Parallel Sessions
Summary of discussions

EdTech in schools: from promises to reality
Parallel Sessions

The parallel sessions were designed to allow for maximum exchange and interaction among participants. They aimed at presenting the nuances of the debate, challenge views, promote exchange and ideas on key issues that occupy the innovation in education sphere. Each session consisted of a short introduction to the topic by an expert, followed by an exchange among participants on key questions.

The topics discussed during the School Innovation Forum 2024 were:

**Topic 1: Technology use in schools and wellbeing of students and teachers.**
What is the relationship between technology use in schools and the wellbeing of students and teachers? This session addressed questions connected to the debate around digital device use in educational settings, taking a nuanced approach, aiming to unravel the complexities and chart a course for a balanced approach to the issue.

**Topic 2: AI in education; promises and challenges.**
The session addressed questions about the increasing use of AI in schools and the impact of this transformation. It explored the challenges faced by educators and institutions in navigating this technological landscape, but also the promises that AI holds for supporting education practices.

**Topic 3: Education and public-private partnerships. (by EmpowerED)**
This session focused on the role of companies active in the field of education and how they affect education processes and methods across Europe and beyond. It explored the opportunities and challenges that such reality creates and their impact in schools’ and teachers’ practices.
Summary of Topic 1:
Technology use in schools and wellbeing of students and teachers.

**Introduction speech:** Niamh Ni Bhroin, Associate Professor of Media Studies at the University of Agder

**Moderator:** Sabrina Vorbau, Project Manager, European Schoolnet

**Introduction**

Over the last few years, concerns about the impact of digital technology and social media on children’s mental health and wellbeing have figured prominently in public, policy and academic debates.

Linked to this, emerging concerns about children’s screen time and digital media in connection with the role and responsibility of schools and formal education as a key environment for promoting mental health and well-being are being discussed. Moreover, also considering, the time children spend online - outside school - and the negative and positive experiences they may have, are bound to have an impact on how they feel at school and what happens in the classroom should not be neglected. Hence, during this session participants had the opportunity to discuss what the relationship between technology use in schools and the well-being of students and teachers is and which responsibility policy makers and the EdTech industry has in this regard. Furthermore, the session addressed questions connected to the debate around digital device use in educational settings with the aim to unravel the complexities and discuss strategies for a balanced approach to the issue.

**The Session**

The session was divided into two parts, and started with a presentation by Niamh Ni Bhroin who is an Associate Professor at the Department of Nordic and Media Studies, University of Agder in Norway where she researches how the digitalization of society affects the everyday lives of children and young people. Moreover, Niamh Ni Bhroin is also an expert member of the Screen Use Committee which was recently established by the Norwegian government to provide advice on
children and young people’s screen use. Niahm’s presentation aimed as a scene setter to look at the current discourse around children and young people’s use of technology. When referring to technology, the session mainly focused on the debate around screen time and mobile phones in schools. However, when looking at the overall usage and reason why and how children and young people are engaging online, despite of new technologies arriving, main reason remains similar over the years (see image).

However, when it comes to screen time a particular concern of adults is gaming. Statistics of EU Kids Online (2019) show that there is a greater concern by parents (and more specifically fathers) when it comes to the gaming time and habits of boys rather than girls. Niahm highlighted the fact that there is still a lot of misconception by adults concerning gaming, as it’s often seen as ‘meaningless’ and ‘waste of time’. Though research also shows that gaming can have a positive impact on children and young people, as it can offer a community especially for those children and young people that have (fiscal) disabilities. As a reference the Norwegian documentary Ibelin was mentioned that discusses the issue.

Furthermore, research shows the increased digitalisation of education, and the number of hours young people report spending on the internet or using technology versus the time spent for school purposes (see image).

**Technology usage of children and young people**

In this respect it is also important to acknowledge that the devices (specifically mobile phones) children and young people bring and use in schools are those that they use at home and outside the school environment. And that potentially issues (e.g. cyberbullying, body issues, data misuse) that may happen outside the school environment are carried into it.
Therefore, if adults who have a responsibility to support children avoid talking to them about their digital lives the consequences of these negative experiences can be enhanced (Livingstone et al., 2023).

