

# The didactic positioning of Information Literacy in Schools.

Information Literacy: When Research Meets Practice (Panel)

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ECIL 2013 Istanbul

# AGENDA

## 1. Juvenile media and information behaviour

What research in Germany tells about media and information use and behaviour of children and youth?

## 2. German school situation

Which framing conditions offer educational challenges and the German school situation?

## 3. IL in German schools

How to implement IL content in school instruction?  
Perform advantages and assess success!

# 1.1 Media use and information behaviour - German studies

Most studies focus university students, esp. Stefi-Study (2001) und Follow-ups, e.g. Brändli (2007) signalize low IL, but also improvement since then.

**Juvenile studies very rare!**

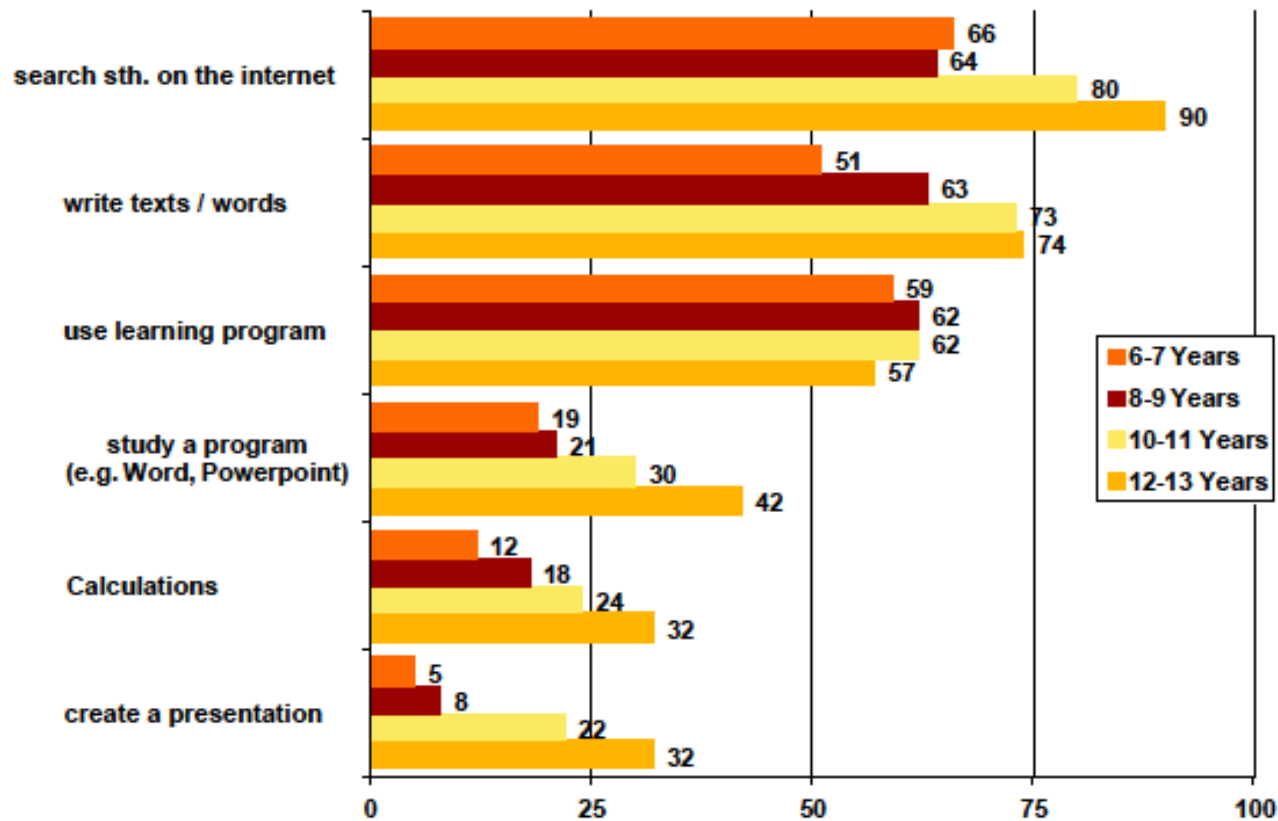
**Panel studies JIM and KIM (latest study 2012)**

