III. WORKSHOP

Príprava pilotných testovaní

Projekt *Vývoj kriteriálnych testov pre primárne a nižšie sekundárne vzdelávanie na Slovensku* (SRSS/S2018/071)

Bratislava, **17. - 18. jún 2020**

Fotodokumentácia

National Institute for Education

State School Inspection

Institute of Educational Policy

Teach for Slovakia

European Commission

NÚCEM

NÁRODNÝ ÚSTAV CERTIFIKOVANÝCH MERANÍ VZDELÁVANIA

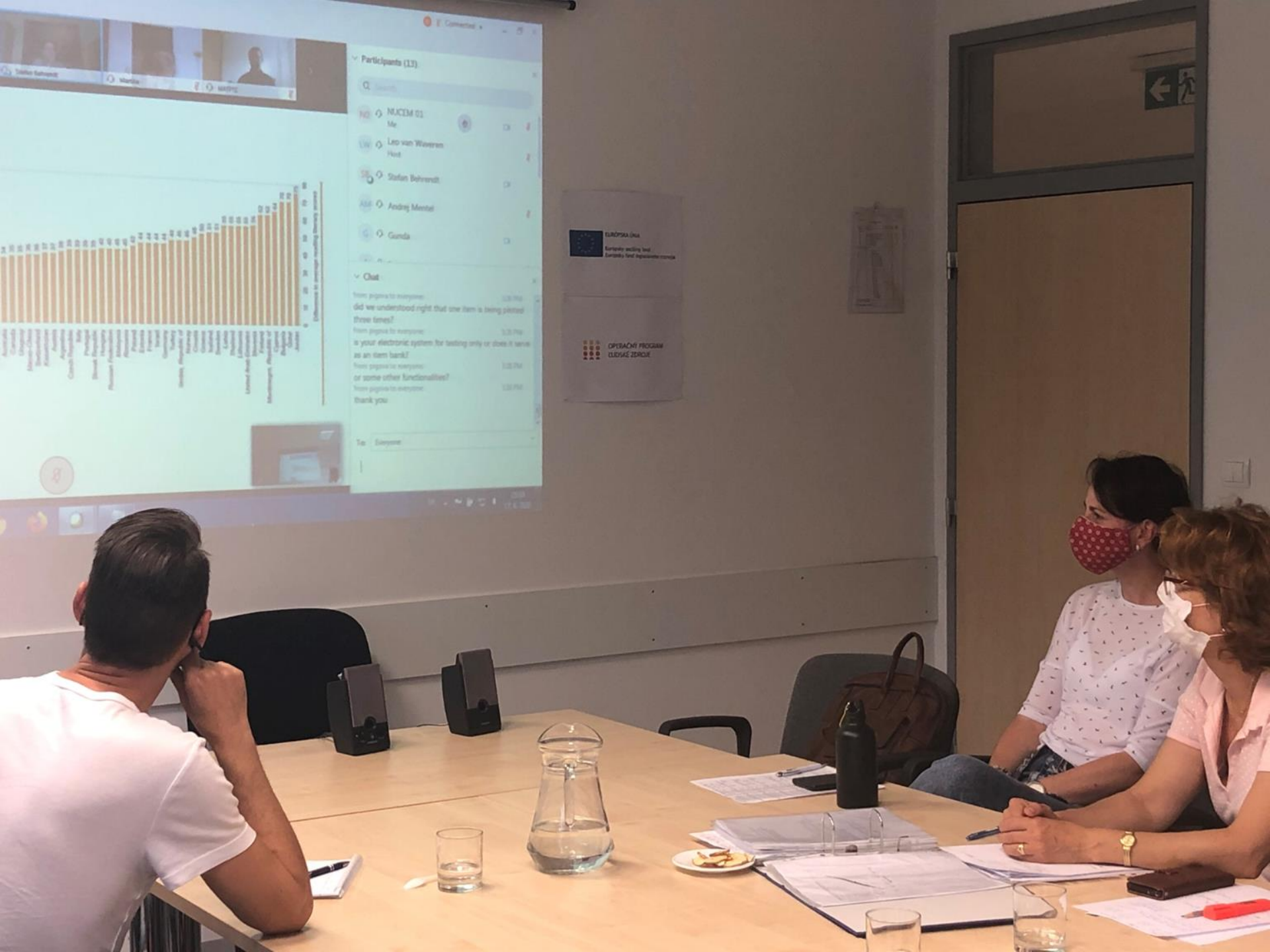
CRT

- Experts
- Test Developers

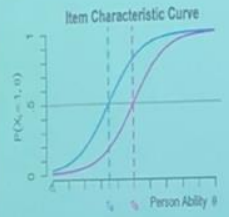
University of Stuttgart
Germany

innove


Medzinárodné hodnotenie
kľúčových kompetencií dospelých
(PIAAC)


Participants (13)
NUCEM 01
Me
Leo van Waveren
Host
Stefan Behrendt
Andrej Mentel
Gunda
Chat
did we understood right that one item is being pitched three times?
is your electronic system for testing only or does it serve as an item bank?
or some other functionalities?
thank you
EURÓPSKA ÚNIA
OPERAČNÝ PROGRAM
ĽUDSKÉ ZDROJE

Krátke zhrnutie # 2



- Parameter položky (napr. σ alebo τ) a meraná schopnosť osoby (Θ - théta) sú na rovnakej škále
- Funkcia položkových odpovedí definuje toto prepojenie ako bijektívnu funkciu, napr. Model Rasch (1PL):

$$P(X_i = 1|\theta) = \frac{\exp(\theta - \sigma_i)}{1+\exp(\theta - \sigma_i)}$$

Chat

ok.

Robíte aj pilotý?

how many students are tested normally by one test? do you also have paper-based tests or electronic only?

on one test?

10thousands at one time or the test is accessible for extended period of time (a month) and this is the number of totally tested pupils?

ok. thank you. that was exactly what we meant with our question

do you pilot each test? how big is a pilot sample (usually)?

did we understood right that one item is being piloted three times?

