about AI (53.8%). This suggests that most teachers are either interested in learning more about it or recognize the big impact AI is having on today's generation and see the importance of understanding it.

Only 15.4 % selected that they received training from their peers, which supports the earlier idea that teachers in this school might not be collaborating enough.



The majority of participants (47.1%) selected that they would like more training in integrating GenAI into lesson planning. This result is predictable since previous data showed that teachers rely on AI mostly for lesson planning. Thus, it seems they want to further develop their AI skills in in that area. There is not a big interest in wanting to learn more about AI and assessment and feedback, which also aligns with earlier results where only 35.3% of teachers

mentioned using AI for these tasks. This suggests that most educators do not rely heavily on AI for assessment and feedback and prefer to handle it themselves, or they feel confident enough in how to use AI for this purpose.

Even though the number one concern for teachers was student misuse of AI, only 29.4% wanted more training in teaching students about GenAI. This shows a clear contradiction between their fear and their training priorities. This gap might suggest that teachers want to feel more confident and adequate in their own AI use before teaching it to students. Another reason could be, since most teachers in this survey are not IT teachers, they might see student awareness as the responsibility of the IT educator rather than their own. Thus, it is concluded from the data that even though there is a significant fear of student misuse of AI, it does not necessarily mean that teachers want to teach AI literacy to students at this stage.

Only 29.5% of teachers selected wanting training in understanding GenAI fundamentals, which suggests that most teachers feel they already obtained the basic AI knowledge and do not believe they need additional training in this area.

Finally, training on creating videos and songs with students received the lowest percentage (5.9%), which might mean that teachers want to strengthen their own AI skills for teacher-related tasks before using it creatively with students, or that they simply do not find this area interesting or as important as the other areas.

### Student Survey:

**Note: Some student answers were not related to the survey questions, so they were excluded from the analysis.**

#### A. Participant Demographics:

The student survey results showed that most participants are students in grade 7 (35 %). This is followed by 8<sup>th</sup> graders (21.4%), and then 10<sup>th</sup> graders (17.1%), and 11<sup>th</sup> graders at 16.8%. In addition, 9<sup>th</sup> graders made up 9.6% of the participants. Finally, there weren't any participants in the 12<sup>th</sup> grade. This shows that younger students participated more than older ones, since the highest number of participants were middle schoolers with a total of 66 %, compared to the smaller group of high schoolers who made up a total of 33.9%.

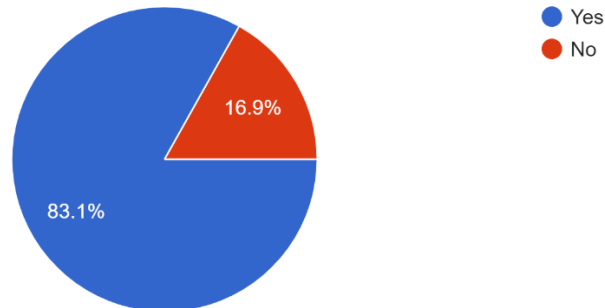
In terms of student ages, the majority were ages of middle schoolers, with age 12 at 31.3%, age 13 at 21.2% and age 14 at 13.3%. The minority, were the high school ages with age 15 at 18.7%, age 16 at 14.4%, age 17 at 0.7%, and age 19 at 0.4%.

Most respondents (93.9%) answered that they study in private schools. The rest (5.9%) reported that they study in public schools. However, since this survey was conducted in one specific private school, this means that the responses of students who selected "public school" are inaccurate.

In regards to the school's location, 96.4% of students selected North Lebanon. The rest selected other options. However, since this survey was conducted in one specific private school in North Lebanon, this means that the responses of students who selected other options are inaccurate.

