



Catholic University in Ružomberok

Pupils in the Virtual World and Education

Ján Gunčaga

Janka Majherová

Hedviga Palásthy

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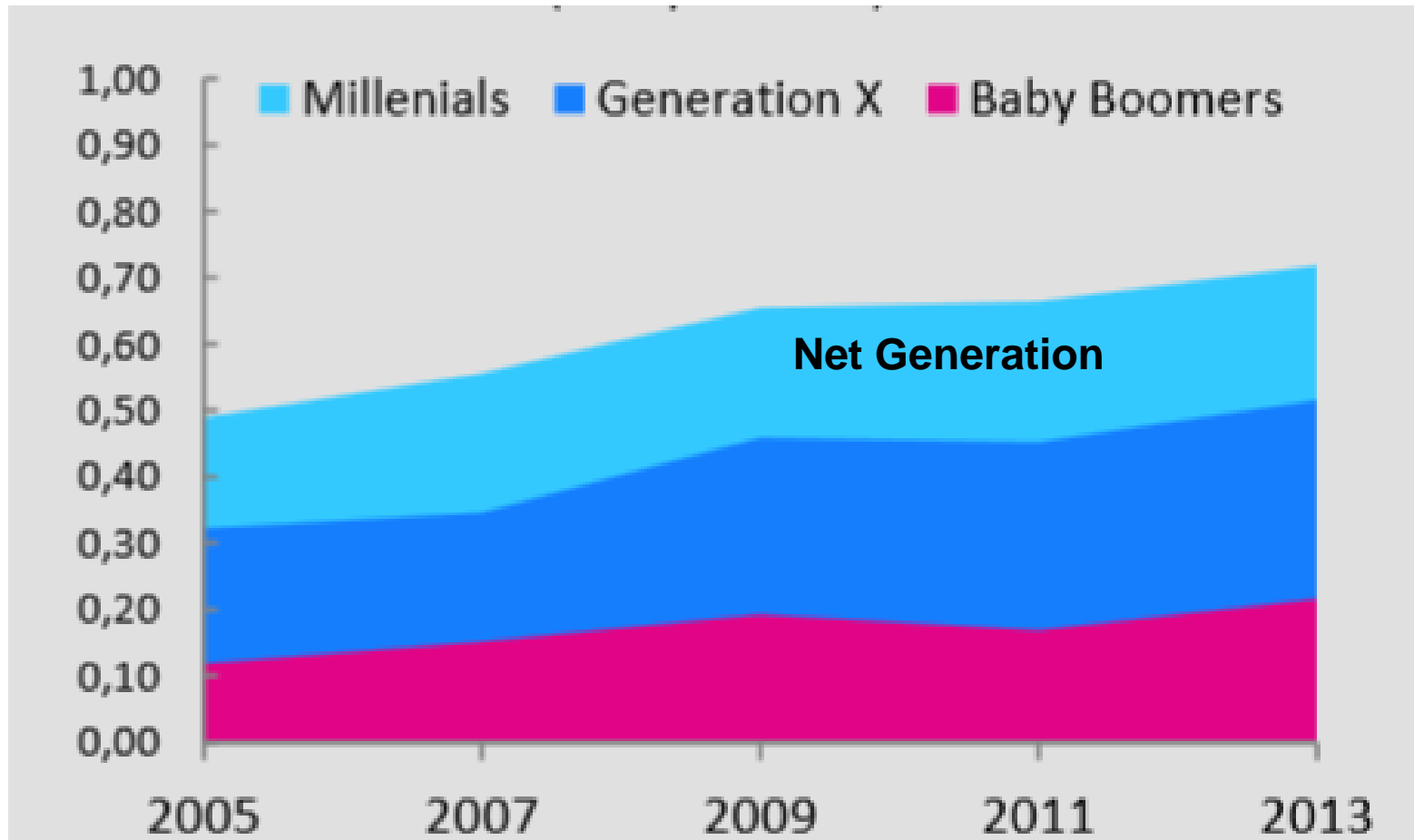
Objectives

