University of Maribor

Faculty of Electrical Engineering and Computer Science

FERI

Students' use of Facebook and potentials to use Facebook in the classroom

Lili Nemec Zlatolas, PhD

Outline

1. **Presentation**
2. Facebook as a teaching tool
3. Research on students' use of Facebook
4. Privacy issues and Facebook
5. Research on privacy awareness among students
6. Research on information disclosure among Slovenian youth
7. Conclusion

Database Technology Laboratory

- At the Institute of Informatics
- 7 members
- Research fields: databases, data warehousing, cryptography, security, privacy, medical informatics

- Teaching Assistant of Informatics at Faculty of Electrical Engineering and Computer Science for the courses:
    - Programming for Media
    - Data warehousing
    - Security of ICT
    - Data protection
    - Information Security
- Researcher at Database Technology Laboratory at Institute of Informatics:
    - privacy and self-disclosure on social networking sites
    - information security and privacy in general

- Local chair of the conferences:
    - KMO conference (Maribor, August 2015)
    - LTEC workshop (Maribor, August 2015)
- Local committee (head of reception):
    - EJC 2015 conference (Maribor, June 2015)
    - EAEEIE 2011 conference (Maribor, June 2011)
    - EJC 2009 conference (Maribor, June 2009)
- PhD thesis defense in October 2015

4

Outline

1. Presentation
2. **Facebook as a teaching tool**
3. Research on students' use of Facebook
4. Privacy issues and Facebook
5. Research on privacy awareness among students
6. Research on information disclosure among Slovenian youth
7. Conclusion

Web 2.0 and SNS

■ Web 2.0

- The users are actively participating in the development of contents

- Development of social networking sites

- **e.g. blogs, social networks, wikis etc. - students are familiar with these technologies**

Facebook

- 2004 – founded, used only by Harvard students
- 2006 - open to broader public
- 2009 - the most popular social networking site
- Number of active users on Facebook in June 2014: **1.35 billion**

- Number of internet users in 2014: **2.9 billion**

Facebook as a teaching tool

- Facebook is a big part of students' lives – great potential

- 2006 - 80 % of colleges in the USA had a Facebook page and in these colleges about 85 % of students had Facebook accounts

- Facebook could function as a supplement to the course

8

Using Facebook features as course supplements

- **Different ways of using Facebook as course supplements:**
  - **Applications** that are mostly developed by third parties and shared through Facebook
  - Features that are developed by Facebook:
    - Facebook **Chat**
   - Facebook **Pages**
    - Facebook **Groups**
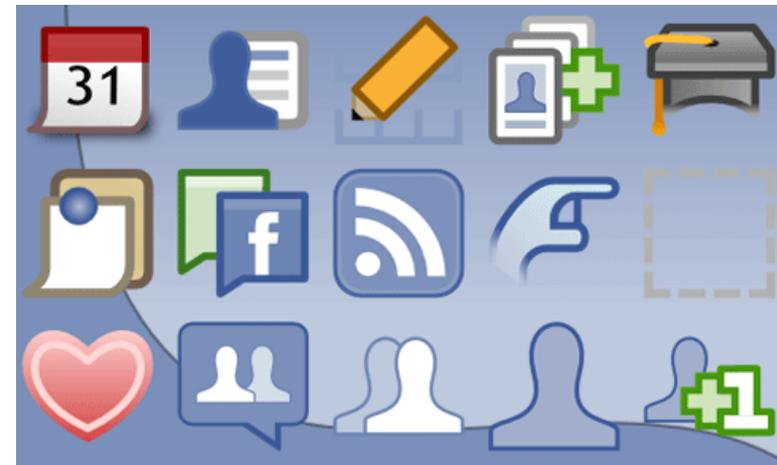
Facebook Applications for Courses

Some available applications, but not too popular any more.

Facebook Applications	User		Application requirements		Monthly active users world-wide	
	Educator	Student	Access basic information	Send emails		
SlideShare	X	X	X	X	500.000	Sharing slides with students
Slidely	X	X			1.000.000	Sharing slides with students
Quizlet	X	X	X	X	100.000	Creating quizes and learning

10
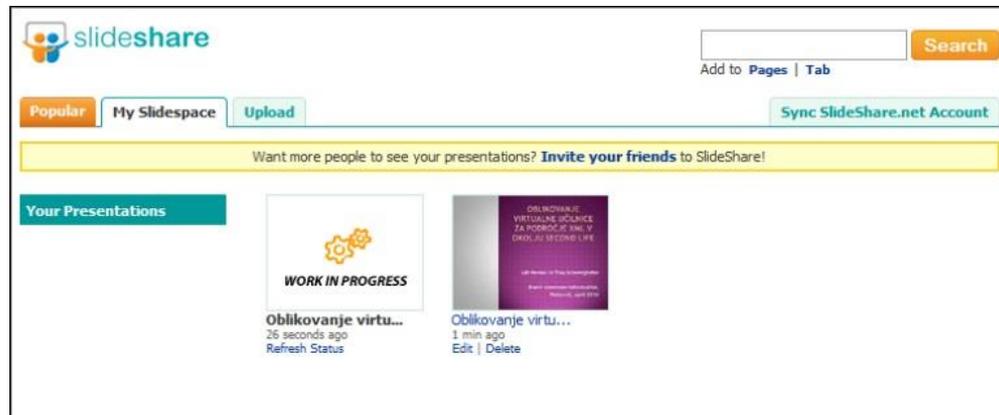
Application's access to educators and students profiles

- Applications have access to some parts of user's profile
- Educators' and students' data could be threatened by third parties which develop applications
- Not ethical to ask students to add applications like this?
- Educators can develop their own application on Facebook