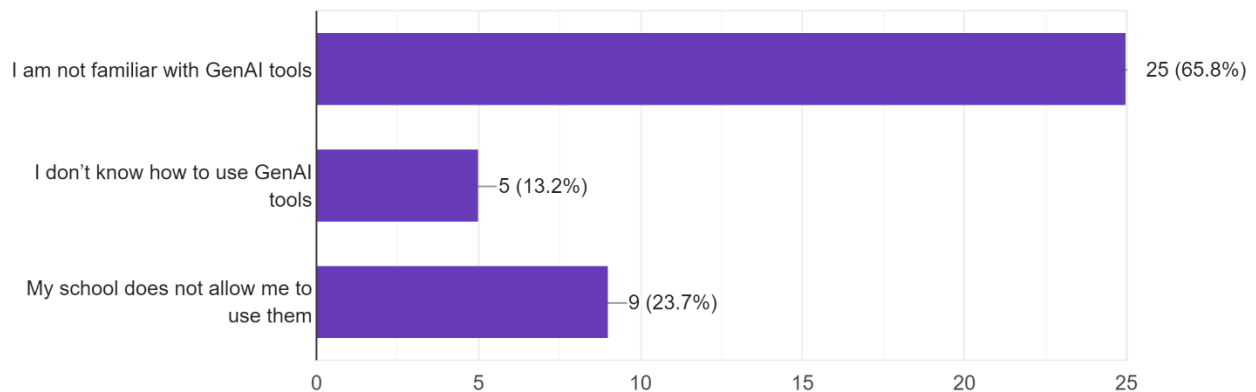
#### B. Main Findings: GenAI Adoption in Schoolwork

Section B: GenAI Adoption in Schoolwork Generative AI or GenAI is a type of artificial intelligence that can create new content like text, images, mu... school or at home to study/prepare/do homework)?  
243 responses



The survey indicates that most students (83.1%) have used GenAI tools for schoolwork. Only 16.9% reported not using AI at all in their schoolwork. This suggests that AI has become a main tool that students rely on when they need help with their school tasks. However, so far, it is still

I haven't used GenAI tools because (select all that apply):  
38 responses



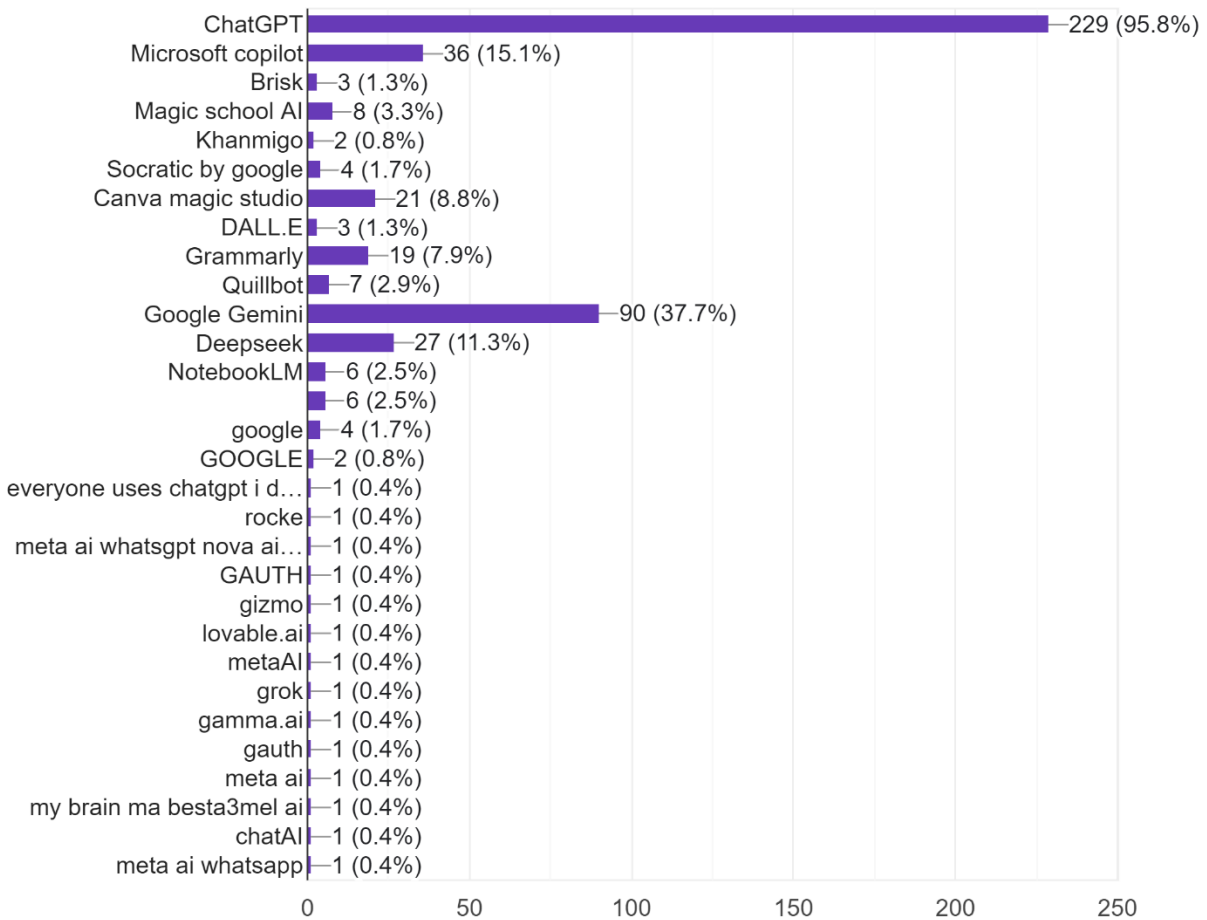
not clear whether students use it for genuine academic support or for improper use.