- analyse of relationship of pupils and the virtual world of the Internet in secondary education
- opportunities for sharing educational materials
- show example for using of the digital version of Bloom's taxonomy in subject Informatics

Main parts

- Digital literacy in Slovakia
- Results of survey - pupils and web
- Digital Bloom's taxonomy and subject Informatics

Digital literacy in Slovakia



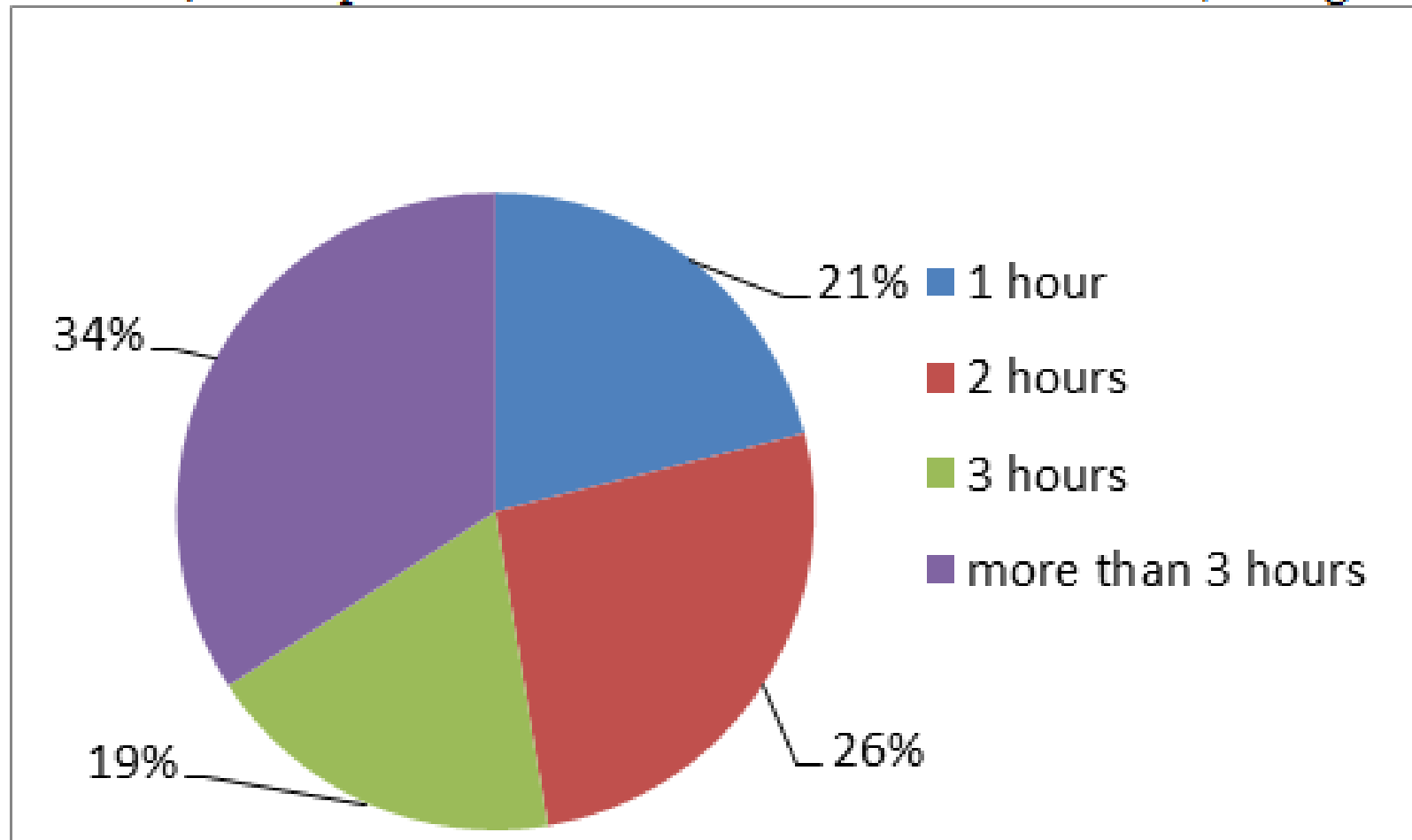
Level of digital literacy

- the school has the most influence on the increase of digital literacy
- knowledge and skills in the majority of ordinary ICT
- difficulties with the ability to understand information and use it in various formats from different sources, presented through ICT

Survey results

- 66 pupils, 28 girls and 38 boys, from two primary schools in Bratislava and Ružomberok
- average age of the respondents was 13 years
- results were compared with the results of research from all over Slovakia, conducted in 2010

