

LYICT Working Conference  
Focus Group “New Learning Environments”

8) Describe the influence of the media on youth and educators

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## Mobile phones

- Advantages
  - informatics system: “small device”
  - very popular among students (and teachers)
  - growing functionality
  - potential with respect to (mobile) learning and informatics education
- Disadvantages
  - problems at schools: “Cyber-bullying” with videos, photos
  - banishment of mobile phones at (some) schools
- Conclusions
  - **bridging the gap** between entertainment device and mobile learning environment **by informatics education**
  - media competencies
  - understanding of mobile devices as an aim of informatics education

- “Informatics systems consist of hardware, software, and network facilities to solve a problem in the application domain” [Claus / Schwill, 2006]
- Hardware limitations
  - slow CPU
  - small memory
  - runs by a battery
- Software limitations
  - limited Graphical User Interface
  - limited input and output (e.g., small keyboard)
- Limitations of network facilities
  - no permanent network connection
  - low bandwidth
  - different networks
- New cognitive relations
  - convergence of media
  - sensors, e.g., GPS

- Aiming at competencies:  
“competencies are **cognitive abilities and skills** available at or learnable for individuals **to solve problems**. The term includes related **motivational**, volitional, and social readiness and ability to apply the solution in variable contexts in a successful and **responsible way**” [Weinert, 2001].
- (Mobile) Informatics Modelling: becoming aware of limitations  
[Carrie, 2006], [Humbert / Micheuz, 2008]
- Databases: using real data as contact data, music files, videos
- Networks: locality of data (local vs. global), security, protection of privacy
- Informatics Systems and Society
- Demands: evaluation of contribution to (informatics) educational standards, learning methods for all subjects, ...

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