- **JIM: J**outh, **I**nformation and **M**edia
- KIM: Children, Information and Media
  - General confirmation of worldwide increase in usage of digital media and the internet with slight increase, but on a very high level for older children, aged 12-13.
  - *Young people use the internet also for school purposes: 48-52% at least once a week*

©Thomas Ratgeb: Informationsverhalten von Jugendlichen. In: Informationskompetenz im Kindes- und Jugendalter, 2012

# Graphic 1

## Using computers at home for school purposes 2012 - at least once per week -



Quelle: KIM-Studie 2012; Angaben in Prozent

Basis: Kinder, die zu Hause am PC etwas für die Schule machen, n=709

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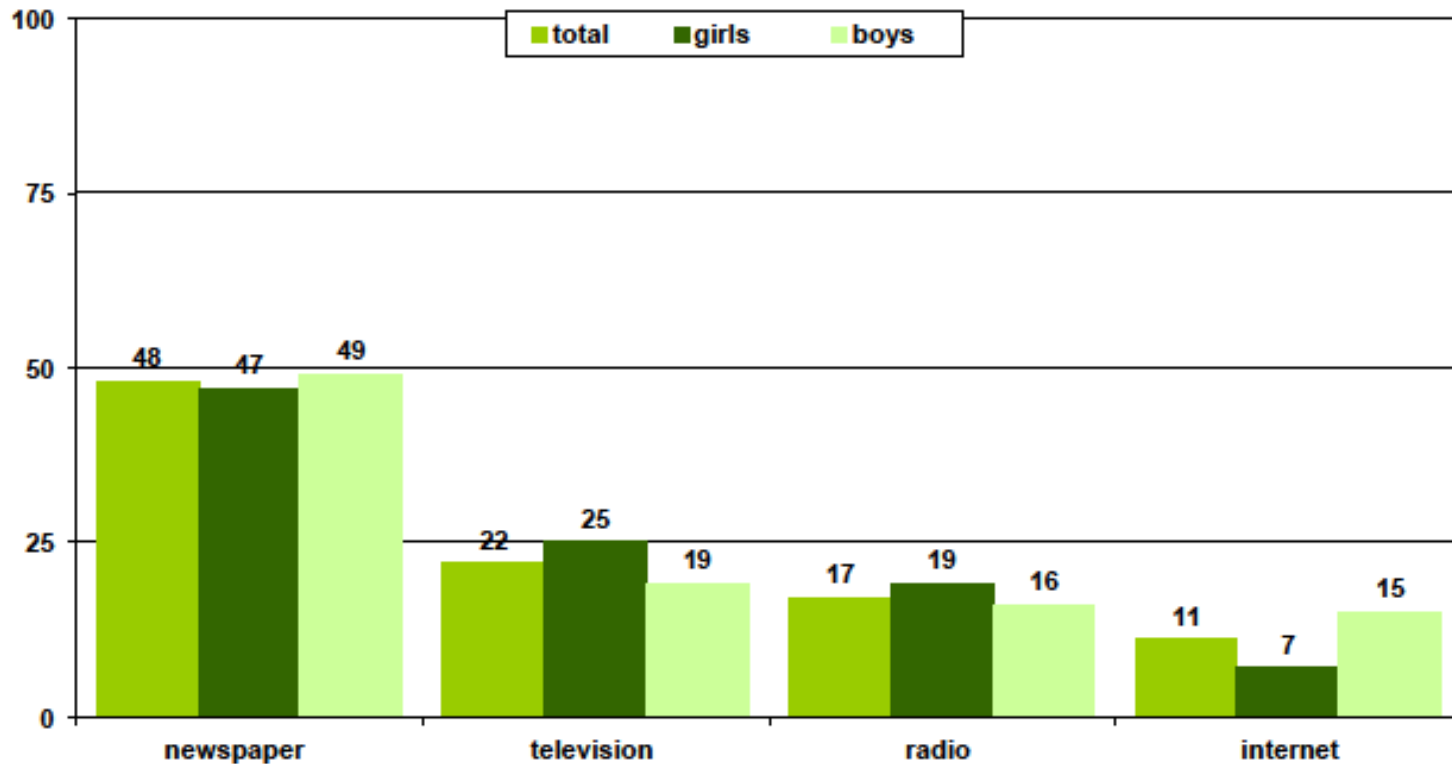
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  - **but internet is not predominant information source**