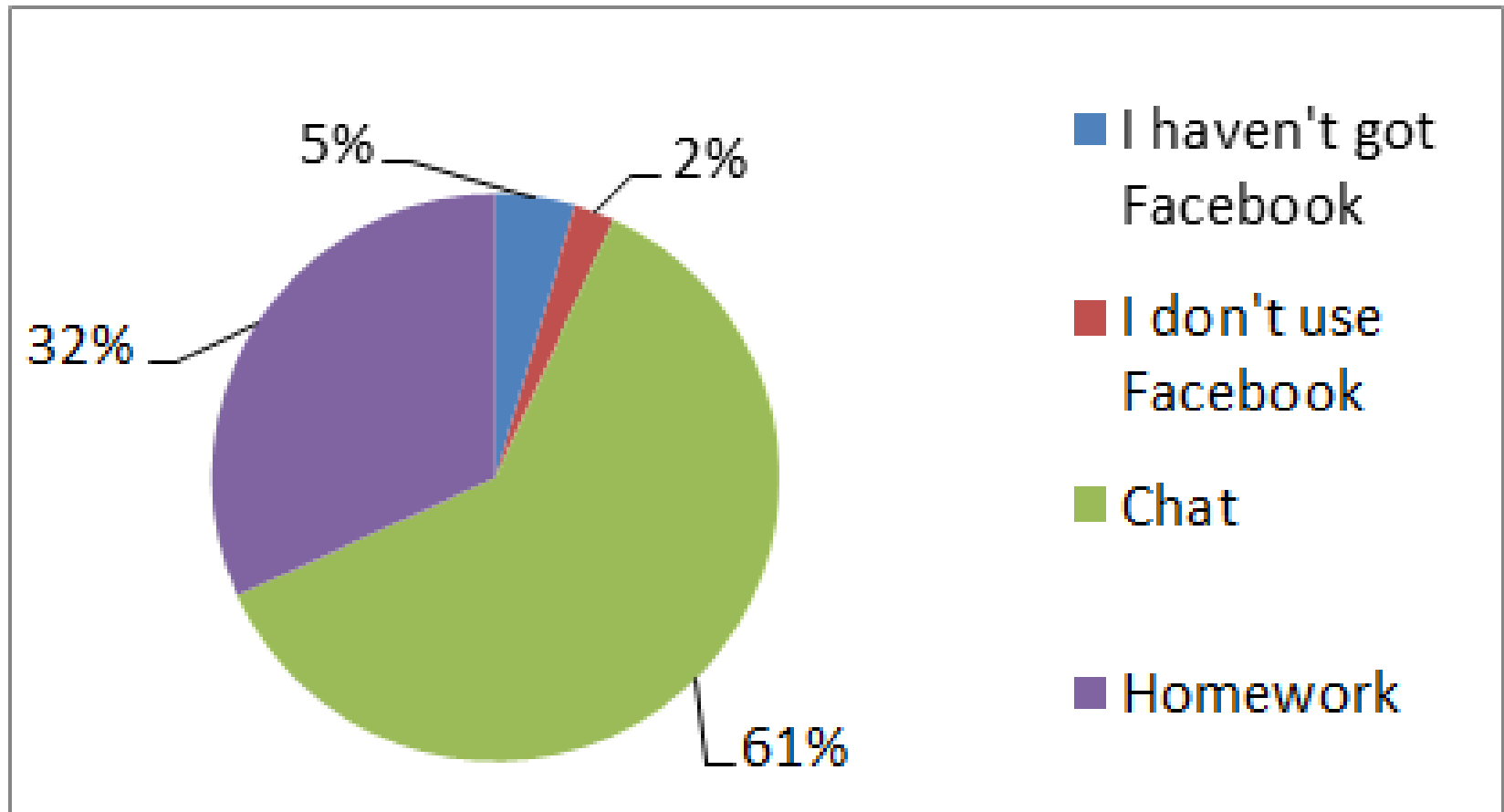
Time spent on the Internet - boys



Most popular Internet activities

- 2010 – chat, watching videos, downloading,
- 2013 – most often
 - downloading movies and music
 - social network activities
 - 91 % population 14-17years
 - 59% every day
- decrease in using e-mail, playing online games

Facebook and preparing for school - boys



How pupils use Internet for school

- Search information / Google, Wikipedia
- Science subjects - projects
- Sharing of teaching materials
- Electronic test solutions

Key competences

- To present the acquired knowledge and apply it in everyday life.
- To creatively process information and use it while studying.
- To know how to analyse and use credible sources of information from the Internet.
- To locate, sort and process information.
- To apply knowledge to specific problems.

Revised Bloom's Taxonomy of educational objectives (2001)

- 1) Remembering
- 2) Understanding
- 3) Applying
- 4) Analyzing
- 5) Evaluating
- 6) Creating

Digital application of Bloom's taxonomy

Level	Activities	Digital addition
Applying	Implementing, carrying out, using, executing, ...	running, loading, playing, operating, hacking, uploading, sharing, editing
Understanding	Interpreting, summarising, paraphrasing, classifying, comparing,	Advanced searching, boolean searching, blog journalling, tagging, categorising and tagging, ...
Remembering	Recognising, listing, describing, identifying, retrieving, naming, finding, ...	Bullet pointing, bookmarking, social networking, Searching, googling, ...

Level	Activities	Digital addition
Creating	<i>designing, constructing, planning, producing, inventing, devising, making</i>	programming, filming, animating, Blogging, Video blogging, wiki-ing, publishing
