



Newsletter - July 2025



Welcome to our newsletter!

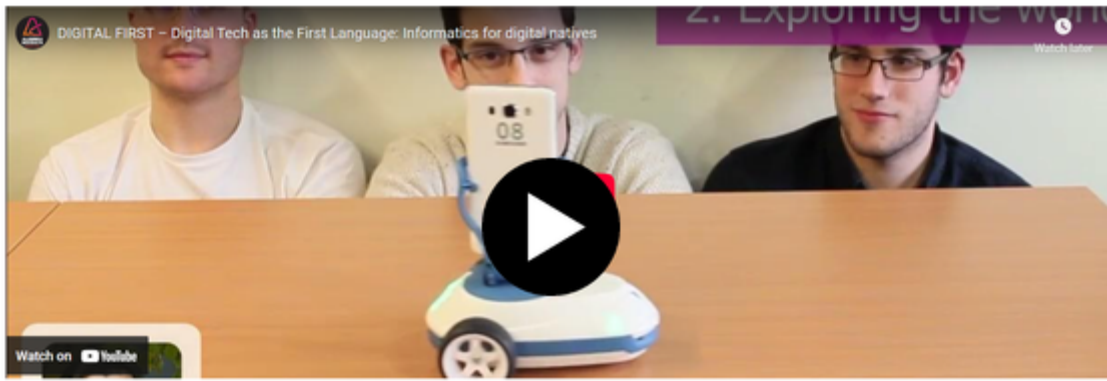
We are thrilled to share with you the latest updates from our journey to transform informatics education. In this edition, you'll find:

- First insights from Dialogue Clubs
- A new educational video
- The latest episode of our podcast
- Our latest blog articles

Interested in staying in touch with us for future news and activities?

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Educational Video 3: Educational Robotics and Functional Informatics



Video 3: Educational Robotics and Functional Informatics

In this [third episode](#) of the Digital First Educational Video Series, the core of the project comes to life, turning computing lessons into hands-on, real-world challenges. Through **educational robotics**, students experience coding not as abstract theory but as an engaging way to solve everyday tasks. Beyond the excitement of using “moving machines”, the video illustrates why Digital First’s **“functional”** approach to informatics is relevant for everyone’s future.

We see teams of young creators testing ideas, exploring data with sensors, and imagining robotic pets or self-driving cars — practical experiences that foster digital confidence, collaboration, and creativity. It offers an inspiring glimpse into how today’s classrooms can prepare tomorrow’s citizens to be not just users of technology, but its inventors.

Thanks to our project partner **University of A Coruña** for the production of this video.

[Watch the video](#)

Podcast episode 4: The Importance of Teaching and Learning
Computer Science



Episode 4: The Importance of Teaching and Learning Computer Science

In this [fourth episode](#) of our podcast series, Dimitria Terzieva and Nadya Stankova from Secondary School “St. st. Cyril and Methodius” speak with:

- Stela Yaneva,
- Maria Kecheva,
- Sefani Apostolova – students in Secondary School “St. st. Cyril and Methodius” and
- Stanislav Djurov, a student of Computer Science in the Technical University of Plovdiv and also currently a trainee for an IT company.

Together, they discuss how important Teaching and learning computer science are for the requirements of today’s digital world. What catches their thoughts is that all of the guests today consider that the computer science knowledge they receive at school and university is insufficient to prepare them for the digital world after graduation.

Thanks to the Secondary School “**St. st. Cyril and Methodius**” for the production of this podcast.

[Listen to the podcast](#)

From Dialogue Clubs to the World of Informatics



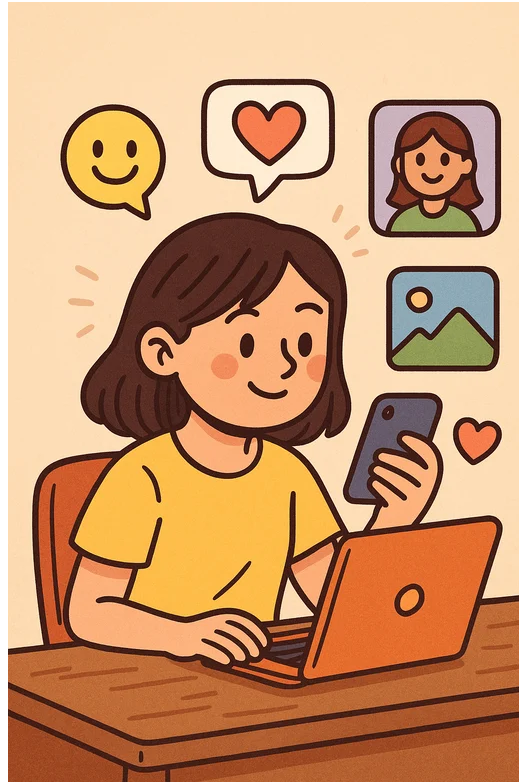
Welcome to the world of Dialogue Clubs—an exciting initiative within the Digital First project that’s redefining how we teach informatics across Europe. These clubs are vibrant spaces where educators, experts, and stakeholders come together to co-create innovative teaching strategies, explore the evolving role of teachers, and build readiness for integrating digital-first pedagogies.

