Inter-generational learning of internet skills

CR&DALL Seminar „Teaching your grandmother to suck eggs"
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	Estonia	**Scotland**
Population	1,3 M	5,3 M
Area	45 000 km²	78 000 km²
Density	28 pers/km²	68 pers/km²
SKT per capita	$ 22 000	$ 46 000
Independence from	from 1918 (till1940), 1991	843
Language	Estonian (finno-ugric)	English (germanic)
65+ population	18% (240 000)	17% (900 000)
up to 25	27%	29%

The impact of learning in old age

1. Non-formal learning (like courses of music or arts, sport clubs) increases *subjective wellbeing*

Siegrist, J., Wahrendorf, M. (2009). Participation in socially productive activities and quality of life in early old age: Findings from SHARE.

2. Achieving the next level on qualification increases *subjective wellbeing*

Jenkins, A, & Mostafa, T. (2012). Learning and Wellbeing Trajectories Among Older Adults in England.

But the association between formal education and wellbeing is not proved

3. There are evidences that such an inevitable life event as retirement has the potential to affect person's cognitive functioning

Bonsang, E., Adam, S., Perelman, S. (2012). Does retirement affect cognitive functioning. Journal of Health Economics

The impact of learning in old age

4. Participation in social activities prevents depressive symptoms.
Croezen, S., Avendano, M., Burdorf, A., Lenthe, F. J. (2013).
Does social participation decrease depressive symptoms in old age?

5. Learning in later life can boost intellectual power, assist in maintaining mental functions and help to reverse memory decline.
Cohen, G. D. 2006. *The Mature Mind: The Positive Power of the Aging Brain*. Basic Books, New York.

6. Learning in older age not only maintains but improves such abilities that decline by normal ageing – like speed of reactions and fluid intelligence.
Schneider, K. (2003). The significancec of learning for aging. *Educational Gerontology*. 29: 809-823

Pure Statistics

In Estonia 18% of population is 65+
(increase till **25%** by 2050)