Hence it is important to equip teachers and school staff with the necessary competencies and provide active support to parents and care givers. The role and responsibility of policy makers and industry developing technology remains crucial to achieve the objective.

After the presentation, participants had the opportunity to discuss the topics of screentime and mobile phones use in schools in smaller groups of 2x 20 minutes. You can access her presentation [here](#).

**Takeaways**

When discussing screen time and mobile phone use in schools, the first question that arises concerns **responsibility**. Who is responsible, setting the guidelines and rules? It seems that different degrees of autonomy exist between schools at local, regional and national level, with schools creating their own guidelines and rules to their best knowledge. In response to this, stronger collaboration between policy makers, industry and users (schools and families) should be anticipated. To achieve this, the need for a facilitator (e.g. NGOs, civil society organisation) is crucial that has the possibility to bridge gaps and foster conversation between the different stakeholders. As certainly the responsibility should be a shared one, as schools need support and guidance from policy and industry to develop effective guidelines and rules in the best interest to support the well-being of students and teachers.

To achieve effective rules and guidance it is important to invest time to understand what type of **content** and in which **context** young people use technology.

- **How** are they using technology? Which can range from very passive to very active usage, with young people being content creators themselves.
- **Where** are they using technology? In school, but the way they are using technology (and in many cases the same device) outside the school environment has an impact on one another.
- **When** are young people using technology? Which can be in a rather restricted way or in a very accessible 24/7 manner. Either extreme might have an impact on the young person’s well-being, hence it is important to find a balanced approach and educate young people to use technology in a responsible way.
Furthermore, the importance of role models was highlighted and how adult practices can influence children and young people. Hence, it is important to reflect on ourselves and the way we use and engage with technology. And those guidelines and rules concerning screen time and mobile phone use in schools (and at home) should also apply to the whole school staff (and parents).

Moving forward, looking at education, it is crucial to invest more time and resources in the professional development of teachers, ensuring they have the necessary knowledge and skills to support the technology use in schools in an effective and responsible manner. European projects and networking opportunities for teachers, such as offered by European Schoolnet are vital in this respect. In addition, it is also important to provide necessary support for parents, as they are a crucial part of the discussion. Very often parents are a stakeholder group that are rather difficult to reach given their busy schedules. Hence, efforts need to be made by the public and private sector ‘to meet person where they are’. Here, examples were given to collaborate with companies/employers and meet parents in their workspaces for information sessions. Lastly, we should not forget children and young people as part of the discussion. It is important to invest and make the effort to invest in co-creation approaches. For example, when new pedagogical tools and methods are being created or policies and guidelines are being shaped that are addressed to them. Making young people part of the discussion/creation process will give them a sense of ownership and will empower them to apply guidelines in a more responsible and effective way. In this regard it was also mentioned that policies and guidelines should be translated into child-friendly versions to make them more accessible to young people.
Summary of Topic 2:
AI in education; promises and challenges.

Introduction speech: Katarina Sperling, PhD candidate, Department of Behavioural Sciences at Linköping University - strategist at the Research and Development Department of the Education Office in Norrköping, Sweden

Moderator: Konstantinos Andronikidis, Education Policy Manager, European Schoolnet

In the introductory part, Katarina Sperling shared some thoughts on the issue at hand. She highlighted the many technological developments that historically promised to revolutionise education and looked at the hype that surrounds all things related to AI today. She continued by presenting some of the key challenges that AI technologies bring to society such as biased outputs based on historical data, the environmental impact that the development and use of AI has on our planet, and the ethical questions regarding the working conditions of many connected to the sourcing of raw materials used for the hardware needed. Katarina characterised AI as a “sociotechnical phenomenon” that brings about many challenges and is driven by research, policy, and the big-tech industry. In her view, many AI educational tools are questionable, whether for ethical, pedagogical, or educational reasons. To address this knowledge gap about the efficacy and safety of AI in education, it is important to better understand and explore teachers’ professional knowledge and to involve educators in defining what AI literacy encompasses in a school education context. Her presentation can be accessed here.
This session allowed participants to delve into key questions regarding the impact that integration of Artificial Intelligence might have on different aspects of education. Split into smaller groups, participants shared ideas, input, and proposals based on their experience and expectations. Below a summary of these exchanges.

