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Approaches and Perspectives on Assessment of Information and Media Literacy related to Formal Education

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Overview

Introduction

21st Century Pedagogy

Media Literacy, Information Literacy &
ICT Literacy

Examples from ITK.basic

Pilot Study

Results

Final Considerations

Introduction



ICT in schools

Teacher's
competences

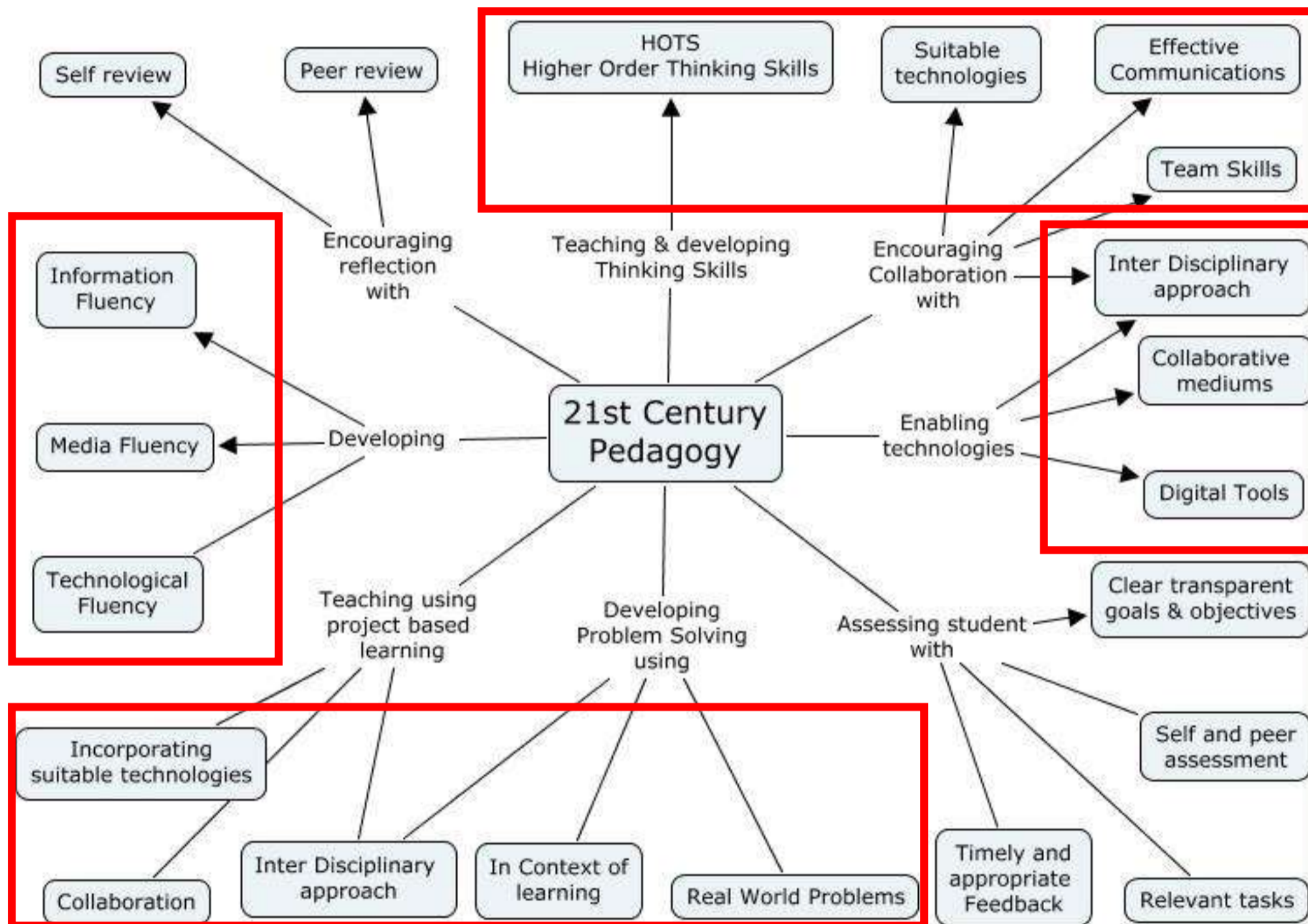
New requirements
for students

Innovation in
teaching practice





21st Century Pedagogy



- Changing perspectives
- Consciousness
- Employability
- Human resources potential and Innovation
- ...