# Other ways of implementing Facebook into courses

- **Facebook Groups**
  - as a notification and discussion board
  - Wall of the Group (links, videos, images,…)
  - Types: Open, Closed, Secret
- **Facebook Pages**
  - similar to Groups, but more appropriate for bigger groups or bigger courses (e.g. Coursera)
  - open type (accessible to everyone)
- **Facebook Chat**
  - enabled by default
  - users can chat with their added friends
  - educator and his students should be friends on Facebook
  - educators should make a separate List named for students and turn it off and on
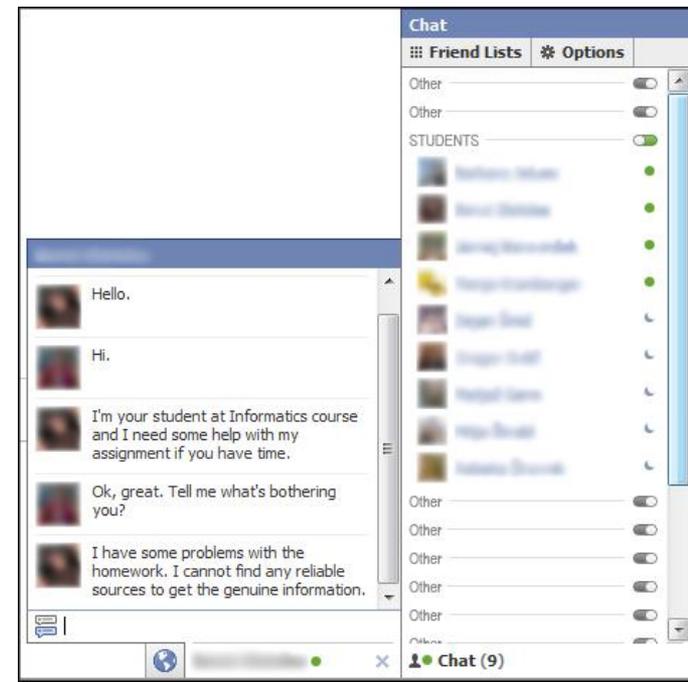
Outline

1. Presentation
2. Facebook as a teaching tool
3. **Research on students' use of Facebook**
4. Privacy issues and Facebook
5. Research on privacy awareness among students
6. Research on information disclosure among Slovenian youth
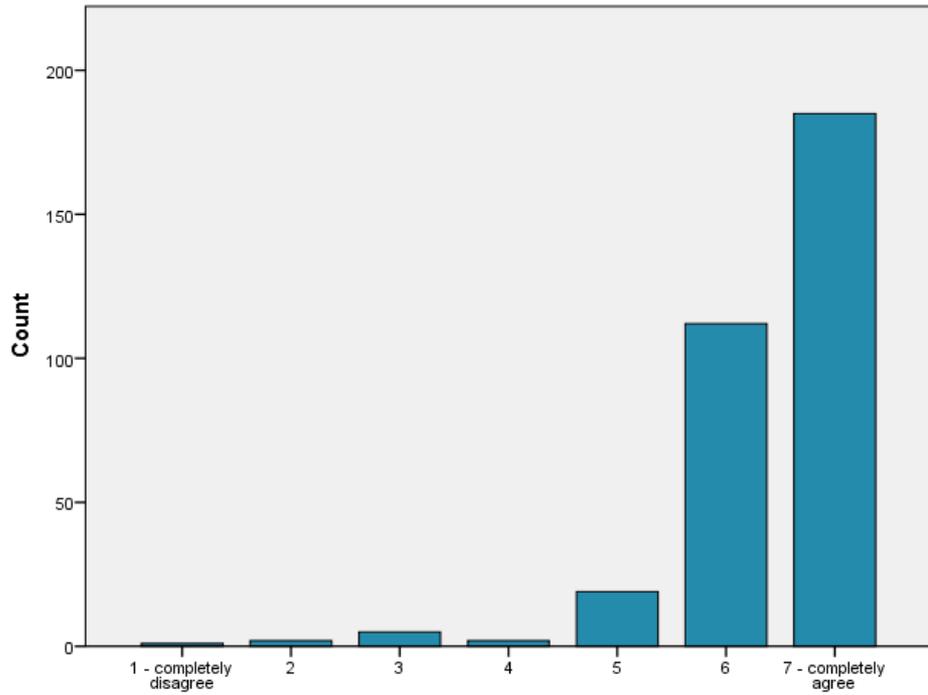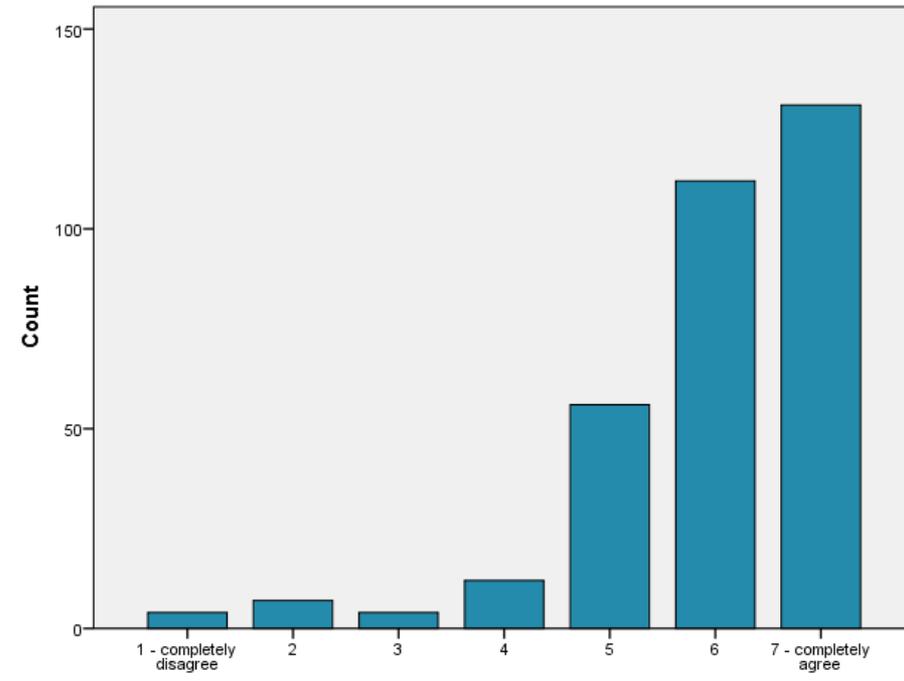7. Conclusion

Research on students´ use of Facebook

- Research on the use of Facebook among Slovenian students (2016)

- Web based survey

- 65 questions in total

- n=326 students (statistically-valid with a 95% confidence level and 5.42% margin of error; all together 80.800 students in Slovenia)

Research on students´ use of internet and Facebook

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Experience Internet	326	1	7	6,41	,893

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Experience with Facebook	326	1	7	5,97	1,219