In 2013 the average life expectancy:
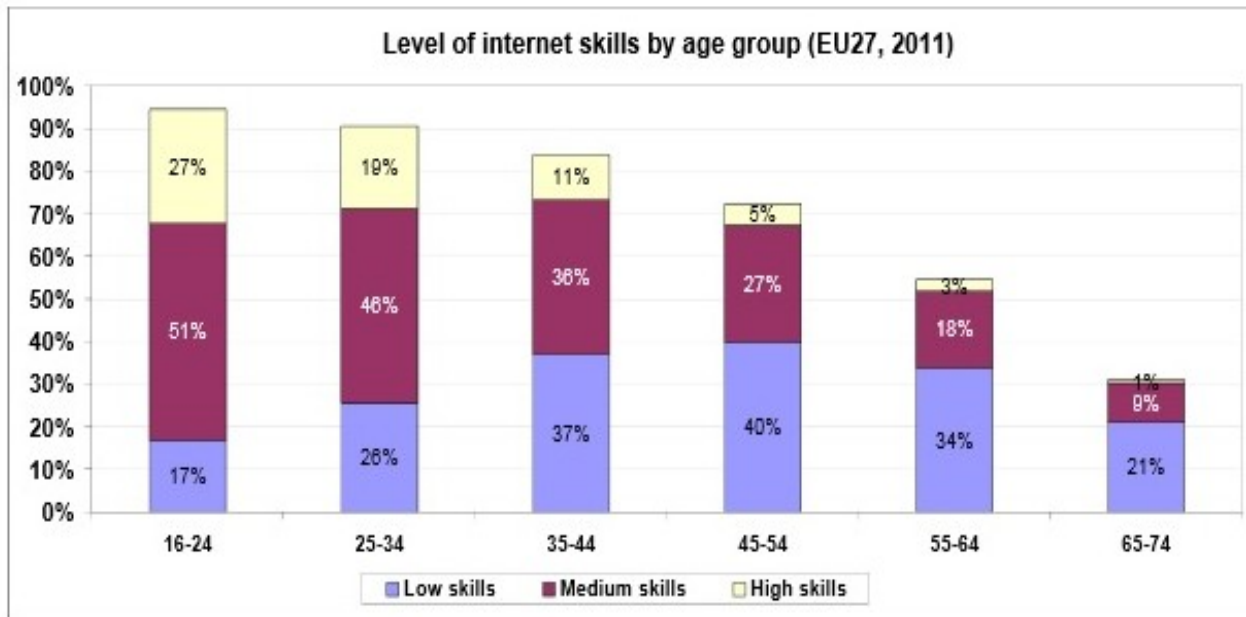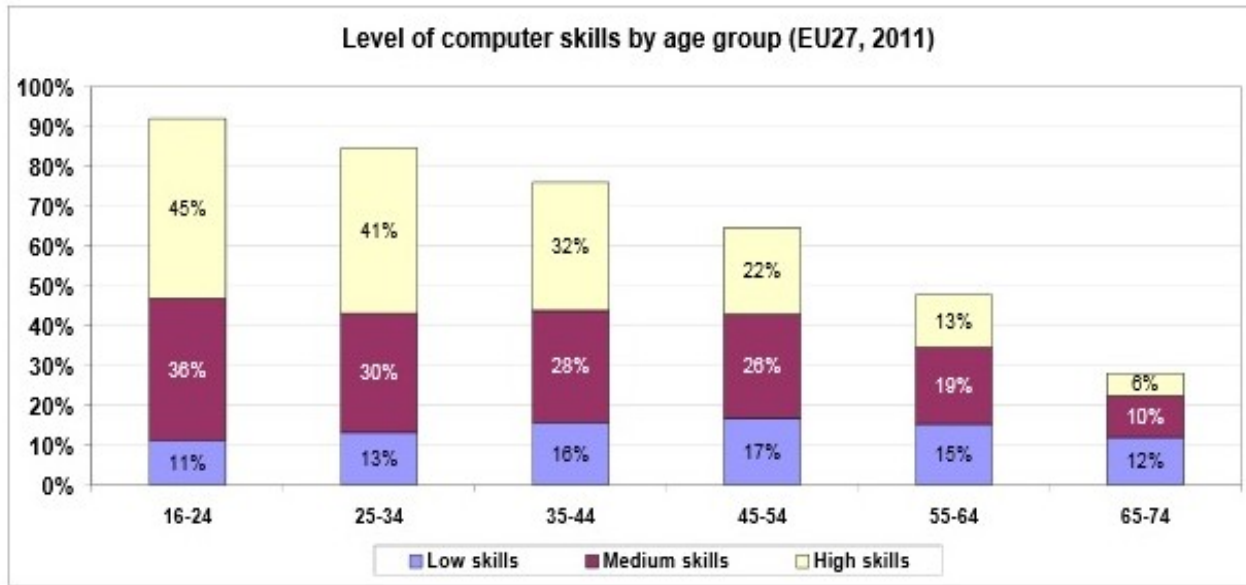**72** years for men, **82** years for women

Computer skills among older population
are low: e.g.in 50-64 age group **50%**

16% of people in the age group 65+ have participated in a course (12 months)
In the 50–74 age group **64%** have not been actively studying
More than **1/2** of them have no wish to do so in the future either.

In UK (the survey Adult Learning@Home): (Selwyn, Gorard, & Furlong ,2006)
52% of older adults had made use of one during the past 12 months.

Generally: in developed countries over **1/3 of adult population** do not
participate in adult learning (NIACE 2003).

Level of computer skills by age group (EU27, 2011)

Level of internet skills by age group (EU27, 2011)

Digital Agenda Scoreboard 2012
https: //ec. europa.eu/digital-agenda/sites/digitalagenda/files/scoreboard_digital_skills.pdf

Adult learning facilitators in 21st century

Do not conflate "access to ICT" with "use of ICT"