Out of the 16.9% of students that did not use GenAI, 65.8% explained that it was because they are not familiar with GenAI tools, 23.7% reported that it was because their school does not allow them to use it. Finally, 13.2% explained that they do not know how to use GenAI

tools. These results suggest that while most students have digital knowledge, some still have limited awareness. This might mean that students are interested in learning about AI and how to use it, but they don't have enough exposure to it.

1. Which GenAI tools have you used? (Select all that apply)

239 responses

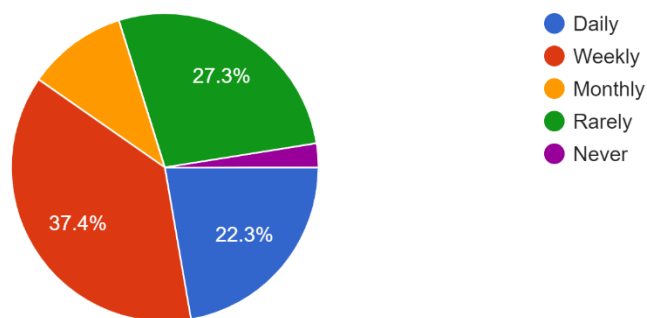


As for the specific reason for using GenAI, students were asked to select all that applied. The tool that got the highest percentage of use was ChatGPT (95.8%). This is followed by a significant drop, with Google Gemini, the second most used tool, at 37.7%. The rest of the tools'

uses decreased even further, with Microsoft Copilot, DeepSeek, Canva Magic Studio and Grammarly ranging between 15.1% and 7.9%. All other tools fell below 3% of use, including Google, which was added manually by a few students (2.5%). This shows that while Google used to be the most used resource by students, it has been replaced by ChatGPT maybe because it is easier to use, quick to understand and navigate with, and is programmed to be human-like which makes it easy for students. Therefore, the data shows that AI powered tools (ChatGPT and Google Gemini) have become central learning resources for the younger generation instead of AI supported tools. Arias Sosa (2023) found that students are using AI tools like ChatGPT more than any other search tools such as Google which had previously been the most commonly search tool used for search engine. This indicates a clear shift from traditional search engines to AI tools. Students found such more efficient to use compared to other tools. This supports the idea of the highest percentage using ChatGPT (95.8%)

## 2. How frequently do you use GenAI tools for schoolwork?

238 responses

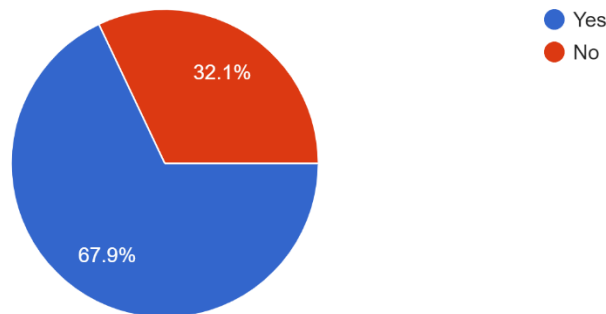


In terms of the students' frequency of AI use, 37.4% reported using GenAI tools for schoolwork on a weekly basis. 27.3% said they use it rarely, 22.3% mentioned that they use it daily, 10.5% selected monthly, and 2.5% reported never using it. However, the percentage of

“never” is invalid because all students who answered this question had already selected “yes” in a previous question stating that they do use GenAI for schoolwork. Therefore, their selection of “never” will not be included in the analysis of this section. This further supports the idea mentioned previously that GenAI tools have become a main resource in students’ schoolwork, but the intensity of its use varies. Most students use it moderately (weekly) maybe for guidance when needed; some use it heavily (daily), possibly as a regular assistant for their schoolwork; and others use it rarely. These variations in frequency might stem from several reasons. For example, students might want to rely mostly on themselves and only use AI when needed. Additional reasons could be that they choose not to use it heavily because of school policies, they might lack confidence in using it, or they simply do not mind making it a part of their daily or weekly routine.