15

Average use of Facebook

Average use of Facebook per day

- 0-10 minutes per day
- 10-30 minutes per day
- 30-60 minutes per day
- 1-2 hours per day
- 2-3 hours per day
- more than 3 hours per day
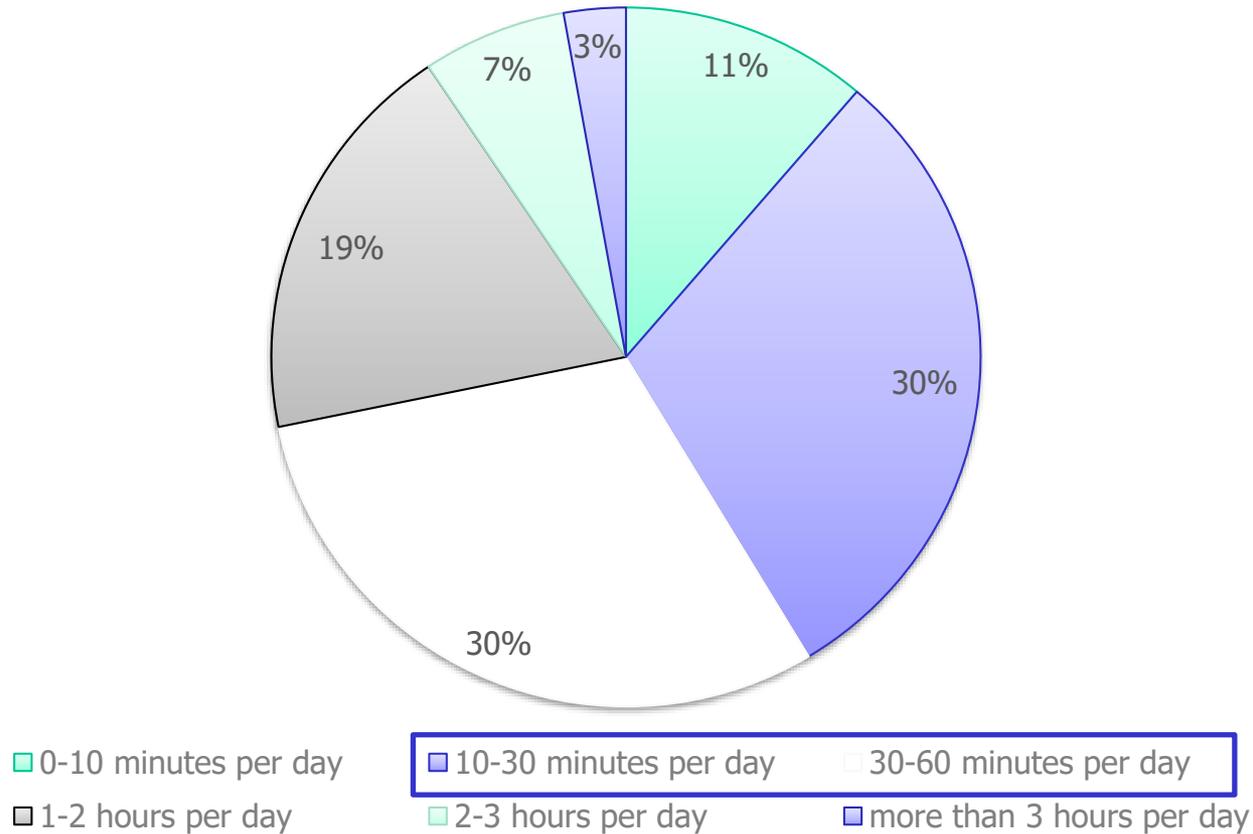
Checking students' profiles

Who looked at your profile?

Category	Percentage
superior at work	15,60%
my future employees	19,00%
my coworkers	25,80%
unknown persons	43,90%
persons, whom I met at the party	74,20%
persons, who study at the same Faculty as me	77,00%
friends of my friends	77,90%
acquaitances	80,10%
my family members	81,60%
my friends	98,80%