1. **How might the role of educators change with the increasing use of AI in the classroom?**

Participants of this group addressed this question from three perspectives. When it comes to the change of the role of educators in terms of teaching and assessment, they suggested that AI could help democratise learning, making it more inclusive, especially for students with special needs, and improve the efficiency and precision of assessments. Participants conserved that educators will likely have the possibility to measure the development of skills such as critical thinking, collaboration, and problem-solving. Teachers will potentially become adept at interpreting data from AI systems to tailor instruction to individual student needs, enhancing personalised learning experiences. To achieve that AI and data literacy programmes are needed as part of educators’ professional development. Participants also considered that with AI’s involvement, the focus of assessments may shift from rote memorisation to evaluating students’ understanding and application of knowledge. AI could also support more continuous assessment with real-time feedback provided by AI tools. In terms of teachers’ role within the organisation, participants suggested that educators would need to adapt their practice, focusing more on student reflection and 21st-century skills development. There is also a need to consider how to use AI capabilities to support delivery of more traditional curriculum. Participants also believe that the integration of AI in the classroom could augment the educator’s role, providing tools for data analysis and freeing up time for more meaningful interactions with students. The educator’s role could become more dynamic, focusing on developing students’ higher order thinking skills and preparing them for a future where AI is an integral part of life and work. To achieve this, it is important that teachers have access to quality professional development programmes to better understand the modern trends and ensure they can navigate these changes effectively. When it comes to teachers’ relations with students, participants underlined the need to bridge the cultural gap between the students that view digital as an indispensable part of their life and the educators’ own experiences. Teachers might be progressively asked to take up a role closer to that of a mentor, helping students navigate the complex societal landscapes. They might also need to increasingly explore how AI influences student motivation and engagement, adapting their methods to maintain or enhance these factors.

2. **What are the potential long-term possibilities and risks of AI use for students?**

This group focused on three areas of long-term possibilities and risks of AI use. When it comes to wellbeing, they considered possibilities such as the use of AI-powered chatbots that could support students, especially those with specific needs or challenges, in an emotional way. Participants also believe that AI integration in schools will free time from teachers who can then dedicate more time for quality time with their students. On the other side, AI algorithms are based on largely western data and reflect western views and values. This could have an impact on representation and efforts to promote inclusivity and diversity. Moreover, students increasingly relying to AI tools could create echo chambers which prevent them from being exposed to views, knowledge, or behaviours beyond their interests or preferences. Finally, participants identified the increase of dee-fake photos and videos as potentially detrimental to children’s wellbeing within the school environment. Asked about the possibilities and risks related to
learning, participants shared several ideas. The groups shared possibilities such as students using AI as a tool to review and improve their work. AI chatbots could also support them as tutors, providing real-time feedback, especially at home for homework. Such tools could also be used as more communicative alternatives to web-search for information, and overall help provide a more equal support to learning for all students regardless of their background. The group also highlighted that AI could support adaptive learning methods that can benefit students. At the same time, the group raised concerns that some students might believe whatever an AI tool produces without critically thinking whether the given output is true or not. To that they added the difficulty in assessing the sources used for training different models which can affect the value transmitted and promoted through the outputs of the AI. Finally, when it comes to future skills, the group considered that AI can support the development of 21st century skills and competences, contribute to the preparation of young people being able to live and prosper in the digital world, and to offer a playground for students to better understand ethical concerns and dimensions of AI use.

3. How can we ensure that AI technologies in education are designed in ways that meet the needs of different educational stakeholders?