3. Does your school allow you to use GenAI for schoolwork?

237 responses

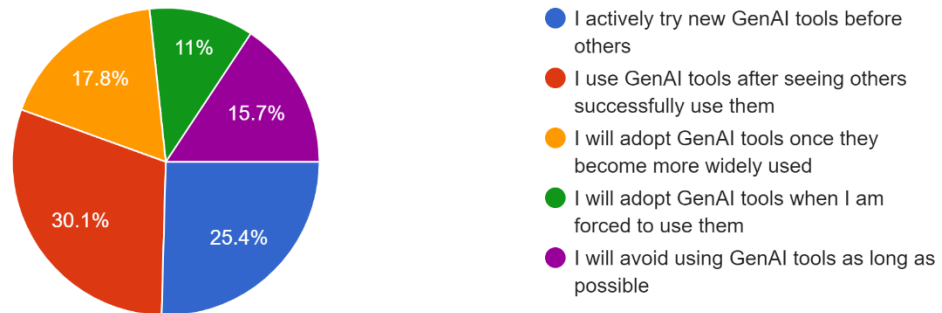


In regards to the school’s rule in terms of AI use by students 67.9% reported that it allows them to use it while 32.1% reported the opposite. Even though the data suggests that the school allowed students to use AI, some students (32.1%) believe they cannot which suggest that the school might not be clear on the rules of technology use. Maybe it allowed

students to use it but with limitations. Therefore, there is confusion among students in regards to permission. Moreover, since most students use technology only through ChatGPT it seems that the school did not provide student training or awareness about the different technological tools available.