17
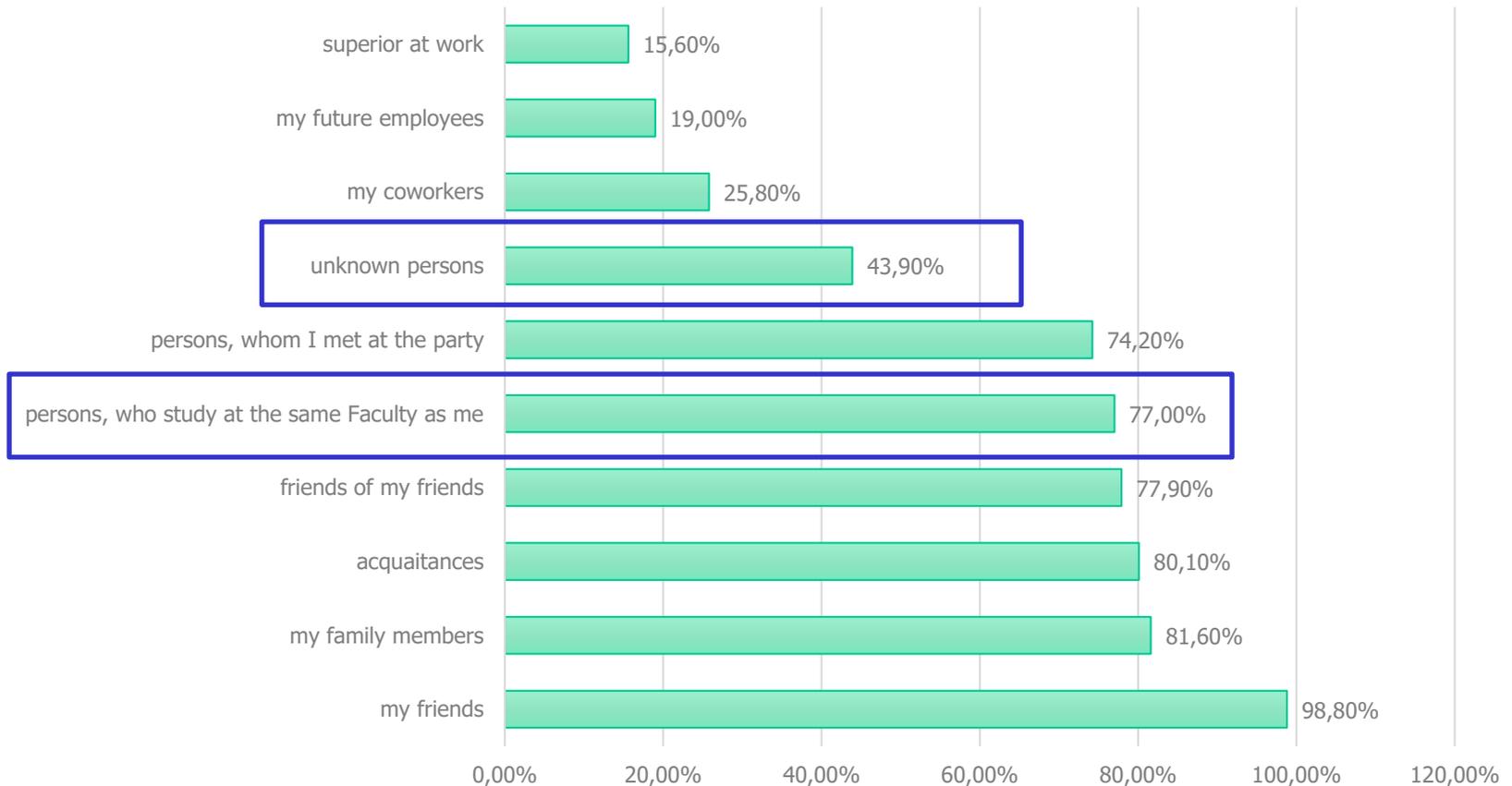
Reasons for using Facebook

Why do you use Facebook?
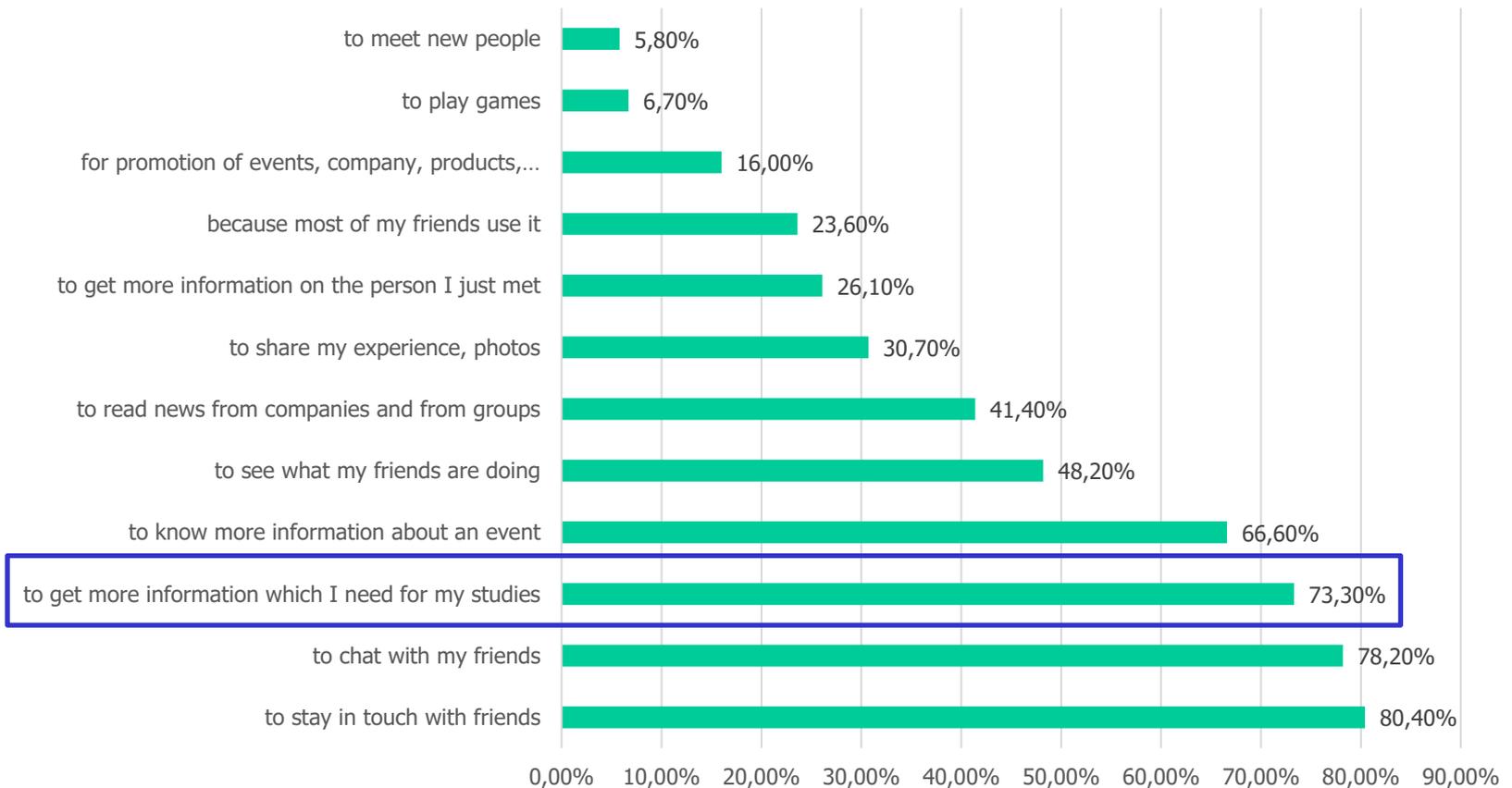
Reason	Percentage
to meet new people	5,80%
to play games	6,70%
for promotion of events, company, products,...	16,00%
because most of my friends use it	23,60%
to get more information on the person I just met	26,10%
to share my experience, photos	30,70%
to read news from companies and from groups	41,40%
to see what my friends are doing	48,20%
to know more information about an event	66,60%
to get more information which I need for my studies	73,30%
to chat with my friends	78,20%
to stay in touch with friends	80,40%

18

Outline

1. Presentation
2. Facebook as a teaching tool
3. Research on students' use of Facebook
4. **Privacy issues and Facebook**
5. Research on privacy awareness among students
6. Research on information disclosure among Slovenian youth
7. Conclusion

Privacy issues

- Exposing information from profiles to students, educators or to applications

2010 (Apr)

Wall posts
Networks
The Entire Internet
All Facebook Users
Photos
Contact Info
FoF
Likes
Friends
Friends
You
Name
Friends
Picture
Birthday
Gender
Other Profile Data

Click the chart to advance, or click on a year

2005
2006
2007
2009 (Nov)
2009 (Dec)
2010 (Apr)

Availability of your personal data on Facebook (default settings)
Number of People

1   8.5K   1.8B
130   400M

Matt McKeon, May 2010

McKeon, M. (2011). The Evolution of Privacy on Facebook.

