New learning environments with focus on ICT in Sweden

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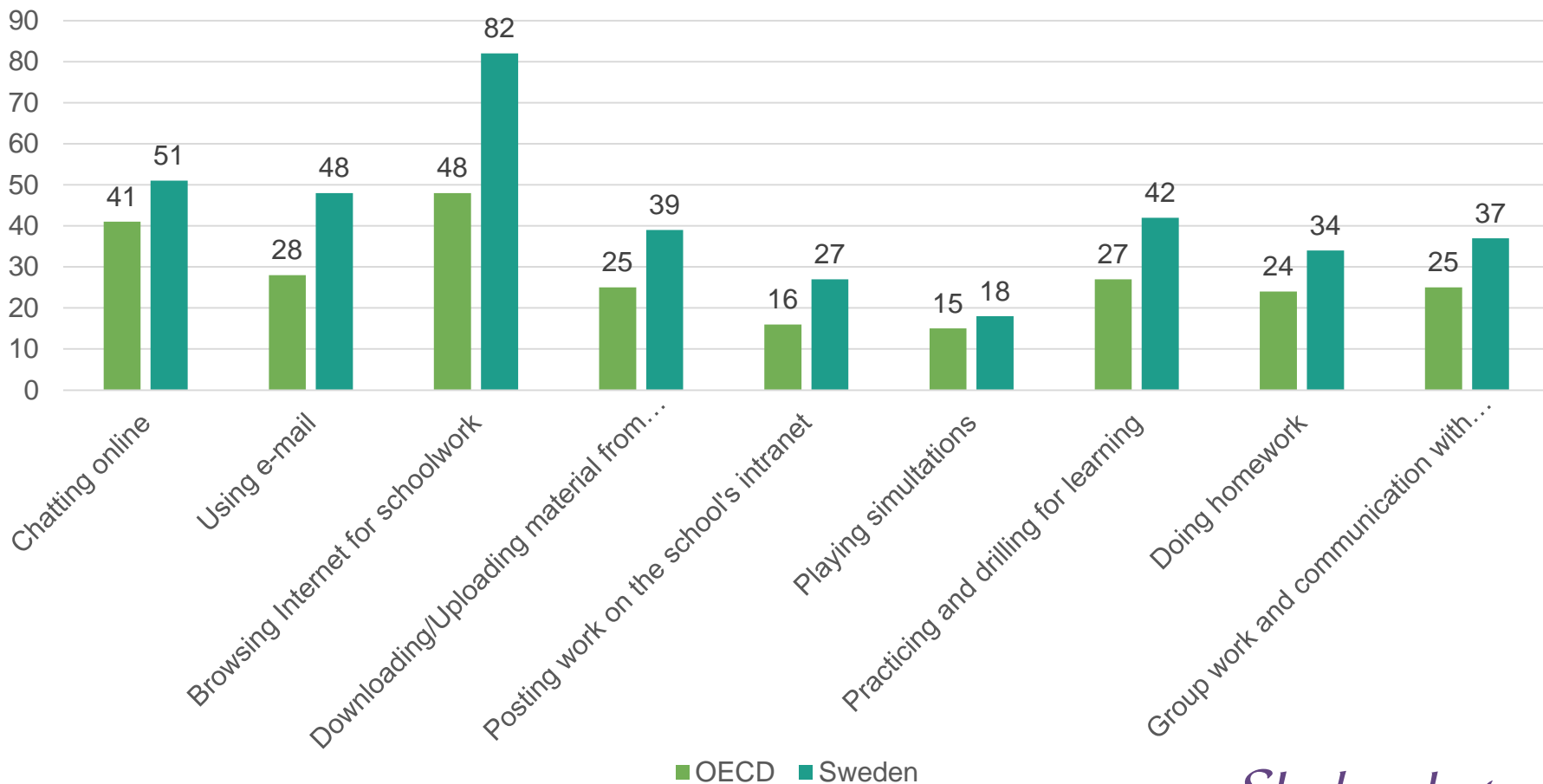*Skolverket*

What we will talk about

- Background: Usage &Access with data from PISA 2015 and National follow-up on ICT usage and accesss in schools

- National Digitalization Strategy for the School system

- National Action Plan for School Digitalization

- Digitalization in Curricula & Syllabuses

- Digitalization of National Tests

- Examples of succesful implementation of ICT in 1 school and 1 municipality

- Ådalsskolan
- Botkyrka

Skolverket

ICT access and usage in PISA 2015

- **Internet usage has increased in almost all OECD-countries compared to 2012**

- **Almost all Swedish students have access to a computer with internet connection in school**

- **Sweden, one of the countries where students report the highest usage of ICT at school**

- **Almost 50% of Swedish 15-year olds spend at least 4 hours/day on internet outside of school on a typical weekday. OECD-average is 32%**

- **About 62% of Swedish 15-year olds spend at least 4 hours/day on internet outside of school on a weekend day. OECD-average is 47%**

- **Gender differences in 15-year olds internet usage outside of school are particularly high in Sweden**

Skolverket

ICT usage in school in PISA 2015

Percentage of students who use digital devices for the following activities at school at least once or twice a week:

Activity	OECD	Sweden
Chatting online	41	51
Using e-mail	28	48
Browsing Internet for schoolwork	48	82
Downloading/Uploading material from…	25	39
Posting work on the school's intranet	16	27
Playing simulations	15	18
Practicing and drilling for learning	27	42
Doing homework	24	34
Group work and communication with…	25	37