#### 4. Which of the following best describes your current use of GenAI tools for schoolwork?

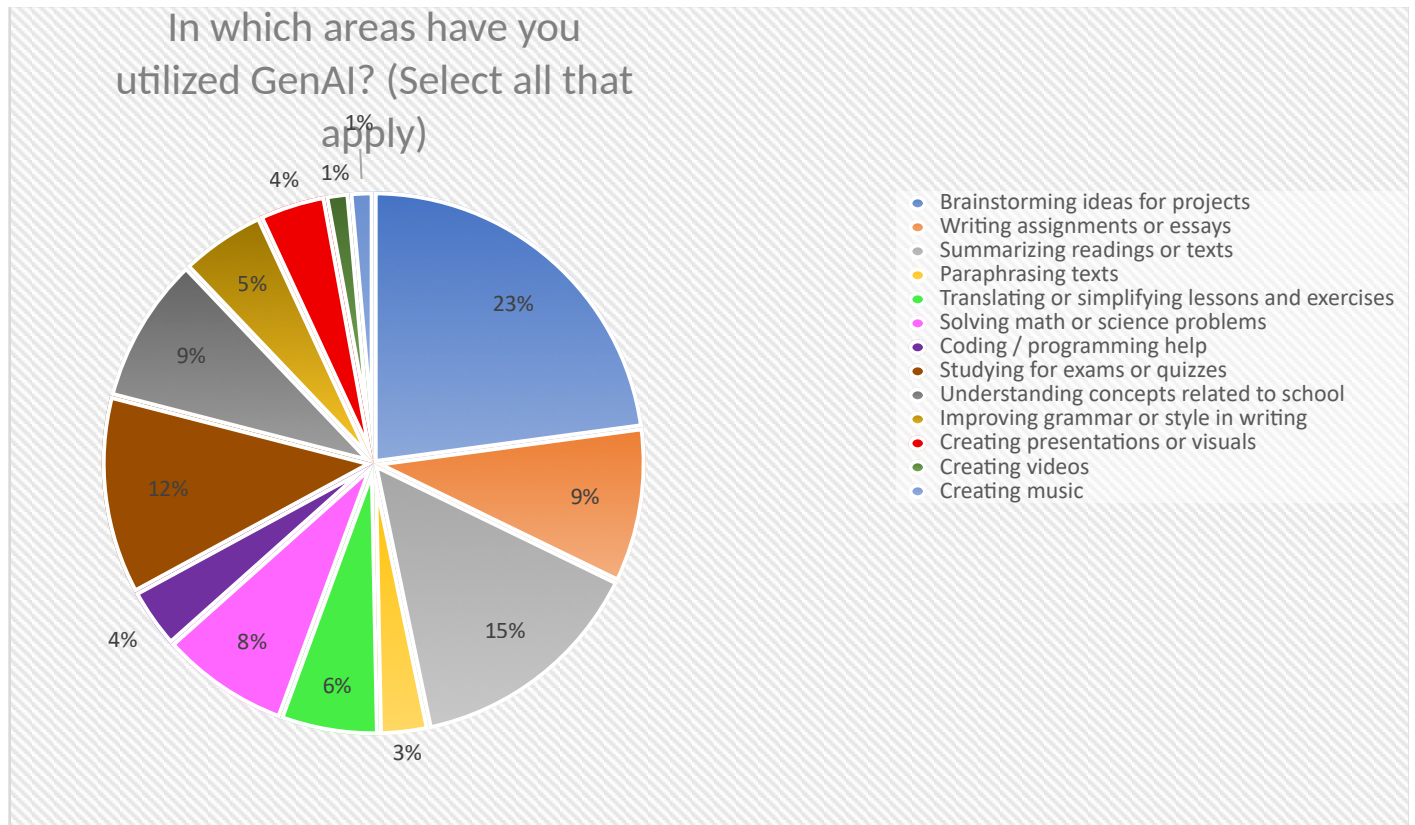
236 responses



The majority of students (30.1%) reported using GenAI tools after seeing their peers successfully use them. Another 25.4% said they actively tried new GenAI tools before their school friends. 17.8% adopted GenAI tools once they became more widely used, while 15.7% tried to avoid using them as long as possible. Finally, 11% selected that they would only adopt AI tools when they are forced to do so. This data suggests that most students are influenced by their environment. When they noticed their friends using AI tools, they decided to try them as well. Some students, however, seem to be naturally curious or personally interested in AI which explains why they experimented with it before others.

Even though some students selected that they will avoid using it unless forced to, or that they will avoid using it for as long as possible, their answers are questionable. This is because all students who answered this question had already stated that they use AI tools, and 95.8% of them selected that they use ChatGPT. This means it is not possible for 26.7% (11%+15.7%) of

students to claim they are avoiding its use and will only use it when forced. Nonetheless, a



reason for their selection could be the fear that their school might discover they use AI, and they may worry that their answers will be shown to the school, even though they were informed that the survey is anonymous. Overall, the data confirms that AI has an important growing role in student learning.

**Note: This chart was recreated on MS Word because of a big number of invalid data received from students in the Google Forms chart.**

The survey indicates that the number one reason for GenAI use among students is to brainstorm ideas for projects (23%). Between 15% and 5% of students use it as a studying guide for different reasons, such as summarizing readings or texts, understanding concepts related to

school, or translating and simplifying lessons and exercises... Finally, less than 5% of students use it to create images, presentations, or videos.

It can be interpreted from the data that the role of AI among students can be divided into three levels: starting-guide, facilitator, creator.

### **Starting-guide:**

The first and primary role is that of a starting-guide. To elaborate, 23% of students use it to brainstorm ideas for projects. This suggests that when students are working on something new that they are unfamiliar with, they rely on GenAI as an aid to give them a guiding start and help them figure out how to begin their project.

### **Facilitator:**

The second moderately used role of AI for students is that of a facilitator. Here, students use AI as a tutor: it explains lessons for them, translates difficult words, helps them solve problems, supports them while studying for exams... Thus, it functions as a study support tool.

### **Creator:**

Finally, AI is the least used by students as a creative production tool. Only less than 5% of students use it to create something like an image or a video. Therefore, it seems that students are less likely to use AI in their studies as a creator.

The data shows an equal percentage (38.5%) between students who use AI responses as a means of inspiration and students who edit and revise them before submitting. 13% of students copy and paste responses as is, and 8.2% check the answers from AI but do not include