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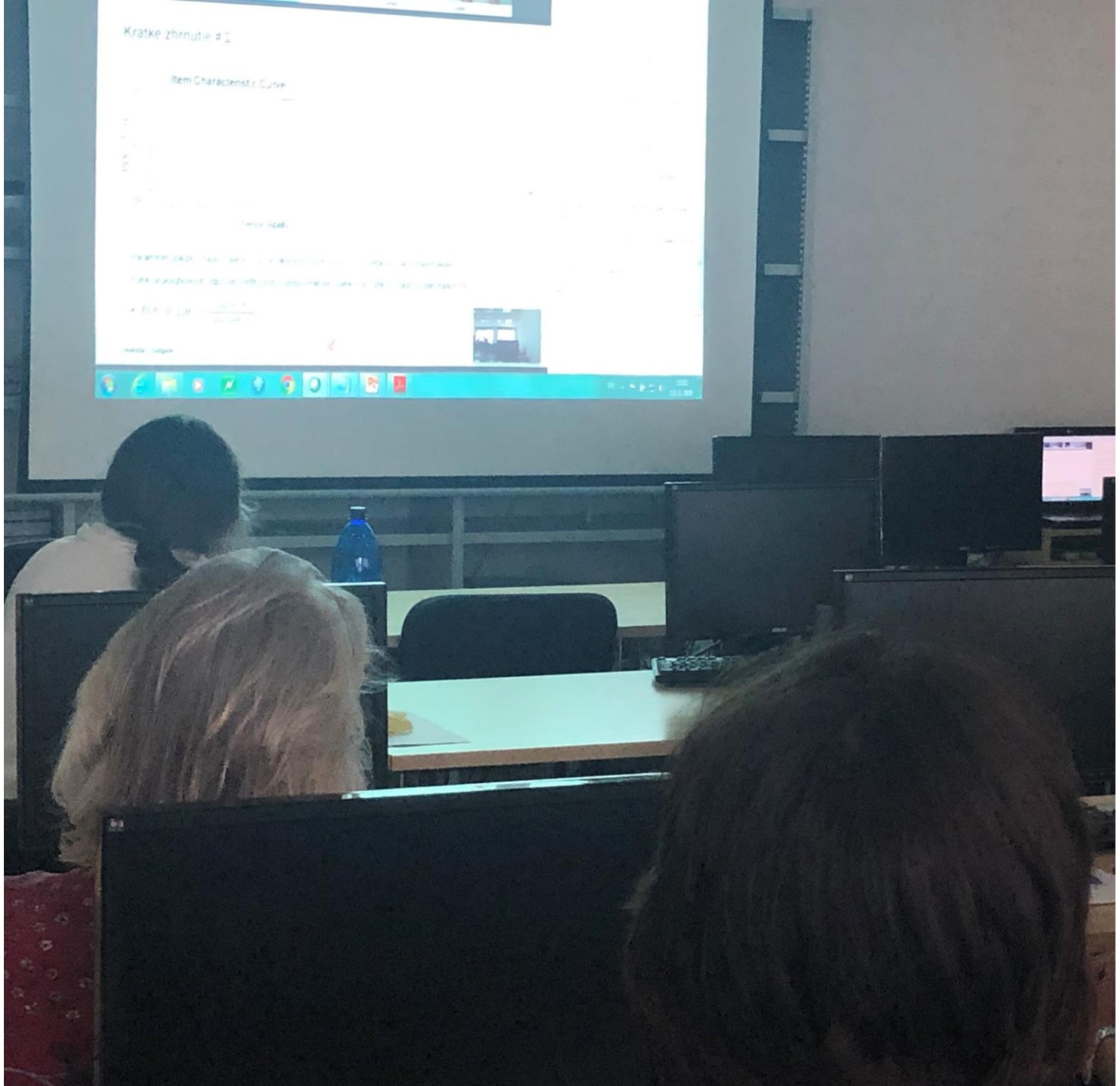
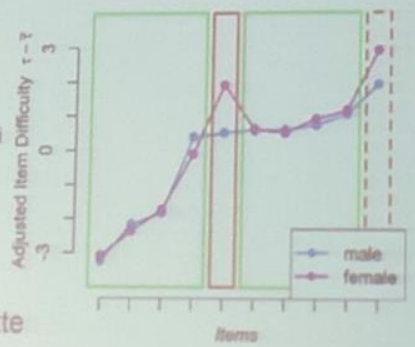

Kratke zhrnutie # 2
Item Characteristic Curve


WiFi
ZONE

Potreba výberu vzorky
Príklad č. 1

- Situácia
  - efekty špecifické pre konkrétne pohlavie
    - dievčatá majú zvyčajne v mat. gramotnosti nižšiu výkonnosť ako chlapci
    - chlapci majú zvyčajne v čit. gramotnosti nižšiu výkonnosť ako dievčatá
    - ! ale aj dievčatá reagujú na podnety inak ako chlapci!
- Úloha pre terénnu skúšku
  - zozbierať a odhadnúť špecifické informácie o tomto efekte podľa položiek
  - zabezpečiť nezaujaté („unbiased") zloženie budúcich testov vzhľadom na pohlavie
- Čo robiť, keď nemáme dostatočné informácie o dievčatách alebo chlapcoch?