Rooted in research and stakeholder consultation, Dialogue Clubs aim to spark meaningful conversations, foster community, and generate practical solutions for teaching informatics in a digital age. The first seven clubs dive into creative pedagogical approaches inspired by Halliday’s theory of language, helping educators align digital learning with the real communicative needs of today’s students. From superhero avatars to interdisciplinary projects, Dialogue Clubs are shaping a new narrative for informatics education—one that’s collaborative, evidence-based, and future-ready.

Written by Partners in Learning, Croatia

Dialogue Clubs: First Insights

We are happy to share some insights from the first seven dialogue clubs organised in ten countries (Bulgaria, Croatia, Cyprus, Finland, Greece, Italy, Lithuania, Spain, Slovenia, and Portugal) with 901 participants by May 2025.

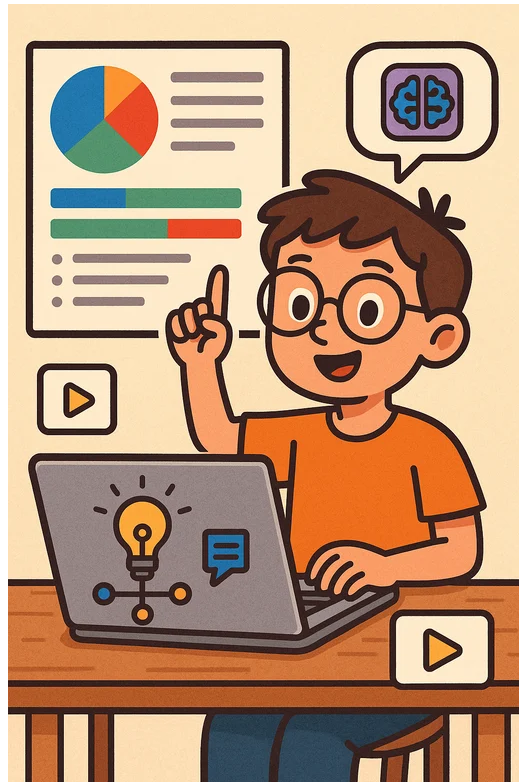


Personal function of digital technology

Children use social media and gaming apps to explore identity and express emotions through avatars, creative content, and messaging. Visual tools like emojis and videos support communication but may simplify feelings. While digital platforms offer safe spaces for self-expression, they can also lead to shallow interactions or risks like cyberbullying. Supporting healthy emotional development requires educators and parents to promote digital literacy, emotional awareness, and responsible online behaviour, helping children balance digital and real-life connections.

Informative/Representational function

Children use digital tools to present and organise information through infographics, slides, and collaborative documents—often using templates for clarity and style. These platforms support real-time editing and creative expression, though design can sometimes overshadow content. To enhance learning, students use AI tools, videos, and mind maps, while practising source verification and peer collaboration. Simulations and interactive apps help explain abstract ideas. However, over-reliance on AI and limited critical thinking highlight the need for balanced digital literacy that fosters creativity, analysis, and collaboration.



Interactive function

Children use digital platforms, social media, and gaming apps to build friendships, share memes, chat, and collaborate—often blending school and social life. From classroom tools to global gaming, these spaces support connection but raise issues of safety, privacy, and screen time. Group projects and team games foster

communication and peer learning, especially with teacher support. While digital tools can enhance confidence and connection, they risk weakening face-to-face skills. Balancing online and offline interaction is essential for healthy, meaningful relationships.

Instrumental function

Children use digital tools to express needs, ask for help, and collaborate in school and social settings, blending formal and informal communication. Messaging apps, AI tools, and virtual assistants support problem-solving, from homework to group projects. These tools build confidence and reduce anxiety, but can also cause misunderstandings or over-reliance. With proper guidance, digital platforms help children develop critical thinking, express themselves clearly, and solve challenges independently, making them valuable assets for growing autonomy and communication skills.