Issue of how people learn to use computers has been little researched

Preferences of learning facilitators:
„soft experts" (Vengerfeldt, 2004 in Estonia)
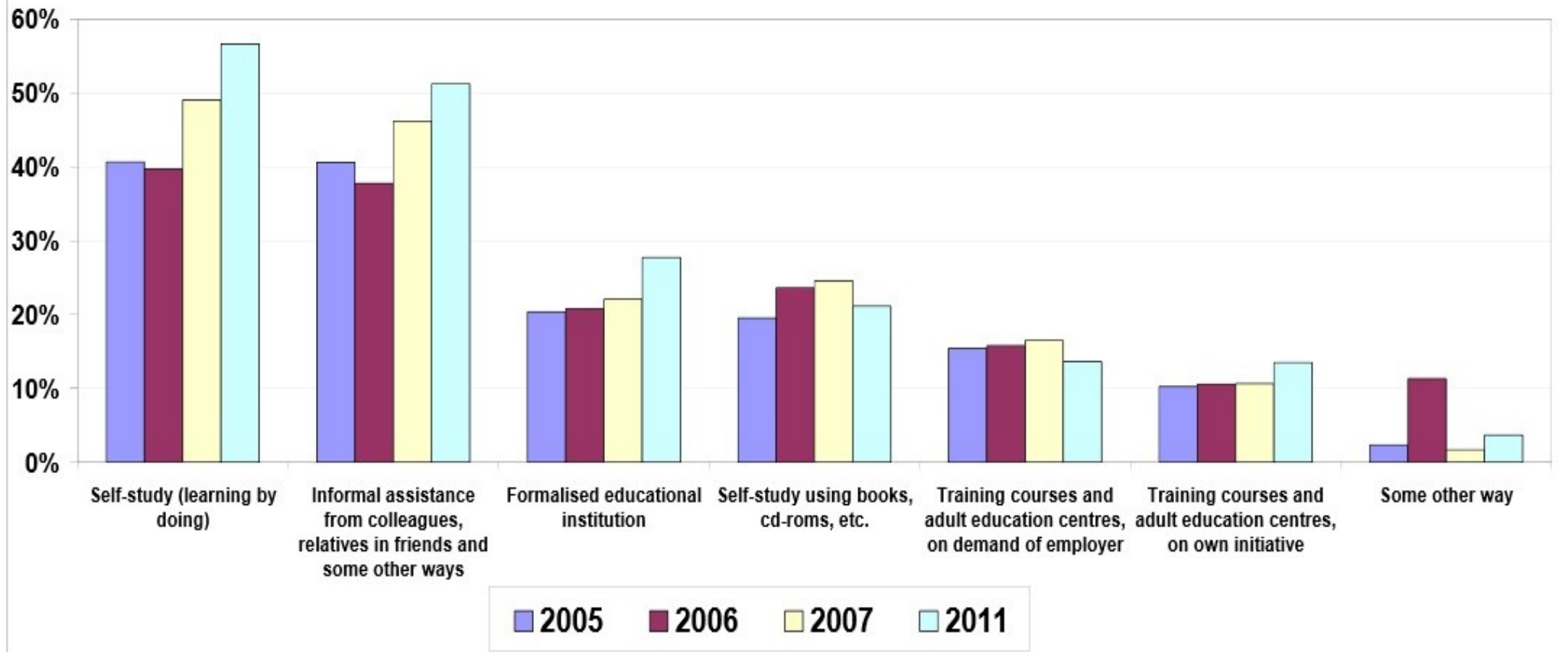„significant others" (Selwyn, et al., 2006 in UK)
„adolescents at home" (project Home Net , see Kraut et al., 2006)

Learning to use a computer: self-learning, experimentation at home and learning from others.

This family-directed learning does not necessarily lead to sustained use.

(Selwyn, et al., 2006)

Selwyn, N., Gorard, S. & Furlong, J. (2006). Adult learning in digital age. Information Technology and the Learning Society. Routledge.
Strom, R., D. & Strom, P. S. (2012). Learning Throughout Life. An intergenerational Perspective. IAP, p 389

Ways of obtaining internet and computer skills (% of individuals)

Categories: Self-study (learning by doing); Informal assistance from colleagues, relatives in friends and some other ways; Formalised educational institution; Self-study using books, cd-roms, etc.; Training courses and adult education centres, on demand of employer; Training courses and adult education centres, on own initiative; Some other way

Legend: 2005 · 2006 · 2007 · 2011

Digital Agenda Scoreboard 2012
https: //ec. europa.eu/digital-agenda/sites/digitalagenda/files/scoreboard_digital_skills.pdf

Unrecognised responsibility
Lack of preparation

„For the first time in the history, students possess greater skills in using tools needed for learning in the future than do the adults who are expected to educate them" (Strom & Strom, 2012)

Strom & Strom: the optimal reverse mentor relationship

If the child does not have good manners,
he/she behaves unpolitely, we look at the face
of parents, because it is or was
their responsibility to explain
and excersise these things.

