

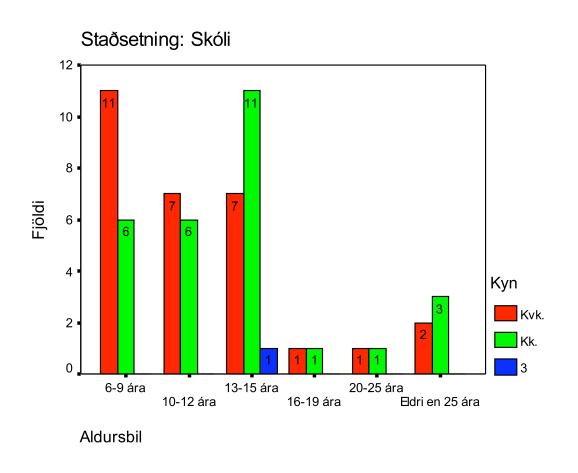
### Goal

- Z Examine how Icelandic children and adolescents are using the Internet
- Provide graduate students that are in a diploma program on ICT in education at KHÍ researchrelated experience in data gathering and analysis.

### **Graduate students 2002**

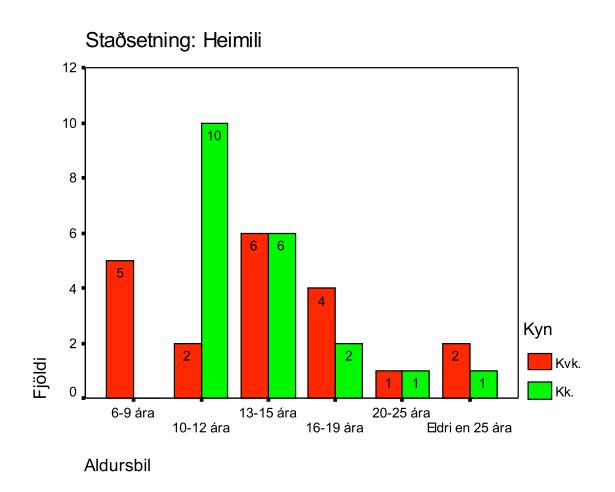
- Were taking a course managed by Salvör Gissurardóttir, assistant professor KHÍ -Teaching and Learning on the Internet in Spring quarter 2002. Research participation was evaluated as 1/2 credit (1 ects), managed by Sólveig Jakobsdóttir, associate professor KHÍ.
- Most are practicing teachers. In 2002 there were 22 graduate students that participated 17 women and 5 men.
- Made observations and short interviews of 102

# Study participants 2002 from schools, chosen randomly

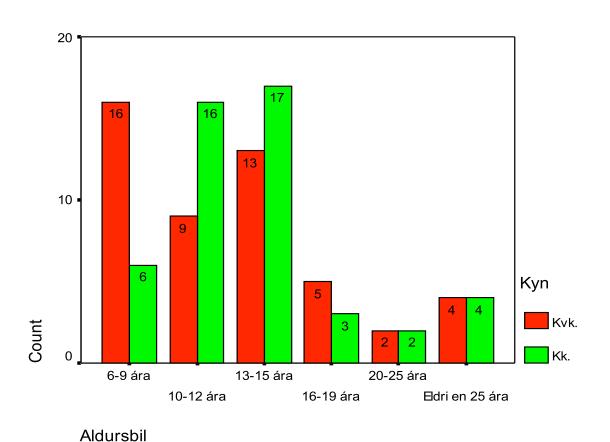


X-axis = age, y-axis = Number, red = individual girls, green = individual boys, blue = pair of children