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## Graphic 2

**In case of contradictory reporting I would  
mostly rely on ...**



Quelle: JIM 2012, Angaben in Prozent  
Basis: alle Befragten, n=1.201  
[www.mpfs.de](http://www.mpfs.de)

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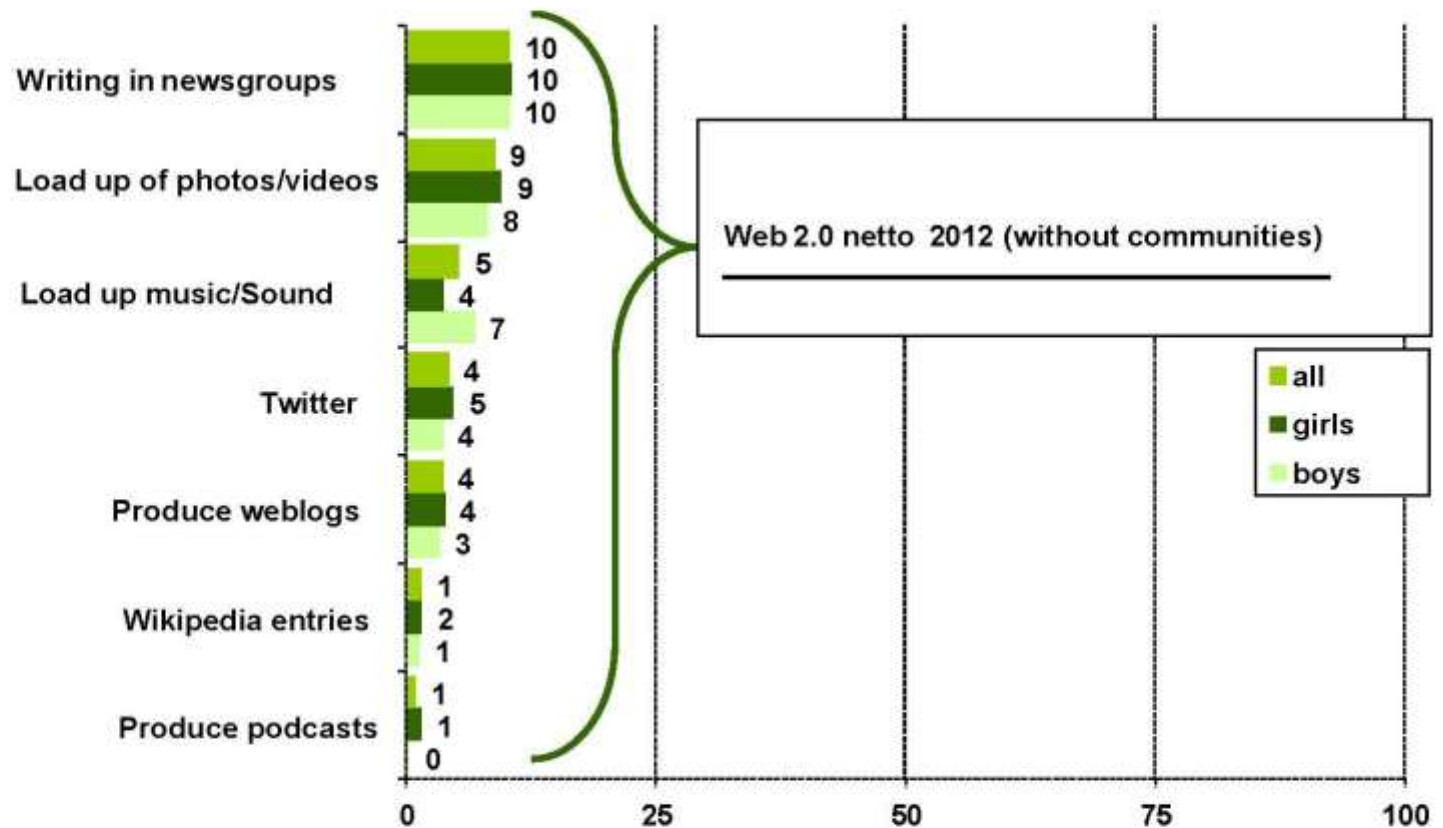
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  - **Some young people do take an active - producing - role in web 2.0, but not yet very many.**