## 6. How do you typically use the GenAI responses?

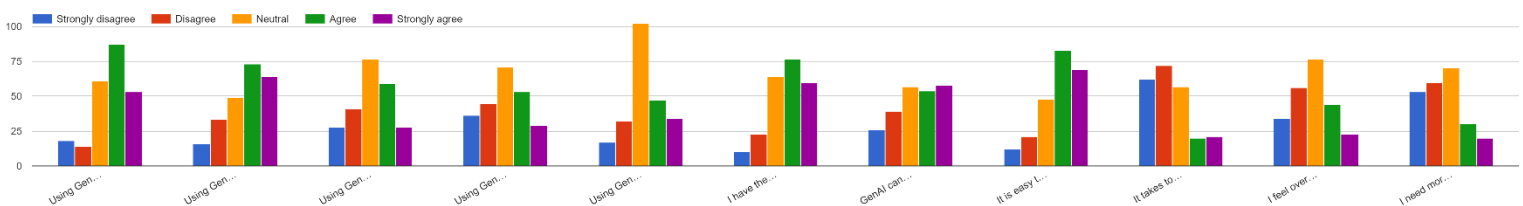
231 responses



them in their final work. This suggests that AI responses are mostly used by students actively for constructive purposes, such as getting inspiration from them or editing and revising them before submitting. However, it is clear from the results that AI is also being used passively by a minority of students who just copy and paste the same responses. Finally, it seems that a few students use it as a verification tool where they check its answers but do not use them for the final submission.

This shows that overall, the majority of students are demonstrating digital use awareness, and are careful and efficient users of AI because they are critically going over responses, using them only as inspirations, or using them to ensure their work matches the response of the AI. However, the legitimacy of their answers is a limitation because students might attempt to select the options that they know their school or the society around them desires them to choose. Even if that were the case, it still shows some digital awareness because it means that students, even if they do not apply it, realize that copying and pasting

Rate the following statements based on your experience with GenAI tools.



from AI is frowned upon and considered wrong, and they are aware that it should be used critically.

In regards to AI use for homework, most students seem to view it as a positive addition rely on it heavily for homework tasks. Most students agreed that using it simplifies their work tasks and helps them complete tasks faster. Even though they see AI positively in the context of homework, the data shows that this does not necessarily translate into improved grades. This is because most students selected “neutral” when asked if AI improves their grades or helps accommodate to their learning needs. This suggests that while they appreciate its usefulness for homework, they are unsure if it supports their academic performance when working independently in class. This uncertainty might suggest that students are not using AI very critically for when completing homework because they seem unsure whether they are truly learning the information or not. They only feel confident that AI helps them finish tasks and not that it helps them understand the concepts behind those tasks better.

Students were also unsure if GenAI provides fun experience. This suggests that they value the practical part of GenAI, such as using it for homework, rather than viewing it as an entertainment tool. This interpretation aligns with earlier findings that showed students rarely used AI for creative purposes like creating music, videos, and images and mostly use it for academic purposes.

It seems that students find it easy to learn how to use AI tools, as most agreed that these tools are not difficult to learn about and do not require much time to understand. However, despite their ease of learning, students seem somewhat concerned about the rapidly growing number of AI tools. As shown in previous data, most students only use ChatGPT and Google Gemini, which suggests that students feel unsure about their ability to keep up with new

tools and would benefit from training about more tools. This further supports the idea that, even if students can learn AI tools quickly, they still need structured training and guidance. Meaning, they may need a teacher to provide proper instruction on how to use AI effectively.

It also seems that most students are aware that AI can spread false information because most selected they strongly with this statement. However, the second most selected response was “neutral,” which suggests that a notable number of students are still unsure if AI is truly reliable or not. This indicated that some students may need more training and awareness in regards to accuracy and limitation of AI information.

### Comparison between Teacher and Student Use of AI:

#### The Frequency and Purpose of AI Use:

The data shows that both teachers and students mostly rely on AI powered tools rather than AI supported tools, and especially on ChatGPT as 94.1% of teachers and 95.8% of students use it. While each of them uses AI for different purposes, they both use it as a home-based assistant to their work. To elaborate, teachers and students rarely use it in the classroom. This can be noticed because both teachers and students use AI the most weekly (teachers 58.8% and students 37.4%), which suggests it is mainly used outside school hours and possibly over the weekend

. Educators tend to use it more as an assistant to help them prepare lesson plans and activities. As for students, they use it mostly as a brainstorming tool and tutor to help them solve their homework and study for exams. It can be noticed from this, that ChatGPT is used by both as a facilitator to make their work easier and faster and not as a creativity and entertainment tool.

In regards to learning, this shows that AI is currently being used in education mostly as an individual work tool and as a task assistant that is mostly used to quicken work. Meaning, it is not being taken advantage of by being used as a collaborative or interactive learning tool that deepens understanding, encourages class discussion and expands knowledge. Therefore, in education, AI seems to be used mainly as an efficiency tool outside the classroom instead of an active learning tool integrated into the classroom.