# Participants from homes in 2002 (i.e. connected to grad. students' families)



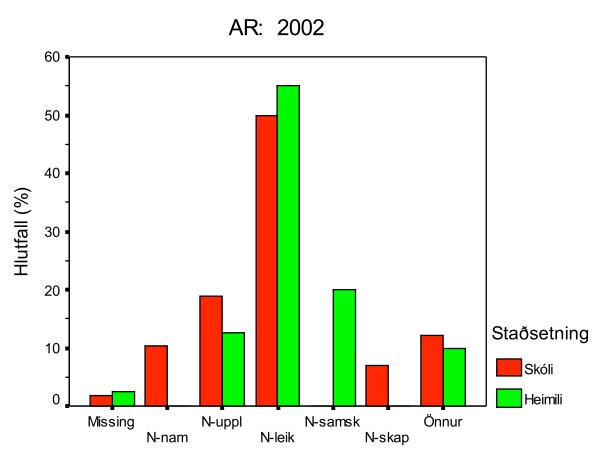
### Participants 2002, everyone



### **Observations - instructions**

Write down as fast as you can everything that the individual being observed is doing - try to include movements, facial expressions, sounds, words, keyboarding skills, interaction with the screen and others, things going on on the screen

### **Types of Internet Use**



Forritaflokkur

N-nam = learning related, N-uppl = information search, N-leik = games, N-samsk = communications, N-skap=creative, Önnur = Other

### 

Z 86 individuals under 20

Z

They visited 59 webs that were recorded plus a few unrecorded

Z

- Z Entertainment and sports
- Z 62% visited such webs

- Nobody under 10
- Z Girls more entertainment
- Z Boys more sports

- Z Games
- z 52% participants used those

- Not much gender difference
- Most popular among10-12 year olds

- Z Information -related
- Z 31% participants used those

- Z School webs, 9%
- More girls than boys and more prominent among13 years and older

- Z Communications
- Z 22% used those

Z

- More girls than boys
- More prominent among13 years and older

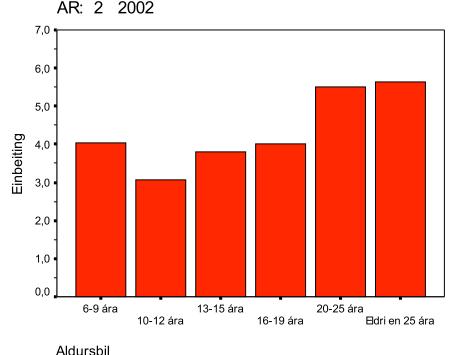
- Z Search machines/webs
- z 19% of participants used those

Z

Mainly an Icelandic one leit.is (16%)

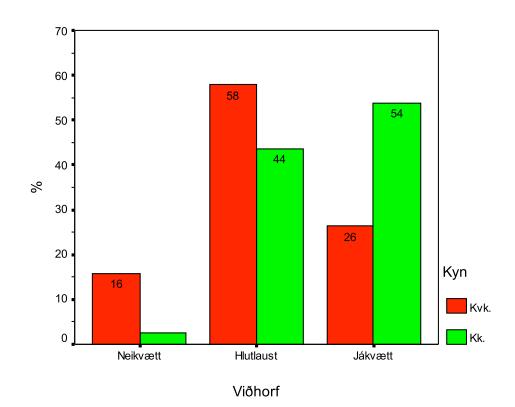
### **Elements coded for - focus**

Increases with age, less with increased interaction with others, and less with fragmentation of cotivity



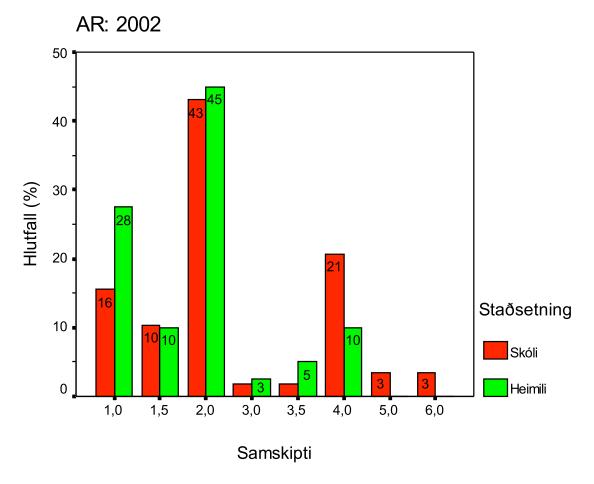
## Elements coded for - attitude/ enjoyment

