

NEWS RELEASE

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Informatics for All Publishes Informatics Reference Framework for School

New Report Supports the Advancement of Informatics as a Fundamental Discipline for the 21st Century

Brussels, Belgium, March, 15 2022 – The Informatics for All coalition recently released their <u>Informatics</u> <u>Reference Framework for School</u>. The new report advances informatics as a fundamental discipline for the 21st century, while also indicating how informatics may become a driver for renewal and innovation of other disciplines. <u>Informatics for All</u> is a multi-national initiative aimed at making informatics (referred to as computer science or computing in some countries) compulsory in primary and secondary school settings throughout Europe.

Recognizing that the introduction of informatics in primary and lower secondary education is a recent phenomenon, and that many schools need guidance in building their informatics programs, *Informatics Reference Framework for School* is designed to help schools develop their informatics curricula. The report includes a set of core topic areas with their associated practices that all students are expected to be competent in by the end of their upper secondary education (age 18 years).

The authors maintain that a *common* European vision of informatics with a minimum set of high-level requirements is a cornerstone of their overall efforts. In many instances, Europe participates in the global economy as a unified entity, the economies of European nations are often integrated, many students travel outside their home countries for university education, and employees of large companies collaborate with colleagues across national borders. At the same time, the authors underscore that the *Informatics Reference Framework* is deliberately flexible and short. The authors designed the document to leave space for educators to develop curricula attuned to their own culture and needs. The authors intend for the Framework to be viewed as a high-level document which will stimulate ideas.

"Since Informatics for All was established in 2018, our organization's efforts have revolved around a two-tier strategy," explained Dame Wendy Hall, Professor, University of Southampton and Chair, Informatics for All coalition. "Tier 1 emphasizes that informatics should be a foundational discipline on par with mathematics and languages. In Tier 2, we encourage schools to explore how informatics could be a useful tool in helping students learn other disciplines. This new Reference Framework mainly focuses on Tier 1, by offering educators across Europe a clear sense of what kinds of instruction should be offered to make informatics a foundational discipline. This is not a precise map, but it does seek to move educational systems in the same general direction."

"A strong educational infrastructure in informatics is essential for Europe's economic development and industrial growth in the coming decades," said Michael E. Caspersen, Professor, Aarhus University and Chair of the Informatics for All subgroup that developed the framework. "At the same time, school education in informatics across Europe is still fragmented and not receiving enough attention. This report builds on our earlier work and will make it easier for educators to incorporate informatics education for students between the ages of 6 and 18 years."

In addition to the main *Informatics Reference Framework for School* report, the Informatics for All coalition will publish supplementary documents in the near future which will provide additional guidance in specific areas.

Teachers play a crucial role in implementing the *Informatics Reference Framework* and designing a curriculum that fits their country, region, or school. Teachers can further shape the development of the *Informatics Reference Framework* by sharing their insights and their experiences.

Along with the implementation of the *Informatics Reference Framework*, the Informatics for All coalition urges informatics education research to be conducted, to learn and draw consequences first from pilot stages and later from the full implementation, with the goal of developing more tools, platforms, and pedagogies to assist students and teachers.

The authors of the report hope the *Informatics Reference Framework* and supplementary documents will be further developed over time and will encourage professionals in the informatics community to undertake more research, share thoughts and refine ideas.

About Informatics for All

Formed in 2018, <u>Informatics for All</u> is a coalition whose aim is to establish informatics as a fundamental discipline to be taken by all students in school. The Informatics for All initiative deploys a two-tier strategy at all educational levels: informatics as an area of specialization, that is, a fundamental and independent subject in school; and the integration of informatics with other school subjects, as well as with study programs in higher education. The constituent organizations that make up the Informatics for All coalition include the <u>ACM Europe Council</u> of the Association for Computing Machinery; <u>CEPIS</u>, the Council of European Professional Informatics Societies; <u>Informatics Europe</u>, the association of European Informatics university departments and industrial research labs; and the <u>International Federation for Information Processing</u>, the federation of computer societies and associations worldwide.

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