Evaluating	<i>Checking, hypothesising, critiquing, Experimenting, judging, testing</i>	(Blog/vlog) commenting, reviewing, posting, moderating, collaborating, ...
Analysing	<i>Comparing, deconstructing, finding, structuring, integrating</i>	Mashing, linking, reverse-engineering, mind-mapping

Example educational objectives

- Remember - to search, to select, to solve an online test ...
- Understand - to structure the information - creation of a mind map,
- Apply - editing of various types of information (graphics, text, numbers, etc.) , publication within an online environment, ...

Example educational objectives

- Analyze - to recognise the structure of information content, to identify the origin of the individual components ...
- Asses – to present outputs of project teaching, to evaluate the seriousness of the source
- Create - to create of presentations or the telling of digital stories

Key competences

- to locate, collect and process information and use it in a critical and systematic way, to visit websites, or create them on their own,
- to assess their importance and distinguish between real and virtual information
- to use tools for the creation, presentation and understanding of complex information,
- to acquire, search and use Internet services

Conclusion

- updating the contents of the subject of Informatics,
- extending the learning objectives about the digital dimension,
- future teachers

sources

- Velšic, M.: Digital literacy through the optics of the young generation. Research report.
- Churches, A.: Edorigami.
<http://edorigami.wikispaces.com/Bloom%27s+Digital+Taxonomy>
- Kalaš, I.: Learning activities for students in the 21st Century
- Prensky, M.: Digital Natives, Digital Immigrants.

Thank you for your attention!