When discussing this question, participants of the parallel session focused on three roles in the school community. First, they considered students and underlined that safeguards should be put in place to ensure the content is relevant and legitimate. It is important that students are considered in the design phase of AI technologies and that developers take into account the different values and competencies that the technology will help them foster and develop. Focus should be put on developing AI tools that adapt to individual learning styles and paces, and on using AI to provide customised learning paths and resources that cater to each student’s strengths and weaknesses. Moreover, the group stressed the importance of ensuring AI tools are accessible to students with disabilities, incorporating features like text-to-speech, speech-to-text, and adjustable font sizes. They should include multilingual support to cater to students from diverse linguistic backgrounds, and perhaps gamification and interactive elements to keep students engaged. When it comes to privacy and security, such technologies should focus on protecting students’ personal data with robust security measures, ensuring transparency about data collection and usage policies. The second role this group considered was teachers. Their input focused on involving educators in the design process and early testing of prototypes for them to review and feedback on their use. New AI technologies should be accompanied by training programs to help educators understand and effectively use them, and by resources for better use of these tools in practice. When it comes to more administrative applications, participants emphasised that tools should be designed to actually support teachers in needed tasks like scheduling and attendance tracking. Related to curriculum, AI tools should be designed to assist the creation and customisation of lesson plans, as well as to recommend educational content and resources tailored to the curriculum and student needs. AI tools should also be designed to support collaboration of educators, using AI facilitate collaboration and communication among teachers, students, and parents. Finally, AI should be designed to meet needs of teachers for assisting them with real-time insights into student performance and to support them create formative and summative assessments that are fair and comprehensive. The third group considered was school leaders, including those teachers that participate in the decision-making process of the school. Participants shared the importance of AI technologies being designed to support data-driven decision making at a school level, effectively using educational data to inform any decisions. Such tools could also be used to
forecast trends and identify areas needing improvement. Another need that can be met by AI is the use of AI to optimise the allocation of resources such as funding, staffing, and facilities, as well as to identify and address gaps in resources across different areas. School leaders could also benefit from tools designed to support long-term strategic planning and development, such as initiatives that align with the school’s vision and goals. Finally, participants considered the use of AI to facilitate communication and engagement with parents, community members, and other stakeholders. AI-driven tools could support and gather feedback from all stakeholders to improve educational practices and policies.

4. What are the biggest opportunities that AI technology can bring to education?
Participants of this group discussed opportunities that AI can bring to education for schools. They considered the opportunities that AI could offer by allowing for more automated school flows and data-driven monitoring of students’ learning process. The group also suggested the opportunities for easy automated translations and interpretation of discussions with, for example, parents of non-native speakers that do not speak the language. Other opportunities such as automatic reporting of meetings and support in time scheduling were also mentioned as some of the opportunities that AI could offer. Participants also discussed opportunities for educators, mentioning the potential for saving time for lesson preparation, automatic translation of content, and personalisation of content and assessment based on students’ level. AI tools could also help teachers provide feedback to students and allow them to use learners’ data to improve their instruction practices to better match their needs. Finally, the group also discussed opportunities for students, focusing on the support that AI technology could offer in, for instance, revising their work or improving their writing. They also mentioned the opportunities for more personalised feedback based on their individual learning path, as well as support for those students that struggle with the learning content or have some kind of need.

5. How can we foster AI literacy and a culture of critical and ethical integration of new AI technologies?
The fifth group in this parallel session addressed the question of fostering AI literacy and a critical view to integrating AI technology at a student, teacher, and school level. At a student level, participants mentioned the need for young people to learn how to use AI in a critical and openminded way. They also underlined the need for critical exchange and dialogue with students on key aspects of AI, also through the more practical exposure to the technology and evaluation of its capabilities and limitations. At a teacher level, similarly to other groups, participants emphasised the importance of professional development and adequate time allocated to continuous training. Teachers should also be involved in the discussion about their changing role and be able to shape it in the digital era. Finally, at a school level, the group shared the importance of the organisation investing in quality training of its personnel. They also highlighted the value that grass-roots initiatives from teachers that are interested in the field could bring to the school culture and the inspiration that this could bring to their peers.
Summary of Topic 3: Education and public-private partnerships.

This parallel session was organised by the EmpowerED project.

Introduction speech: Zelda Gerard-Besset, Legal Officer, Compliance Tools Department, Commission Nationale de l’Informatique et des Liberté (CNIL), France

Moderator: Donatella Solda, Director of Future Education Modena, President of EdTech Italia

Introduction

The session on ‘Education and Public - Private Partnerships (PPPs)’ was organized within the scope of the EmpowerED project. The project aims to foster collaboration and strengthen the European EdTech community, transcending country borders and ‘knowledge silos’. EmpowerED reaches out to EdTech solution providers and support organizations, EdTech end-users, researchers and policymakers via different channels and capacity building opportunities.