■ OECD ■ Sweden

Skolverket
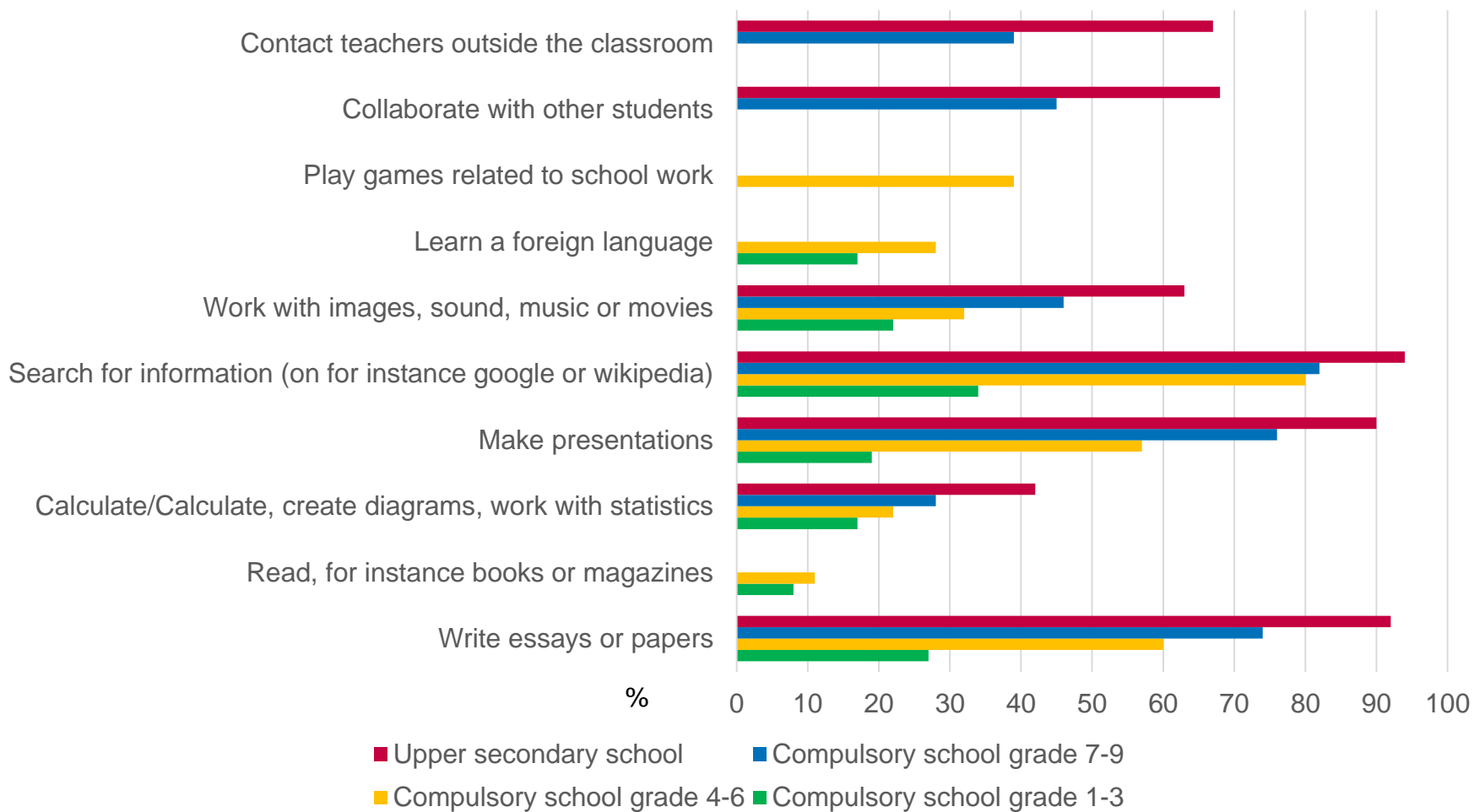
Negative correlations
of extreme internet usage

- **There's a correlation between extreme internet usage and…**

- late arrival

- skipping classes and skipping a whole school day

- lower educational expectations

- lower performance in Science, Reading and Mathematics

- lower performance in Collaborative Problem Solving

Skolverket

ICT access and usage Sweden 2015

- 1/5 preschool teachers report that they use computer/tablet every day in pedagogical activities with the children

- Most common activities in preschool: work with music or art, language development, science and technology

- 14% of the teachers in grade 1-3 report that their students use a computer/tablet every day

- 6% of students in grade 4-6 report that they use a computer/tablet every day in school for school-work

- Proportion of students in grade 7-9 that use a computer/tablet/smart phone at all/almost all lessons varies between 3% - 47 % depending on school subject

- Proportion of students in upper secondary school that use a computer/tablet/smart phone at all/almost all lessons varies between 5% - 70% depending on school subject

Skolverket

ICT access and usage Sweden 2015

Proportion of students doing following activities

Legend:
- Upper secondary school (crimson)
- Compulsory school grade 7-9 (blue)
- Compulsory school grade 4-6 (yellow)
- Compulsory school grade 1-3 (green)

Activities (top to bottom):
- Contact teachers outside the classroom
- Collaborate with other students
- Play games related to school work
- Learn a foreign language
- Work with images, sound, music or movies
- Search for information (on for instance google or wikipedia)
- Make presentations
- Calculate/Calculate, create diagrams, work with statistics
- Read, for instance books or magazines
- Write essays or papers

X-axis: % (0 to 100)

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ICT access and usage Sweden 2015

- 7/10 preschool teachers report that their ICT skills are very or quite good

- 8/10 teachers in compulsory school report that their ICT skills are very or quite good

- 8/10 teachers in upper secondary school report that their ICT skills are very or quite good

Skolverket

ICT access and usage Sweden 2015

Proportion of teachers with a high or rather high need for capacity builing in following areas

Legend:
- ■ Preschool teachers
- ■ Upper secondary school teachers
- ■ Compulsory school teachers

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