Informatics Education in schools

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A very long story

- The story started with « 58 high schools experience » in 1970

- Many reports talk about the necessity of teaching informatics:
  - an optional « introduction of programming in high school » class (J. Arsac, 1980)
  - Rapport Nivat on teaching Computer Science, with many Computer Scientist were involve in this report like Gérard Berry (VP)… (1983)

Strange times

• 1997: during the Internet boom, an optional teaching class was withdrawn

• 2000: introduction of B2I (Brevet Informatique et Internet), an evaluation tool with its actual extension PIX…

• In 2008: Gérard Berry first lesson @Collège de France

  • « I'm scared that the education is oriented towards the 20th century, while the students are in the 21st century education ».
    (« J’ai un peu peur qu’on oriente l’enseignement vers le 20e siècle, alors que les enfants sont dans le 21e »)

• A large lobbying is engaged
New start: 2010-2014

- 2010: Decision to introduce a new specialty teaching ISN (Informatique et sciences du numérique) in scientific section during the senior year
- Introduction in 2012 with high level commitment of professors and academics from university
  - About 125,000 students
- And again a report from French science academy: *It’s urgent to not wait!*

http://www.academie-sciences.fr/fr/Rapports-ouvrages-avis-et-recommandations-de-l-Academie/l-enseignement-de-l-informatique-en-france-il-est-urgent-de-ne-plus-attendre.html
Primary & middle school

• In 2015 introduction of Informatics in many sections
  • 6 to 7 years: informatics devices
  • 7 to 10 years: médias & information, digital, algorithms, informatics as tools
  • Middle school: teaching of informatics in mathematics & technologies: analogic & digital information, algorithms & programs, network, application design & development, simulation, … and scratch programming
2018 new announcement

• Part of Baccalauréat new reform

  • SNT, « Sciences numériques et technologie »
    general program for all sophomores, an hour and a half per week

  • NSI, « Numérique et sciences informatiques »
    4 hours a week for juniors and 6 hours a week for seniors

Program & CAPES

• SNT, « Sciences numériques et technologie, based on 7 subjects with history, data & information and impacts
  • Internet, Web, data structures, social networks, geolocation, embedded system & IoT, and digital photography

• NSI, « Numérique et sciences informatiques »
  • With a more classical program based on CS foundation

• Last announcement on January 8th, by French by the French Education minister for the creation of an exam to become an informatics teacher in middle school (CAPES).
  • A first step to establish informatics as a full school subject like math

• Our association is highly involved in training the teachers who will begin to teach in the 2019 academic year and promotion of CAPES!

https://www.societe-informatique-de-france.fr/2019/01/annonce-de-jean-michel-blanquer-de-la-creation-dun-capes-dinformatique/