This suggests that the school might not be guiding teachers enough on how to integrate AI directly into their lessons with the students. Even though most teachers selected that their school offered workshops on AI, it is unclear what the content of the training was. Perhaps it did not include how to integrate it into the classroom, and only tackled the basics of how to use AI. This limited guidance is further reflected as both teachers and students seem to not prioritize AI use in the classroom, as they were uncertain in their answers when asked questions that relate to AI use in the classroom.

To illustrate, most teachers reported that they do not use AI for differentiating instruction and supporting students with learning difficulties (only 29.4% do so). Moreover, they chose “neutral” when asked if GenAI tools boost student engagement and meets classroom needs, which reflects their uncertainty that stems from the lack of in-class AI use. Similarly, the limited class use was prominent with the students, as most of them selected “neutral” when asked if GenAI tools encouraged them learn since it makes learning fun, and if it fits their learning needs. This also reflects their uncertainty that might come from their teacher’s limited use of AI in the classroom. Thus, they are unsure if it really makes learning fun.

#### Training and Confidence in AI Use:

Both teachers and students seem to have confidence in their AI skills. However, their confidence level differs slightly, as students seem rather more confident in their skills than teachers. Regardless, it seems that both groups can benefit from, and are open to the idea of further guidance and structured training.

To elaborate, most teachers selected “neutral” and a notable number selected “agree” when asked if they needed additional support to use GenAI confidently. Similarly, most students selected “neutral” for the same question. The difference shows in the students’ second most selected answer “disagree” instead of “agree” that the teachers chose. This suggests, that while both teachers and students feel uncertain about their skills and require additional structured training, teachers feel a greater urgency in needing support than students because their two primary answers were neutral and agree rather than neutral and disagree for students.

Correspondingly, when asked if they have the right level of technology skills needed for AI tools, the primary answers for teachers were “neutral” followed by “agree”. As for the students it was the opposite, the top answer was “agree,” followed by “neutral”. This suggests that students feel more confident than teachers in their level of technology skills, but they might also benefit from structured training. Thus, teachers might need more training in technology skills than students, but this does not mean that all students are fully competent and would not benefit as well from training.

In terms of how easy it is for students and teachers to learn AI tools use; teachers’ responses were equally split between “neutral” and “agree.” This suggests that some find it easy and others seem uncertain and might find it slightly challenging. On the other hand, most students seemed confident and mostly selected “agree,” which suggests that the majority do not find it hard to learn about AI tools. From this, it may be deduced that it is easier for the

youth that grew up with technology to learn it than the adults that got introduced to it later in life.

This slight difference in confidence is further proven, as most students selected “disagree” when asked if it takes them too much time to figure out how to use GenAI effectively, while teachers mostly selected disagree as well with “neutral” being a close second.

Overall, it can be interpreted that the confidence in AI skills is relatively similar between teachers and students. They both feel confident, but students are slightly more confident than teachers, as they expressed more certainty in confidence level. This comparison suggests that both teachers and students can benefit from structured training to boost their confidence even more.

Even though students feel confident in their AI skills, and can learn them easily and fast, most of them reported uncertainty when asked if they feel overwhelmed by the number of GenAI tools available. Although this question was not addressed to teachers, if the data of technology tools used by students and teachers is compared, it is interpreted that teachers use a much greater variety of tools than students. Students almost solely rely on ChatGPT (95.8%) with Gemini being a rather distant second (37.7%) and the rest showing only minimal percentages of use (between 15.1% and 0.4%). As for teachers, there is more variety and a greater percentage in tools. To illustrate, 94.1% of teachers use ChatGPT, 64.7% use Google Gemini, 47.1% use Microsoft Copilot, and 35.3% use Magic school AI with the rest vary between 23.5% and 5.9%. Therefore, it is notable that teachers use a wider variety of technology tools than students.

This difference can stem from several reasons. To illustrate, teachers might have received training from the school or online courses, while students were mostly influenced by peers or

were self-taught without proper and structured school training. This suggests that they only know the most popular tools currently circulating. Another reason can be that the teachers' job naturally requires them to have knowledge about a broader range of tools. For example, they use ChatGPT for lesson planning, copilot for their document work, Quillbot for AI detection, Magic School AI to create assignments and assessments... Meanwhile, students are mostly satisfied with ChatGPT to aid in their school related work.