Z Boys tend to be more openly positive in their behavior than are the girls



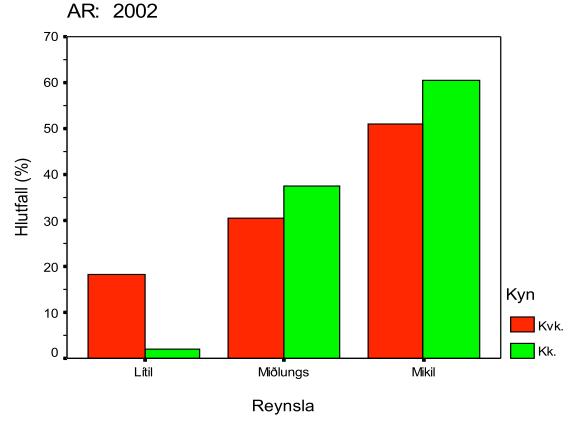
## Elements coded for - communication or interaction with other individuals

More interaction in schools than homes

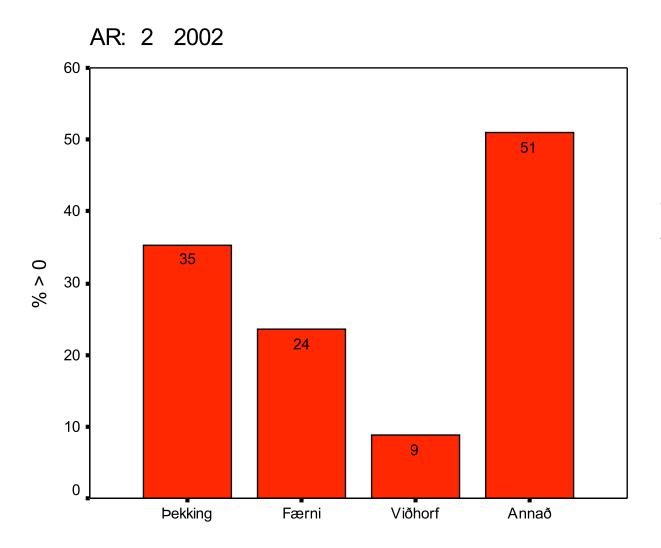


## Elements coded for - how experienced/ confident/skilled the students appear

Boys tend to appear more con dent/less hesitant in what they are doing



# Speculations on what type of learning may be taking place



Þekking = knowledge Færni = Skills Viðhorf = Attitudes Annað =Other (really divided between the other categories)

### Interviews - Internet use

Examining students under 20 years old

Spring 2001, 15 boys and 15 girls
Spring 2002, 24 boys and 25 girls 6-15 years old.
In the interview was e.g. asked about Internet use in and out of school and the use of other types of technology.

### Interviews - Internet use

- Z Games more prominent in younger group than older but in 2001 data but such difference was not visible in the 2002 group?
- Z Trend with project work/information search mentioned more in 2002 than 2001?

## Interviews <sup>2002</sup>

Girls - Internet out of school		
Use the Internet	10	70,5
Do not use Internet	5	33,3
Games	4	26,6
E-mail	3	20
Information search	3	20
Not allowed to use Internet	1	6,6
Chat	1	6,6
Music	1	6,6

Birls - Internet use out of school		
Use the Internet	22	88%
Games	11	44%
E-mail	5	20%
Information search	5	20%
Download pictures	4	16%
Don't use the Net	3	12%
Chat	2	8%
Interest area	2	8%
Music	2	8%
GSM tones	1	4%

Boys - Internet out of school		
Use the Internet	10	66,6
Games	10	66,6
Don't use the Internet	5	33,3
Information search	3	20
Chat	2	13,3
E-mail	2	13
Music	1	6,6

2001

ID42 Interesting web sites (8 year old) www.puki.com.

ID 8 12 years old, buys games over the Net.?

Boys - Internet out of school		
Use the Internet	21	88%
Games	10	42%
E-mail	5	21%
Don't use the Internet	3	13%
Interest areas - vehicles/machines	3	13%
Pictures	3	13%
Chat	2	8%
Information search	2	8%
Music	2	8%

2002

**ID 151** To find ways of cheating at games

**ID 117** Plays games and chats

2001

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Boys - Internet in schools		
Use the Internet	15	100%
Games	9	60
Information searching	5	33,3
Games only	4	26,6
Projects	3	20
Visit home pages	1	5,8

ID 59 It is so boring [to use the Internet at school] - we never get to go on the Interet except to do something boring. We sometimes need to search for something - REALLY boring!