Media Literacy, Information Literacy & ICT Literacy



Differing terminology worldwide (Zylka, Müller & Martins, 2011)

Heterogeneous Discourses

- Discourse on Digital, IT, and ICT Literacy (Hague & Payton, 2010; Gomez, 2011, ETS 2002)
- Discourse on Media Literacy (Education) (Aufderheide & Firestone, 1993; Hobbs, 2009)
- Discourse on Media Competence (Gapski, 2001/2006; Schorb, 2009)

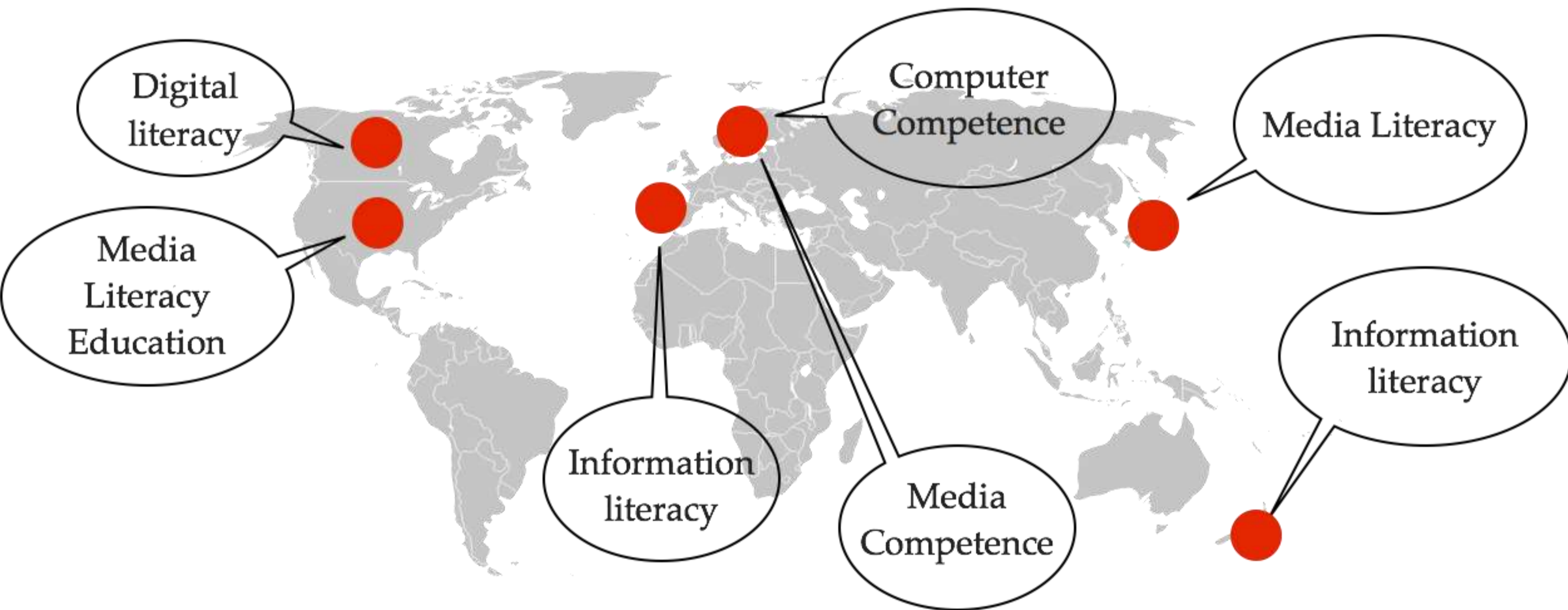
Fundamental theoretical discussions on

- Competence (Weinert, 2001)
- Literacy (UNESCO, 2003)