21

Privacy settings in 2011

Privacy settings in 2015

Privacy settings of educator and student profiles on Facebook

- Setting privacy settings – two Facebook accounts or good privacy settings
- Real name policy by Facebook
- Privacy awareness of students and educators

Outline

1. Presentation
2. Facebook as a teaching tool
3. Research on students' use of Facebook
4. Privacy issues and Facebook
5. **Research on privacy awareness among students**
6. Research on information disclosure among Slovenian youth
7. Conclusion

Research on privacy awareness

- Research on privacy awareness among Slovenian students (2011)
- Web based survey
- 59 questions in total
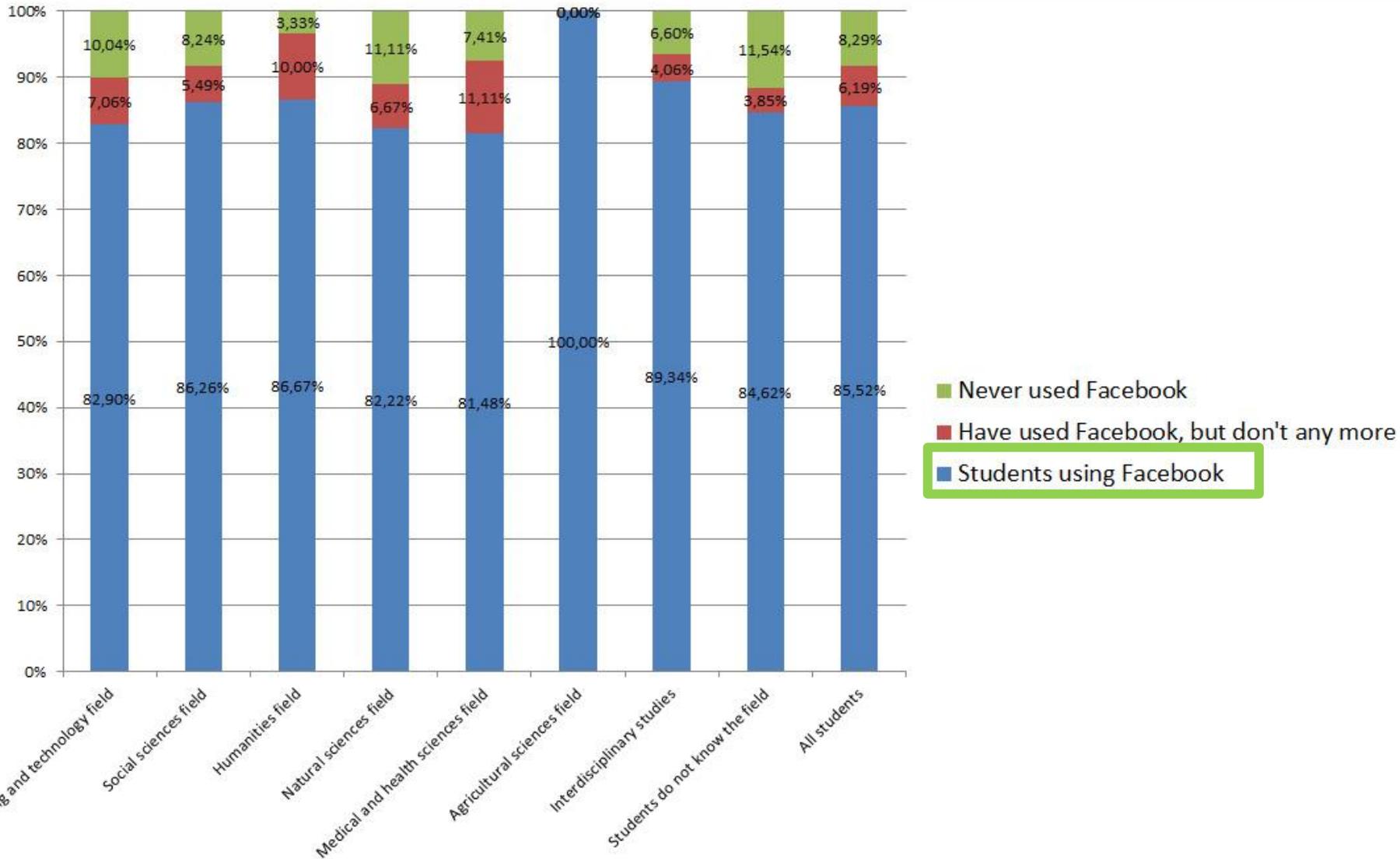- n=808 students (statistically-valid with a 95% confidence level and 3.5% margin of error)