Research conducted during the first year of the project identified challenges regarding the implementation of PPPs associated with integrating EdTech in education. Potential barriers include the different ‘professional languages’ spoken by stakeholders, the variable levels of trust between the sectors and discrepancies between the timeframes and pace governing the public versus the technology development sector (Havinga, B. and Clary, A., 2024).
The session aimed to bring together expert stakeholders across Europe to contextualize those challenges. The session was repeated twice, lasting 90 minutes each time, with ~30 participants per iteration, mostly representatives from Ministries of Education but also industry representatives, the European Commission and educators (Figure 1). Participants discussed three guiding questions related to PPPs in education, and the outcomes are presented in the following sections (with the answers from both iterations aggregated). You can find the introductory presentation [here](#).

**Discussion outcomes**

**Topic 1: What are the topics that can be addressed by PPPs in education**

Based on the discussions during the session, PPPs emerged as a pivotal way of fostering innovation, both by allowing the co-creation of meaningful EdTech solutions and by ensuring the sustained use of those solutions.

**Demand-driven, teacher-led and student-led innovation**

The development of EdTech solutions is often spearheaded by the EdTech industry and the products are subsequently made available to schools. This can often lead to EdTech products that may not address the real needs of educators and learners as well as saturate the market, making it difficult for educators and school officials to choose appropriate solutions. By implementing PPPs early in the product development cycle, educators can provide early input and become actively involved in the co-creation of solutions that address real-world problems in the classroom, whereas EdTech companies can use their expertise to develop such innovative products effectively.

**Sustainably implemented innovation and continuity**

Additionally, it emerged that often the implementation of EdTech solutions is not sustained in the long-term. Products may be implemented ad hoc, not based on long-term considerations but instead on ephemeral trends or happenstance availability. Alternatively, products may be implemented when funding is available and when those resources are depleted, the product is abandoned. Forming PPPs can address these issues by ensuring that the choice of EdTech solutions is placed within a long-term framework, aligns with overarching educational goals and is sustained by appropriate funding opportunities. This continuity can allow educators the necessary time to learn to work with a product and use it more effectively, and additionally avoids wasting public resources, by requiring continuous change in EdTech infrastructure.

**Defining mutually beneficial solutions**

Finally, another issue that can be tackled with PPPs is the early definition of ownership of the resulting products deriving from public-private collaborations. In cases where companies collaborate with schools to develop a solution, there is the grey area of how this solution will be used in the future to provide profits for the company itself. If PPPs are implemented appropriately from the beginning of the process, such discrepancies can be clarified so that both parties reach a mutually beneficial agreement.
**Topic 2: Why are such collaborative models beneficial in the field of education and EdTech?**

The implementation of PPPs can address challenges faced by both the public and private sector in the field of education and EdTech by facilitating bilateral collaboration.

**Trust and adoption**

Trust within the context of the adoption of EdTech solutions in education is **multi-layered**, ranging from the ‘higher’ to the ‘lower’ levels of stakeholders: educational authorities may be reluctant to collaborate with companies whose main driver is profit; school officials may be skeptical to dedicate funding to new solutions without evidence of their effectiveness; educators may be frustrated about using yet another EdTech tool that promises to solve their problems but ends up complicating them; finally, parents may be worried about constantly having EdTech solutions ‘tested’ on their children. PPPs can play a key role in this regard by **offering legitimacy** to the use of a specific EdTech solution and framing an opportunity where all stakeholders can **collaborate in its co-creation**. This approach would enhance the understanding of what innovation serves, how it can be used appropriately and why it can lead to better learning.

**Overcoming demand – offer misalignment**

As mentioned above, one of the challenges educators face today is the oversupply of EdTech solutions. Educators are provided with little support in terms of coaching that would allow them to **critically judge the efficacy of products** in each case and make informed decisions. PPPs could be implemented to provide a formalized way of giving educators access to **solutions fulfilling certain pedagogical criteria**, providing them with **coaching** in using those solutions and supporting research into the effect of EdTech **products** and approaches in learning. Moreover, PPPs could be formed to guide innovation in a direction that better benefits the interests of educators and learners, bridging the gap between demand and supply of EdTech products.