New Developments

- Media and Information Literacy (UNESCO 2012/2013)

Media Literacy, Information Literacy & ICT Literacy





ICT Literacy vs. Media Competencies

„ICT Literacy is using digital technology, communication tools, and/or networks to access, manage, integrate, evaluate, and create information in order to function in a knowledge society.“

(ETS, 2002, S.16)

Media Competence		
Knowledge on Media	Media Evaluation	Active Media Work
Functions Structure Orientation	Critical Reflection Qualification (ethical, cognitive)	Media appropriation Media use Media participation Media design



Assessment

Generally only few studies are focussing on the assessment of

- ICT Literacy
- Media Literacy
- Computer Competencies

If studies are being conducted in this context

- Lack in reliability and validity (Petko, 2012)
- Focus on behavioral or motivational facets (OECD, 2011)
- Lack in including cognitive facets, mostly knowledge
- When including knowledge aspects, mostly focus upon accessing it via self-efficacy (Senkbeil, 2004)



ITK.basic

Questionnaire developed in Germany with good reliability, validity, and objectivity (Zylka, 2013)

- e.g., Cronbach's $\alpha = 0.84$

Focus on assessing digital media-related competencies

22 multiple choice items

Originally in German language

Successfully applied in larger studies in Germany and India for

- Teachers
- Students (university and schools)

Translated to Portuguese and English



Examples from ITK.basic

What choice is correct regarding the online encyclopedia Wikipedia?

- Information contained in Wikipedia is written by Wikipedia users.***
- Information contained in Wikipedia is just from online resources.
- Information contained in Wikipedia is always correct and up-to-date.
- Wikipedia is a corporate group of Microsoft.
- I don't know.

Zylka, 2013

What is the meaning of the expression „malware“?

- It's a synonym for computer viruses.
- Unwanted and user-damaging software products.***
- Faulty software products.
- It's a software which contains all the offers from American malls.
- I don't know.

Zylka, 2013

Pilot Study



Assessing teachers' media literacy competences in Brazil

- The answers were classified in three levels:
 - right, wrong, and I don't know
- Analysis of the data and assess the survey's internal consistency
- Assessing the reaction from Brazilians educators to the ITK.basic achievements

Pilot Study



Sample Contextualization:

- 59 professionals from two schools of Basic Education Schools (elementary and high school)
- Teachers, Principals, Administratives
- The south of Brazil has very good qualitative indicators regarding the census of basic education (IBGE)