Moreover, this lack of knowledge about different tools among students further suggests that technology use is not being integrated enough into the classroom; otherwise, students would have had more knowledge from their exposure to different tools in the classroom. Overall, students may feel overwhelmed by the different tools because they significantly lack structured training in comparison to teachers. Thus, it is difficult for them to keep up just from following trends and being self-taught.

#### Concerns about AI use:

Teachers' number one concern about AI is student misuse and overreliance on it. The data suggests that their concern may appear invalid because students selected they mostly use AI responses only for inspiration, and that they revise and edit responses before submission. However, as mentioned previously, student responses should be interpreted with some skepticism, as they might fear to admit that they copy and paste. This skepticism seems somewhat justified. This is because while a slight number of students admitted to copying and pasting, most students selected "neutral" when asked if AI helped them get better grades and fitted their learning needs. In addition, most of them selected "agree" when asked if AI simplifies and makes completing homework faster. This suggests that they seem to be using as an efficiency tool rather than a learning tool.

Therefore, it is difficult to determine from the data if the teacher's concern is truly valid, but this does not mean that their concern is unimportant. On the contrary, it should be taken seriously by the school. It should set clear rules about AI use, and should teach teachers and students how to effectively use AI, for teachers to help students learn, and for students to use it as a knowledge developing tool and not as an efficiency and time saving tool.

### Interpretation:

Combining the findings from both students and teachers regarding the use of AI tools, it was very noticeable that both teachers and students are using ChatGPT mostly to finish their tasks. Percentages show that teachers (94.1%) and students (95.8%) overwhelmingly rely on ChatGPT, as for Google, it was only used by students with a significantly low percentage (less than 3%) This strongly confirms the findings of Arias Sosa (2023), that highlighted the whole shift in using search engines tools from the traditional tools like Google, to AI tools like ChatGPT and Gemini because they give fast responses and finish tasks easily. The findings showed that both students and teachers use GenAI as their main academic tool.

Teachers' findings for using AI aligns with research trends where teachers are using AI mainly for lesson planning (76.5%), activity creation (70.6%), summarizing texts (58.8%), and generating images (52.9%). This aligns with Giannakos (2024), who states that teachers prefer to use AI tools that do not require advanced technical skills and are not time consuming. Based on his analysis, teachers tend to use AI tools that can finish their work in efficient and accessible ways where AI is used as a supportive tool more than a pedagogical tool that helps teachers grow with their skills.

Teachers and students didn't mention any use of AI in terms of independence and participation in the classroom. Teachers were neutral about this topic and students didn't know whether they

are using AI to improve their grades or to help them strengthen their skills and needs. According to Chan and Hu (2023), without a sufficient guidance and structured learning AI will be shifted from a transformative tool to a time saving tool. Therefore, the findings for both surveys included that AI tools are not used as a professional development tool for deep educational growth. Thus, schools need to organize structured training for both teachers and students. Moreover, the three articles argue the importance of using AI with clear plan and foundation on how to use AI properly and efficiently. AI should lead to higher level thinking, not be a shortcut assistant. Teachers in this school are still using AI outside the school, which contradicts the articles that emphasized on the importance of using it inside schools with training, collaboration and pedagogical intentionally. These areas were very limited in the findings.

Finally, teachers showed concern about how students are misusing AI tools with heavy dependence on it. On the other hand, students reported an excessive use of AI for homework support and brainstorming with the lack of real independent learning. This gives the school the whole responsibility on setting up ethics, guidance and critical use of AI, themes that the three authors reflected on in term of responsibility. In addition to this, the school is missing the wide range benefits that AI can offer. When schools choose the appropriate AI tools and align them with their educational framework and curriculum. This can lead to positive outcomes, including critical thinking, problem solving and higher order thinking. Schools must stay updated to the best AI educational and pedagogical tools. To conclude, AI is evolving and will continue to grow that's why ministries and schools should work together in order to include it wisely as a main part in the learning process. Pedagogy and technology should go together, and should be considered as one. That's why, it is important for the school to consider the inclusion of

educational frameworks like TPACK to blend pedagogy, content, and technology in order to achieve AI use for learning and not AI use for efficiency.

**Group work:**

**Teacher Analysis:** First half of teachers Analysis, done by Inas Hamzeh. It was then reviewed with Mona and worked on as a pair.

**Student Analysis:** Pair work

**Comparison:** Pair work

**Interpretation and Literature:** Done by Mona and then reviewed with Inas and worked on as a pair.

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