**Finding a balance between innovation pace and market failures**

Finally, one important challenge noted by the session participants referred to the **different paces** between the technology development industry and decision-making processes in the public sector. Traditional contexts for PPPs, such as infrastructure, often refer to development processes that are not as time sensitive as innovative technology development, where fast iteration leads to a constant reconsideration and improvement of available solutions. Therefore, PPPs in the field of EdTech need to follow a new, **more agile model** that can accommodate rapid changes in the technology landscape. As an example, the development of AI technologies is moving at such a pace that solutions from even a few months ago are now succeeded by a new generation. EdTech products are often expected to follow such market trends and therefore PPPs should be implemented in a way that allows that.
Topic 3: How can we implement successful PPPs in the field of EdTech?

Successful collaboration in any field should always be based on sharing a common vision and following a common set of values from both parties.

Mutual responsibility - accountability
A crucial agreement between the private and public sector should be to accept mutual responsibility and accountability when introducing EdTech solutions in education. Responsibility should not be seen as a ‘one-time effort’, an action taken ‘to tick a box’; it should be a continuous practice that becomes part of the DNA of organizations on both sides. Decisions should constantly be reevaluated and reflected upon so that corrective action can be taken to ensure that all implementations are done to the benefit of the end-recipients of EdTech, the teachers and learners. PPPs should be structured so that each party’s responsibilities are clearly defined, and feedback loops are envisioned to mitigate risks throughout the process.

Creating places to test innovation, creating a feedback loop
To allow the co-creation of solutions from the private sector and educators appropriate structures where the two worlds can meet, innovation can be tested, and feedback can be collected should continue to be created. These spaces can take the form of testbeds, schools that are capable and willing to test EdTech solutions and independent organizations that can act as intermediaries between EdTech companies and schools. Care should be taken to train teachers in the context of providing feedback to EdTech companies as well as to train companies to understand better the ‘language’ of teachers and treat them with respect. This cross-training or cross-pollination can be fostered by PPPs which would give more credibility to both parties and allow for such spaces to be created equitably and receive resources to sustainably work in the long term.

Guidelines
Finally, the majority of session participants coming from the private sector voiced a need for the existence of clear guidelines regarding the development and implementation of their EdTech solutions, that would consider the fragmentation of the European market. It is often challenging for companies to navigate the legal and financial requirements between countries or even within the same country, partly because they often need to deal with public stakeholders at different levels (ministry level, municipal level, school level). Therefore, appropriate PPPs could be implemented to create a basic common framework, a set of guidelines and proposals that European countries could adapt to their needs. Understandably, this is an endeavor that would require pan-European effort and requires a longer timeframe to be addressed meaningfully. However, participants stressed the need to move in that direction and define the necessary steps to initiate and facilitate that process.
Conclusions

Even though PPPs are not a new concept and are successfully implemented in other sectors, the education and EdTech context provides unique challenges and requires the development of new approaches.

Care should be given to create bilateral trust, by ensuring both parties understand each other’s ‘language’, interests and constraints, to develop a common set of values and a common vision for success. This is complicated by a multi-layered structure within both the public and private sectors. Public stakeholders include decision makers at multiple levels – national level ministries, municipalities, school leaders – but also the end-users of EdTech – educators, pupils and parents. On the other hand, the private sector also exhibits granularity, composed of EdTech developers of different capacities and size – startups, SMEs, mature companies – and possibly other support organizations. PPPs may be required between any combination of the above stakeholders making each case unique. However, the creation of a modular framework that can accommodate varied stakeholder combinations is necessary to ensure an aligned approach within each country and across Europe.

Bringing together stakeholders from these two worlds in different types of settings is necessary to allow for fruitful dialogue to take place. High-level meetings such as the School Innovation Forum are therefore a unique chance to initiate such discussions. Following up on those discussions, however, needs to be coordinated so that actionable next steps can gradually take place.

From its vantage point, the EmpowerED project aims to facilitate this process by fostering on-going dialogue, creating opportunities for such stakeholders to meet and identifying interventions that would be beneficial to the ecosystem. The consortium itself is composed of partners from both sectors, acting as a ‘microcosm’ within which those interactions and arising challenges are reflected upon. Moreover, EmpowerED implements different actions to bring together the European EdTech community at the marco- and meso- levels, which can create opportunities for the definition of a common vision as well as guidelines that could inform the creation of successful PPPs in the future.

References

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