Pilot Study



Details on the study sample

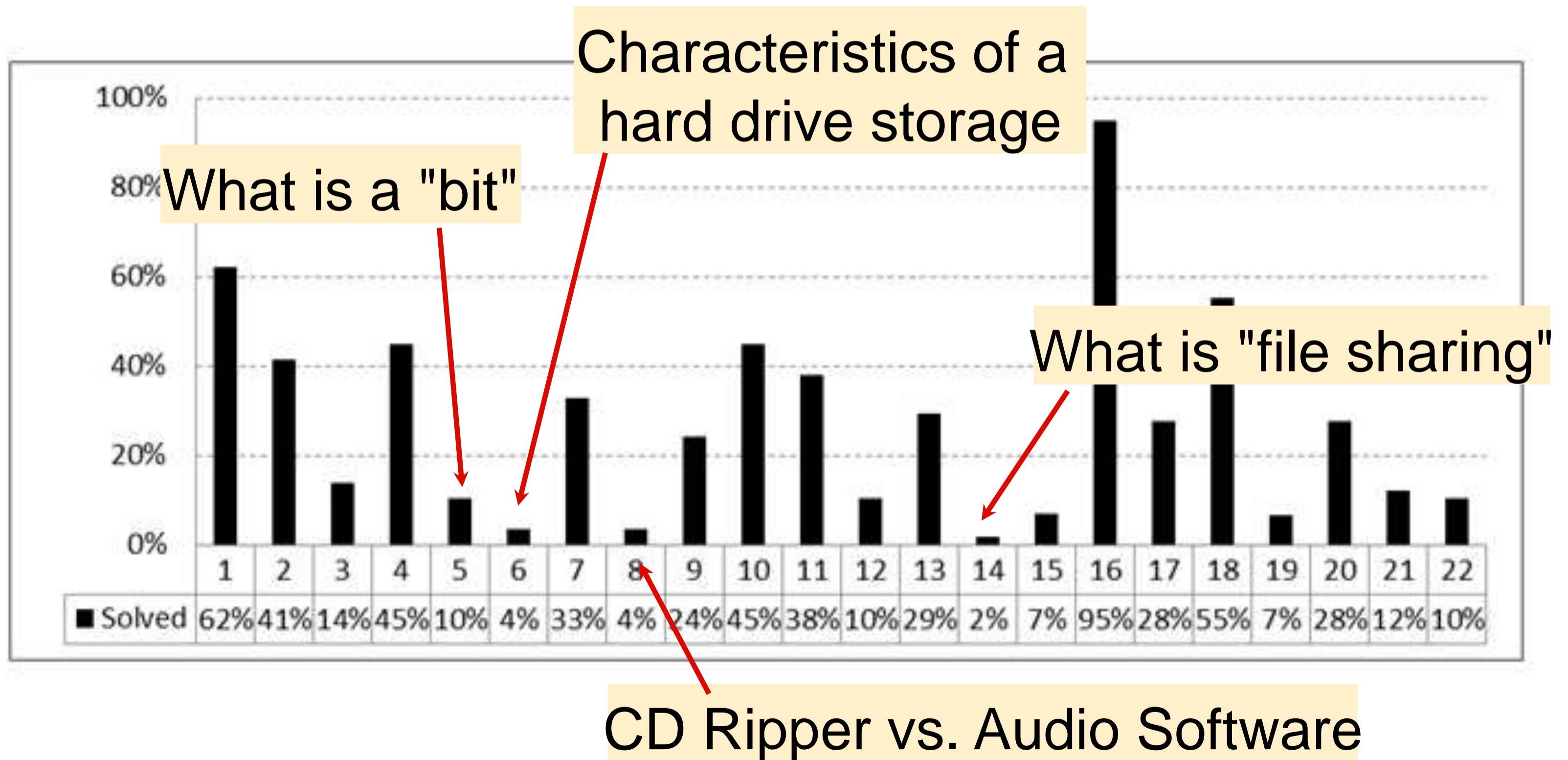
	N	female (%)	male (%)	Average age	Work Time Average
School 1*	35	26 (74,3)	8 (22,8)	39.2	11.5
School 2	24	19 (79,2)	5 (20,8)	40.5	12.4
Total	59	45 (76,3)	13 (22)	39.7	11.7

* One test person from school 1 did not answer the question related to the gender.