If in the household is a adult person who
do not know how and what for
to use a computer...

www.geengee.eu

grandparents & grandchildren

powered by microcosmi

Homepage | Log-in

European award 2010
Lifelong Learning Programme
for education projects
in support of social inclusion

Project
:: N E W S
:: Project description
:: Project idea
:: Press releases
:: Link to G&G
:: Join G&G
:: Project phases G&G eLearning

Resources
:: Internet Gym
:: Manuals and guides
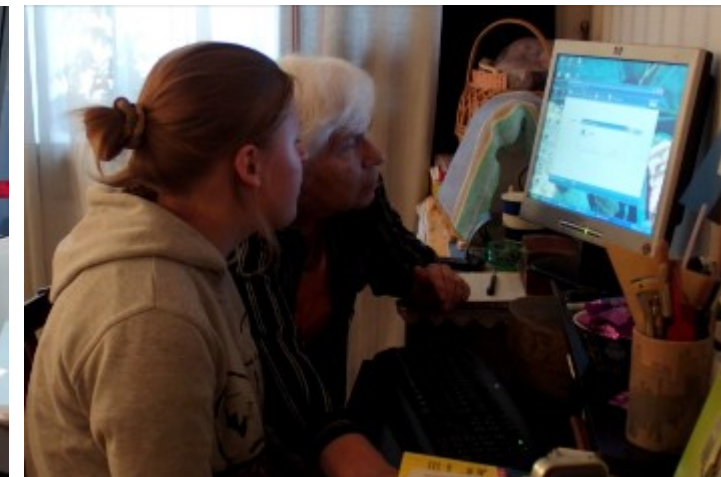:: Training Units
:: Freebies set
:: Facebook

Local activities
:: Photo Gallery
:: Participants

Partners
:: ENAIP FVG [IT]
:: LUJ [SL]
:: SAO [FI]
:: Scienter [IT]
:: Scienter Espana [ES]
:: SIOV [SK]
:: Tallinn University [EE]
:: TNOiK [PL]

Video data: older learner, young tutor

Research design

First phase: 4 sessions   learners 3 F / 1 M   tutors all F
Second phase   14 sessions   learners 10 F / 4 M   tutors 12 F / 2 M

Older learners: retired non-working
(In the second phase balance between previous teachers and non teachers)
Voluntarily motivated
Not acquainted with each other

Completely free to decide on the methodology of the interaction.
(In the first phase – prescribed program of voluntary use)

First phase   no prior described tasks
Second phase   task to learn one particular e-skill till the mastery

Records by two video cameras

A questionnaire after the session

Consent form(s) before session

The problem of selecting learning topics

=> **A young trainer needs to be prepared for taking the responsibility to initiate changes in the subject and advise an older person about topics and tasks.**

=> **The prescribed study program might have a negative influence on the actual training**

=> **Senior's wish to learn how to correct his or her accidental mistakes**

=> **Young tutors need to learn how to object the proposals of older learners.**

=> **Young trainers need to take into account that they are most probably not able to cope with searching for information about subjects they are not familiar with.**

The problem of instructing without instructing skills

1. There are few implications of scaffolding
=> Young tutor is able to scaffold

2. Many implications of scaffolding are rather unintentional. Scaffolding can emerge when:
a) the tutor does not know how to solve the situation
b) the tutor is uncertain
c) the computer produces a situations
d) a very slow internet connection creates pauses
d) strange terms used by the tutor
e) the tutor remains speechless

3. The researcher can see from video data many moments scaffolding could be used but these possibilities are not used by the young tutor
=> The need of introducing instruction skills

Young tutor gives commands with no need to do that. Why?
    older learner is slow
    question of power
    emergence of "delayed instructing"

The problem of instructing without instructing skills

4. The young tutors tend to polish the skills of older learner only by practicing one certain task and **do not challenge** the learner

5. The young tutors **do not provide the big picture**

6. The young tutors never ask „Did you catch it?"

7. The young tutors do not prize the learner

8. There is a **difference in the purposes of learning and teaching** – the tutor assumes only technical skills as the aim of the course

Remarks and recommendations

There was a noticeable improvement in the skills of the tutor, although the session was short and in unnatural environment

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Under the circumstances of computer-mediated-learning the scaffolding is sometimes impossible. There are four types of variables in this process what means the young tutor does not control the whole flow of activities.

These variables are:
- older learner
- older learner's unintentional movements
- young tutor itself
- the computer

The tutor gets more enthusiastic the more the student shows their personal interest in the subject.

As the learner is very slow, we would like to recommend the tactic where the learner comments on his/her own actions or thoughts <u>at all times</u>

Students should feel the responsibility to keep older community members up to date with developments in communication technology

Which means students need to get some preparation for instructing, sharing knowledge and guiding before leaving secondary education

Thank you!
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