©Thomas Ratgeb: Informationsverhalten von Jugendlichen. In: Informationskompetenz im Kindes- und Jugendalter, 2012

## Activities in the Internet – Web 2.0 - daily/several times per week -



Quelle: JIM 2012, Angaben in Prozent  
Basis: alle Befragten, n=1.201  
[www.mpfs.de](http://www.mpfs.de)



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**Statistical data show a variable juvenile usage of different media, but longitudinal studies do not reveal motivational background and leave open reliability of feedback.**

©Thomas Ratgeb: Informationsverhalten von Jugendlichen. In: Informationskompetenz im Kindes- und Jugendalter, 2012

## 1.2 Information Behaviour of Children in the Internet

DJI-Study (2012)     DJI:= German Youth Institute

Focus: three German search engines for children

Mixed-Methods-Study: logfile-analyses - qualitative participating observation - several quantitative surveys (6-12 years when controlled)

Results

- 75% knowledge, 45% usage (cf. Google: 97% knowledge, 91% usage)
- School generated and motivated use is prevailing for most kids' search engines
- The percentage of one-word (64%) and more-word searching (search string length) does not differ from the quote of adults

Qualitative study shows:

- Children often copy the question they were asked to answer.
- Children often realize the advantage of selected content in children search engines in comparison with Google etc., when they ask for special knowledge.
- Children cannot cope with contradicting results.

## 1.3 Societal conclusions on research results

The experts' interpretation of data is split: a more optimistic position is in conflict with a conservative fear of decline of competencies.

1. Theoretically framed by a discrimination of profound knowledge (first rank knowledge) and process- or meta-knowledge (**second rank knowledge**), produced by the internet and digital media some predict information behaviour avoiding deep knowledge!

© Nina Degele: Neue Kompetenzen im Internet. Kommunikation abwehren. Information vermeiden! In: Die Google Gesellschaft. Vom digitalen Wandel des Wissens. 2005

2. Statistical data may indicate a growing diversity in information behaviour of juveniles, but individual motivations cannot be detected by quantitative usage data and respondents may answer according to expectations.

## 1.4 Educational conclusion on research results

‘Information skills are needed more than ever and at a higher level if people are to really avail themselves of the benefits of an information society.

Emerging research findings from the US points to the fact that these skills need to be inculcated ***during the formative years of childhood:***

by university or college it is too late to reverse engineer deeply ingrained habits, notably an uncritical trust in branded search engines to deliver quick fixes.’