Results



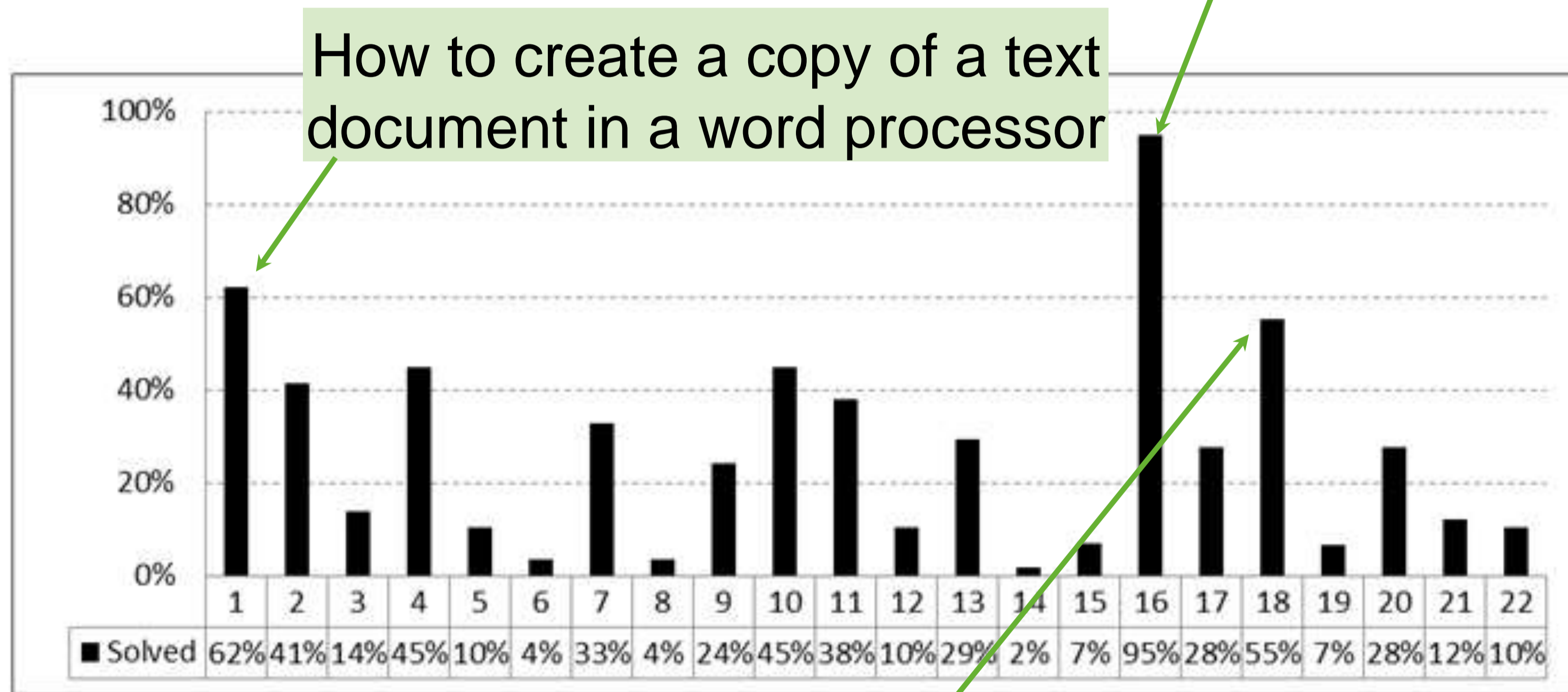
Percentages of correct answers



Results



Percentages of correct answers



How to create a copy of a text document in a word processor

What is "e-mail"?

What is a "spam filter"?



Results

ITK.basic efficacy

- Similar weak results as those obtained in Germany
- The internal consistence was verified
 - Cronbach's $\alpha = 0.794$

Brazilian context

- The technological maturity is new (started at middle of 1990's)
- Two kinds of teachers profiles
 - Technological opponents vs. sympathizers

Results



Reaction of teachers/principals:

- Recognized the lack of media literacy competences
- Questioning about the suitability of that survey to Brazilian reality
- High interesting from novice teachers in learn how to use ITK.Basic as a pedagogical tool



Final Considerations

Media Literacy Impacts to Education in Brazil

- The updates in teaching practice is required and wanted by numerous educators
- The system and policies need to overcome the historical delay regarding developments in ICT (professional and cultural adaptation)
- The ITK.basic brought light to issues must be rethought regarding the way to assess media literacy in Brazil



Questions?



References

Educational Testing Service (2002). Digital Transformation – A Framework for ICT Literacy. A Report for the International ICT Literacy Panel. Princeton: ETS.

Zylka, J. (2013). Media Literacy and its Assessment – Development of Knowledge Test on IT Knowledge for Teacher Students, Teacher Trainees and Teachers. Internationale Hochschulschriften, Band 589. Münster et al.: Waxmann.