Fields of Science and Technology
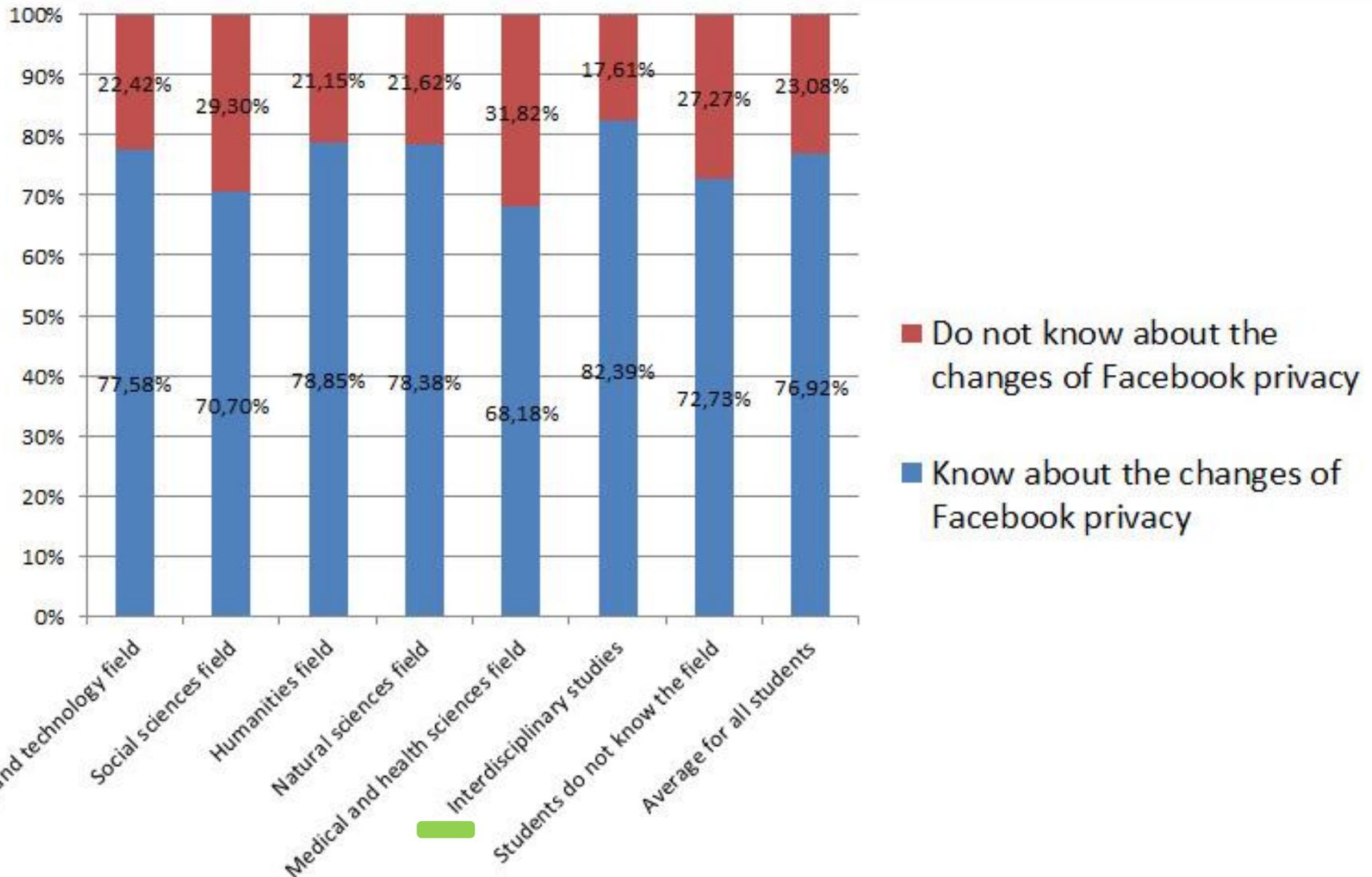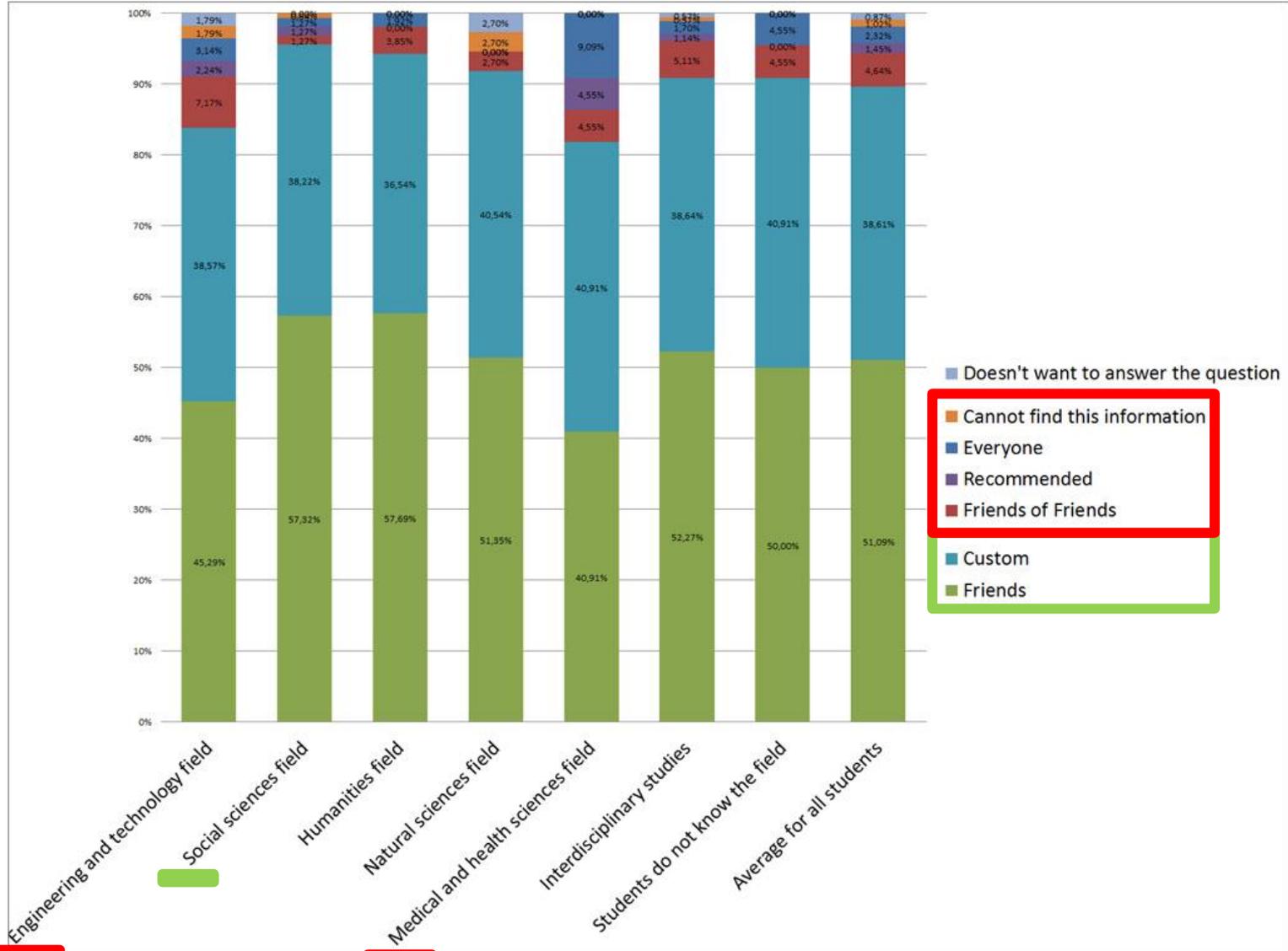## (based on the Frascati Manual – OECD, 2002)
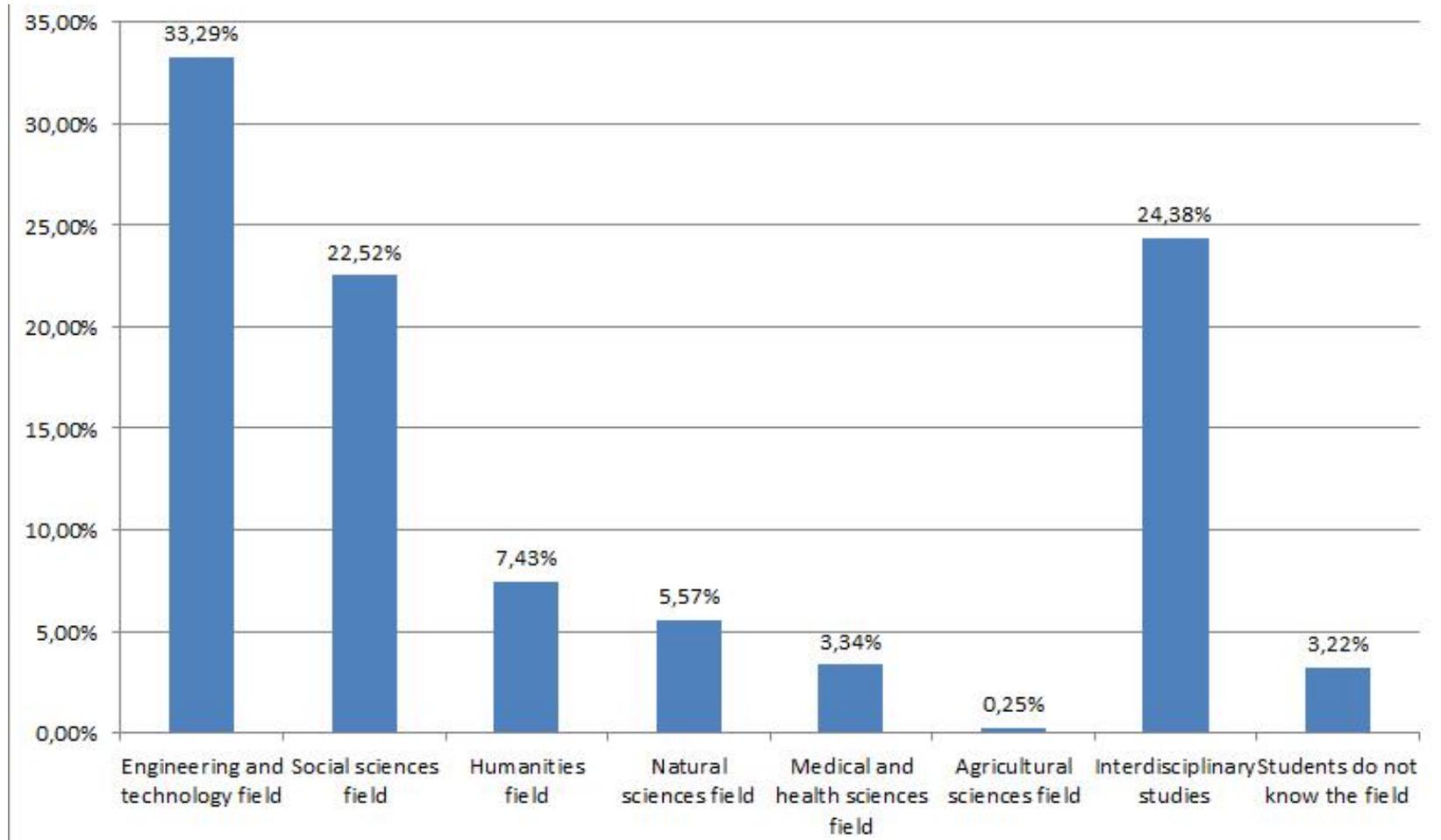
Usage of Facebook