© *Information behaviour of the researcher of the future. A CIBER Briefing Paper, January 2008*  
[http://www.jisc.ac.uk/media/documents/programmes/reppres/gg\\_final\\_keynote\\_11012008.pdf](http://www.jisc.ac.uk/media/documents/programmes/reppres/gg_final_keynote_11012008.pdf)

**IL education is needed at the level of schools!**

## 2 German school situation 1

### Stimulating background for IL:

#### European and German Educational Reform Objectives

1. **The holistic view on education:** The whole life span from early childhood to vocational education and in-service training is seen as a continuum of lifelong learning
2. **The dynamic view on education:** Knowledge, skills and challenges change according to technical, social and economic framework conditions
3. From input orientation to **output orientation:** Instruction is designed towards competences' and standards' oriented teaching and self-regulated learning



individual  
classroom  
institutional  
level

## 2.1 German school situation: Hampering peripherals

Which conditions hamper introduction of IL in German schools?

### 1. A curricular innovation overload

- Adjustment to competences and standards
- new contents to be integrated
- more vocational orientation
- reduction of secondary level schooling by one school year

### 2. An administrative overload

- growing self-administration requirements
- school programmes
- competitive financing
- evaluations, reporting and other measures of quality assurance

### 3. Teachers' lack of understanding the urgent need for IL

## 2.3 German school situation: positive aspects

- Many IL principles are basics of good teaching already
  - forming the search questions,
  - usage of different information sources,
  - critical judgement,
  - imparting and presenting information in a correct way
- There are many examples of IL instruction which include the internet and juvenile information practice (compared to library driven courses of IL)
  - Google and wikipedia as objectives of instruction
  - Juvenile websites
  - Social implications (cyber-mobbing, illegal downloads)
- IL principles are slowly finding their way into standards and curricula
  - In course of the nation wide process of harmonization of school standards IL principles play a role, even if the term itself is seldom used.
- There is a renaissance of media education in the German school system, which is mainly induced by ‚dangers‘ of media use and supports the attention of information behaviour.

### 3 IL in German schools

How to implement IL content in school instruction?

 Perform advantages and assess success!

- Tie up to existing information behaviour, preserve approved practice and show improvements by new competencies!
- Practise of attitudes based on IL within the existing instruction of subjects can start very early,
- Assessment of school success should include assessment of methodological competencies:
  - The IEA International Computer and Information Literacy Study (ICILS) 2013 will examine the outcomes of student computer and information literacy (CIL) across countries.
  - PISA 2015 will have a special focus on ICT literacy, development of tests in progress. Martin Senkbeil, Jan Marten Ihme & Jörg Wittwer: The Test of Technological and Information Literacy (TILT) in the National Educational Panel Study: Development, empirical testing, and evidence for validity
  - Michael Balceris: Medien- und Informationskompetenz. Modellierung und Messung von Informationskompetenz bei Schülern.



# This is it!

## Thank U!

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# 1 Basic concern


## Background for interventions to improve IL at the level of schools and pupils

- Information and learning strategies of young adults are already fairly automatized.


© Ballstaedt, Steffen-Peter: Kognition und Wahrnehmung in der Informations- und Wissensgesellschaft (2005)

© Handbuch Lernstrategien (2006)

- There is a growing variety of information sources

 increase knowledge of sources and their problem specific adequacy!

- Current political awareness of social implications of lacks in IL and even dangers, especially in the role of an emittent, support a national IL strategy

 we need to focus on a comprehensive concept of IL (role of recipient and emittent)!

- The concept of IL is in line with current and future educational goals

 motivate teachers and learners by improvement and success!

# 5 Strategic Options (for discussion phase)

1. Integration into instruction of suitable existing subjects
  - Strive for inclusion of IL principles into secondary schools' curricula,
  - Representation in concepts of media education
  - Promote convincing examples of **better practice** by IL approaches
    - involve publishers and
    - use internet portals and OER platforms
    - instruction must be more efficient in the sense of curricular goals by application of IL standards
  
2. Target groups for a public campaign and/or strategic partners
  - Information Professionals and information infrastructure providers
  - Information Science
  - Take-up in educational politics and visions
  - **Teachers**