Boys - Internet in schools		
Use the Internet	22	92%
Information search	15	63%
Games	11	46%
Download, view pictures	4	17%
E-mail	3	13%
Chat	3	13%
Don't use the Net	2	8%
Look at websites	2	8%
Webquest	1	4%
Make web pages	1	4%

**ID 117 IRC** 

2001

Girls - Internet in schools		
Use Internet in schools	15	100
Games	6	40
Information search	4	26,6
In regular class	3	20
Sofware	2	13,3
Freetime	2	13,3
In computer class	2	13,3
In special computer class	2	13,3
E-mail	2	13,3

Girls - Internet in schools		
Use the Internet	25	100%
Games	14	56%
Information search	10	40%
Freetime	5	20%
Download/view pictures	4	16%
E-mail	3	12%
Software	1	4%
Chat	0	0%

**ID 111** Just as usuals as the teacher says

irls - technology use out of scho	ol	
TV	14	93%
CD-player	13	87%
Computers	11	73%
Radio	5	33%
Computer games	4	27%
Word processing	3	20%
Play station	2	13%
Game boy	1	7%
GSM	1	7%

Girls - technology out of schoo		
Computers	24	96%
TV/video	18	72%
Games	12	48%
CD-players	10	40%
Radio	9	36%
GSM	8	32%
Don't have GSM	5	20%
Play station	2	8%
GSM-games	2	8%
Don't use computers out of so	1	4%
Computer games	1	4%
Video recorder	1	4%

**ID 146** Watch TV, toaster, gsm, grill, microwave, computers and video

oys - technology out of schoo	ls	
Computers	14	93%
TV-watching	13	87%
Computer games	10	67%
CD-player	8	53%
GSM	5	33%
Play station	4	27%
Radio	3	20%
Gameboy	3	20%
Wordprocessing and home	2	13%
work		
Don't have computers	1	7%
All media	1	7%

Boys - technology out of schools		
Computers	22	92%
TV/video	21	88%
CD-player	14	58%
Games	11	46%
GSM	11	46%
Radio	7	29%
Computer games	5	21%
Play station	4	17%
Game boy	4	17%
GSM games	2	8%
Don't use computers	2	8%
News	1	4%

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Girls - technology use in schools		
Computers	13	87%
TV/video	9	60%
Software	5	33%
CD- players	4	27%
Tape recorders	2	13%
Keyboards (for developing	2	13%
keyboarding skills)		
Radio	1	7%

**ID61** I sometimes do 25 lessons in school and educational software

irls - technology use in scho	ools	
Computers	25	100%
TV/video	12	48%
CD-player	11	44%
Software	8	32%
Radio	6	24%
GSM	3	12%
Information technology	2	8%
Computer games	2	8%
Math	2	8%

**ID 146** Telephone, sometimes, GSM, grill and radio

2002

oys - technology use in schools		
Computers	15	100%
TV/video	7	47%
Software	6	40%
CD-players	4	27%
Word processing	3	20%
TV-documentaries	3	20%
Learn	2	13%
Tape recorder	2	13%
GSM	2	13%
Keyboard to develop kb-skills	1	7%
Radio	0	0%

Boys - technology use in schools		
Computers	21	88%
TV/video	8	33%
Software	6	25%
Projects	6	25%
Computer games	5	21%
CD-player	4	17%
Forbidden to use GSM	4	17%
Radio	3	13%
Don't use computers	3	13%
GSM	2	8%
Math	2	8%
Explorer/frontpage/medidor	2	8%
Vword	2	8%
Chat	1	4%
Ritfinnur - writing software	1	4%

ID 151 Eins og kennarinn segir

# Questions - improving the research model - ongoing study

- Interview checklist, improve
- Make more detailed interviews with older participants.
- NB research not conclusive but provides sort of a window - provides hints about trends and ideas about further research regarding everchanging technology environment and use of the Internet

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