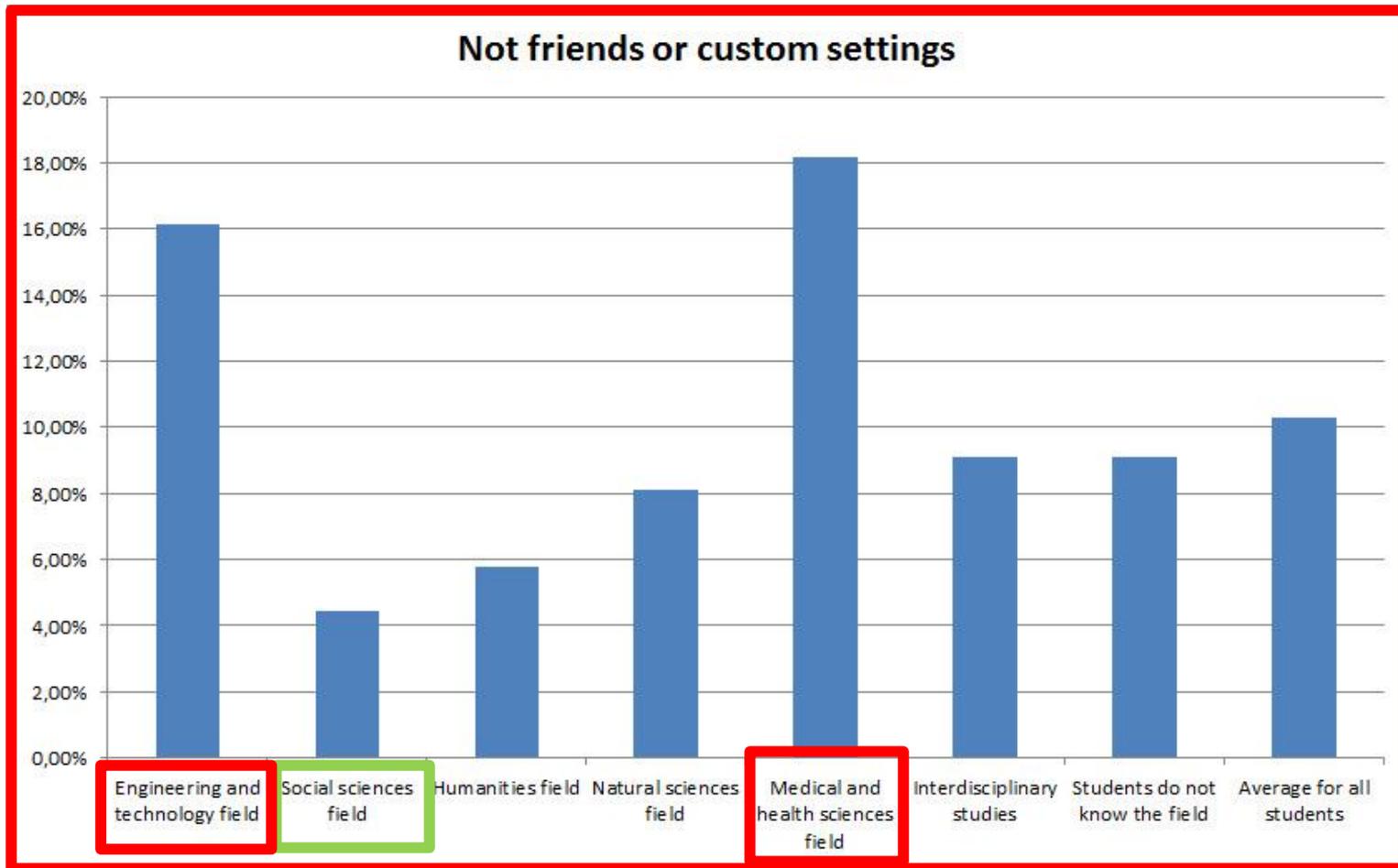# Student awareness on changes of Facebook privacy policy

