



DIDAMATiCA 2021

Palermo, 7-8 October 2021

“Artificial Intelligence for Education”

CALL FOR PAPER

**Paper submission deadline extension: ~~July 23 2021~~
July 30 2021**

DIDAMATiCA - DIDAttica e inforMATiCA – (Informatica per la Didattica) has been the point of reference on the digital innovation of the education sector for students, teachers, educational institutions, ICT professionals, companies, and public administration since 1986. A bridge between schools, Education, research and business, Didamatica encourages a vital debate on research, innovative developments and recent experiences in Information Technology applied to Education in the various domains and multiple learning contexts.

DIDAMATiCA 2021 aims to open a debate on how the rapid advances in the field of "Artificial Intelligence" (AI) could affect learning and teaching processes and the world of Education in general.

The notion of 'Artificial Intelligence' might seem like something very far from the world of Education and today's reality, especially when the education system struggles to cope with the problems associated with the pandemic emergency. However, the impact that AI has on various areas of our lives (marketing, finance, health and safety, to name but a few) requires a reflection in the world of Education and training.

According to the recent UNESCO report "Artificial Intelligence in Education: Challenges and Opportunities for Sustainable Development" (UNESCO, 2019), the integration of AI in Education raises several issues. Besides the ethical issues related to the massive collection of data valid for profiling students and personalising learning paths, there is also a need to deepen the reflections already started in other sectors on the transparency of decision-making processes (explainable AI). The integration of AI techniques in educational processes requires further study of the issues of the digital divide and social inclusion, the risks associated with these innovations, and the opportunities that technologies offer for managing these issues

with new approaches. Finally, we need to reflect on the role of teachers and what tools to provide them with to make them aware actors in these innovation processes.

DIDAMATiCA 2021 aims to take a picture of the current state in integrating these two worlds and start a theoretical and methodological discussion on how to think about learning and teaching to benefit from these innovations.

DIDAMATiCA 2021 will also be an opportunity to discuss ethical issues that are closely related to the theme AI in Education.

DIDAMATiCA 2021 will encourage national and international comparison during the two-day conference and throughout discussions moderated online through a dedicated portal. The objective of the debate will be the definition of a research agenda for all those involved in educational innovation who are interested in exploring the issues related to AI.

DIDAMATiCA 2021 "Artificial Intelligence for Education" indicates a challenge and an opportunity to make the school and the world of work productive and smart, to make students, teachers, professionals aware and able to implement safe behaviours and ready to face the challenges and threats of the future in a world "increasingly smart".

Topics chosen for DIDAMATiCA 2021

- Technology-enhanced learning
- Didactics of computer science in the school
- New digital technologies and "old profession."
- Teachers' digital skills
- Environments, languages, platforms for coding and educational robotics
- Technologies and inclusion: digital miracles
- Digital innovation and Public Administration
- Experiences of educational innovation during the Covid19 emergency
- The impact of AI technologies on teaching methodologies
- Artificial intelligence in the classroom
- The student "model"
- Semantic networks and ontologies in educational processes
- Adaptive learning environments
- Intelligent Tutoring Systems
- Intelligent agents as cognitive tools for education
- Conversational agents and their application in education
- The role of cognitive architectures: a bridge between cognitive sciences and the world of education
- E-learning platforms and their evolution in the AI era

- Serious Games and AI
- Learning analytics and AI
- Social robotics in education
- Ethical considerations in the relationship between AI and Education
- Gender inequality and AI: opportunities and risks
- The teacher, the trainer and AI technologies
- Teacher training on issues of innovative teaching in an increasingly smart school
- Artificial intelligence, Industry 4.0, social life: new models of value production

Submitted papers may not be limited to the topics listed above and describe original scenarios, problems, technological and methodological solutions not submitted in parallel elsewhere; contributions may be written in Italian or English.

The following **types of papers** are accepted:

- **Full paper**: maximum 10 pages
- **Short paper**: maximum 4 pages

Submission is through the easychair.org portal at the following address:

<https://easychair.org/my/conference?conf=didamatica2021#>

- to make the upload it is necessary to make first a simple registration
- then access the page where you can upload the text file, first clicking the boxes relating to the themes characterizing the paper.

Instructions for preparation of the paper (in Word format) are available at the following link (to be copied and pasted into the browser):

https://easychair.org/publications/for_authors

Important deadlines

Paper submission: ~~July 23rd, 2021~~ July 30th 2021

Referee's answer: September 3rd, 2021

Submission of accepted papers and registration to the conference: September 17th, 2021

Submitted papers will be refereed by at least two members of the Scientific Committee.

Proceedings

Accepted papers will be published with ISBN on the conference portal, prior to the start of the conference, at: <http://www.aicanet.it/didamatica2021>.

Abstracts of all accepted papers will be published in the Mondo Digitale journal (indexed in Scopus) with a link to the full paper on the conference portal.

Best Paper Award: The best papers will be selected among all the accepted papers. These papers will have to be extended and will be submitted to a second peer-review process before being formatted in the editorial version for the Mondo Digitale journal.

Dates and location

DIDAMATiCA 2021 will be held October 7-8. In light of the current uncertainty regarding the pandemic, the **DIDAMATiCA 2021** organizing committee will periodically monitor official health and safety guidelines, as well as travel restrictions. Should circumstances prevent a safe physical presence, the conference will be held virtually on the same dates as originally scheduled on the online portal provided by the Institute of Educational Technology of the National Research Council of Italy (ITD-CNR) and discussions will continue online on the same portal until the end of October.

<http://www.aicanet.it/didamatica2021>