Imaginative function

Digital tools reshape how children tell stories and explore imaginative play, blending creativity with collaboration and digital literacy. Students design comics, build virtual worlds, or create interactive stories—often in cross-curricular projects. These activities foster planning, problem-solving, and emotional expression. Sharing their work online boosts confidence and communication, though safe environments and teacher guidance remain essential. Digital storytelling nurtures imagination and resilience while building real-world skills, preparing children for a future where creativity and technology are deeply intertwined.

Heuristic function

Children use digital tools to explore new topics creatively, researching, organising, and presenting ideas with shared boards, AI, and multimedia. They learn to cite sources, create mind maps and e-books, and connect schoolwork to real-life contexts through project-based learning. Games and coding tools turn trial and error into learning opportunities. However, many still struggle to assess online content critically. Supporting autonomy and curiosity requires strong digital literacy education, teacher training, and engaging platforms that promote responsible exploration.



Regulatory function

Children use digital platforms and games to lead, collaborate, and shape group dynamics—often taking initiative, setting rules, and guiding peers. These environments empower quieter or tech-savvy students, but challenges remain, including digital inequality and limited awareness of digital rights. Educators and

families must promote ethical behaviour and teach children their rights, supported by frameworks like the Digital Services Act and the UNCRC. Embedding digital literacy and collaboration into education helps children grow into confident, responsible digital citizens.

Latest posts from our blog

Discover a selection of recent articles from our project website, offering insights into the current state of informatics education.

Explore the latest developments and join the conversation on this evolving field!



AI in the Classroom: How Croatia Is Bringing Artificial Intelligence to Schools

Croatia is stepping confidently into the future by integrating artificial intelligence (AI) into its primary and secondary education system. With new curricula, pilot programs, and teacher training initiatives, students and educators alike are getting hands-on experience with the technology shaping tomorrow's world.

[Read more](#)

The Representational Function as a Foundation for Digital Literacy and Information Evaluation

In today's educational context, characterised by a constant flow of data, interactive digital environments and technologies that mediate our perceptions, it is essential to rethink how computer science is taught and how digital literacy is developed in general education. The approach adopted by Digital First is based on the study of language functions proposed by M.A.K. Halliday. In this article, we focus particularly on the representational function to provide clear insights about the relevance of such proposed functions.

[Read more](#)



The importance of cybersecurity in education

As digital tools become increasingly integral to education, including cybersecurity awareness in school curricula has become crucial. According to the EU Kids Online survey (2020), which surveyed 25,101 children aged 9–16 across 19 European countries, approximately 11% of respondents experienced data misuse or abuse, underlining a significant gap in online security awareness among young people.

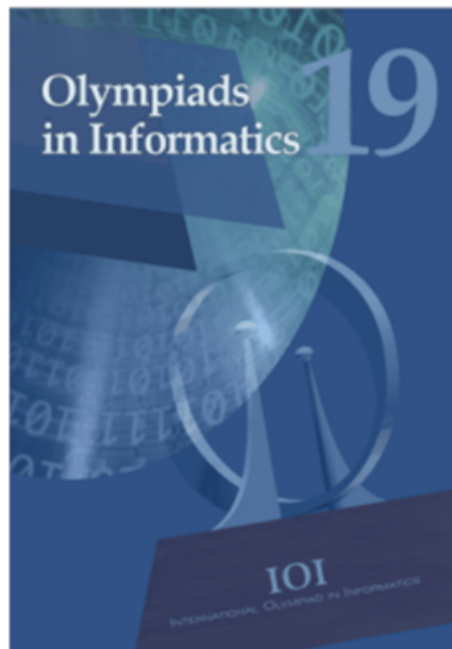
[Read more](#)

New volume of Olympiads in Informatics now available – a rich resource for informatics

The 19th volume of the journal *Olympiads in Informatics* has just been released and it offers a wide range of valuable research and practical insights for educators in

informatics and computer science. Closely associated with the [International Olympiad in Informatics \(IOI\)](#), the journal serves as a bridge between academic research and educational practice in the field of algorithmic thinking and programming education.

[Read more](#)



Meet our partners!



Our project consortium consists of 15 organisations including universities, teacher training centers, primary and secondary schools, NGOs, and a public body from Belgium, Bulgaria, Croatia, Cyprus, Finland, Greece, Italy, Lithuania, Portugal, Slovenia, and Spain.

[Read more about our partners](#)

www.digitalfirstnetwork.eu



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