Student privacy settings

Student privacy settings not set to Friends or Custom

n=689

Outline

1. Presentation
2. Facebook as a teaching tool
3. Research on students' use of Facebook
4. Privacy issues and Facebook
5. Research on privacy awareness among students
6. **Research on information disclosure among Slovenian youth**
7. Conclusion

Research on information disclosure

- Research on information disclosure among Slovenian youth (2013)
- Web based survey
- 65 questions in total
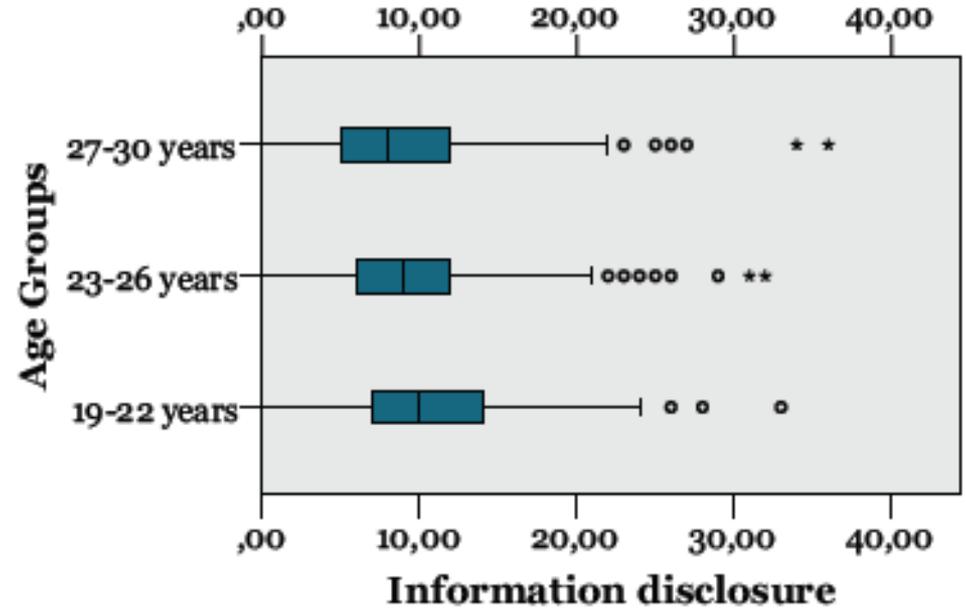- N=940 respondents

Information disclosure on Facebook

Information Disclosure - Age Groups

ANOVA

19-22 years (n=465):
- mean 10.95
- standard deviation 5.45
- maximum 33

27-30 years (n=181):
- mean 9.25
- standard deviation 5.88
- maximum 36

23-26 years (n=294):
- mean 9.87
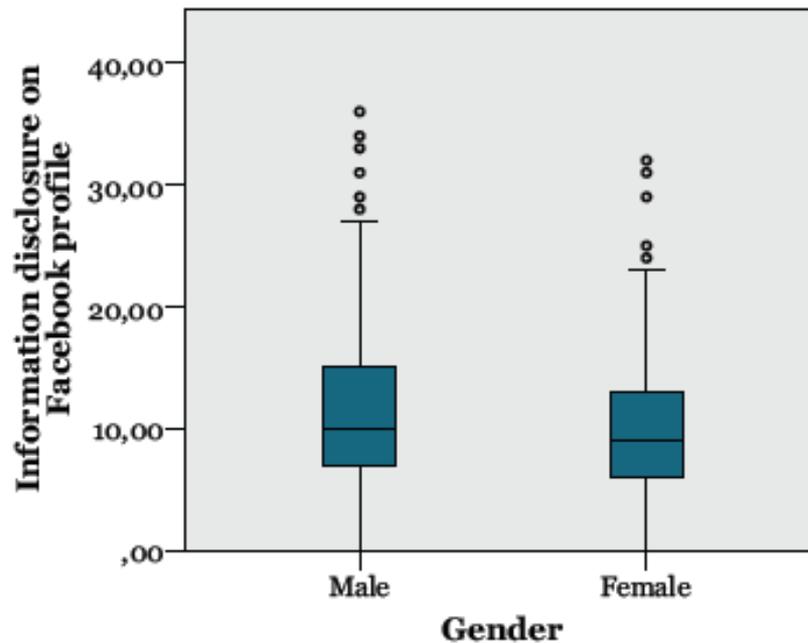- standard deviation 5.80
- maximum 32

Post-hoc Bonferroni test

Multiple Comparisons						
Dependent Variable: Information disclosure on Facebook						
(I) Age Group	(J) Age Group	Mean Differ. (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
19-22 years	23-26 y	1.07854*	0.42037	0.031	0.0704	2.0867
	27-30 y	1.69854*	0.49427	0.002	0.5132	2.8839
23-26 years	19-22 y	-1.07854*	0.42037	0.031	-2.0867	-0.0704
	27-30 y	0.62001	0.53302	0.735	-0.6583	1.8983
27-30 years	19-22 y	-1.69854*	0.49427	0.002	-2.8839	-0.5132
	23-26 y	-0.62001	0.53302	0.735	-1.8983	0.6583
*. The mean difference is significant at the 0.05 level.						

Information Disclosure - Gender

females (n=524):
- *mean 9.64*
- *standard deviation 4.97*
- *minimum 0*
- *maximum 32*

males (n=416):
- *mean 11.11*
- *standard deviation 6.37*
- *minimum 0*
- *maximum 36*

36

Outline

1. Presentation
2. Facebook as a teaching tool
3. Research on students' use of Facebook
4. Privacy issues and Facebook
5. Research on privacy awareness among students
6. Research on information disclosure among Slovenian youth
7. **Conclusion**

Conclusions

- Facebook - students are comfortable in this environment
- No unique application that allows similar operations to Moodle – using mixture of Facebook features and applications
- Facebook can be used only as a course supplement
- Privacy issues – raising awareness
- In 2016/17 we will try to use a Closed Facebook Group for the course Programming for Media and report on the results

University of Maribor

Faculty of Electrical Engineering
and Computer Science

FERI

Students' use of Facebook and potentials to use Facebook in the classroom

Lili Nemec Zlatolas

lili.nemeczlatolas@um.si