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Leo van Waveren Host
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Gunda

Chat

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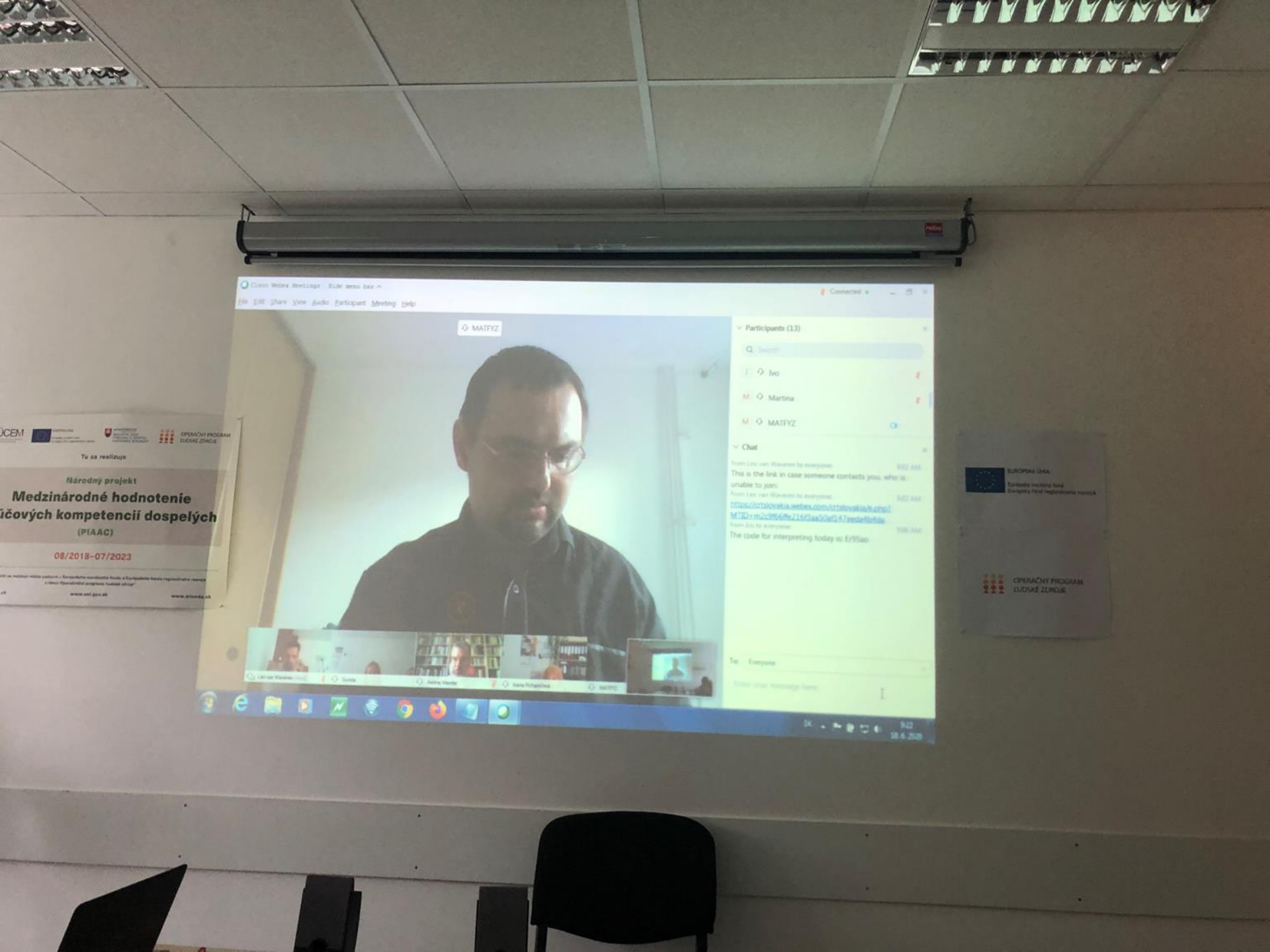
To: Everyone


Tu sa realizuje
Národný projekt
Medzinárodné hodnotenie
(PIAAC)
08/2018-07/2023
OPERAČNÝ PROGRAM
ĽUDSKÉ ZDROJE
EURÓPSKA ÚNIA
MATFYZ
Participants (13)
Ivo
Martina
MATFYZ
Chat
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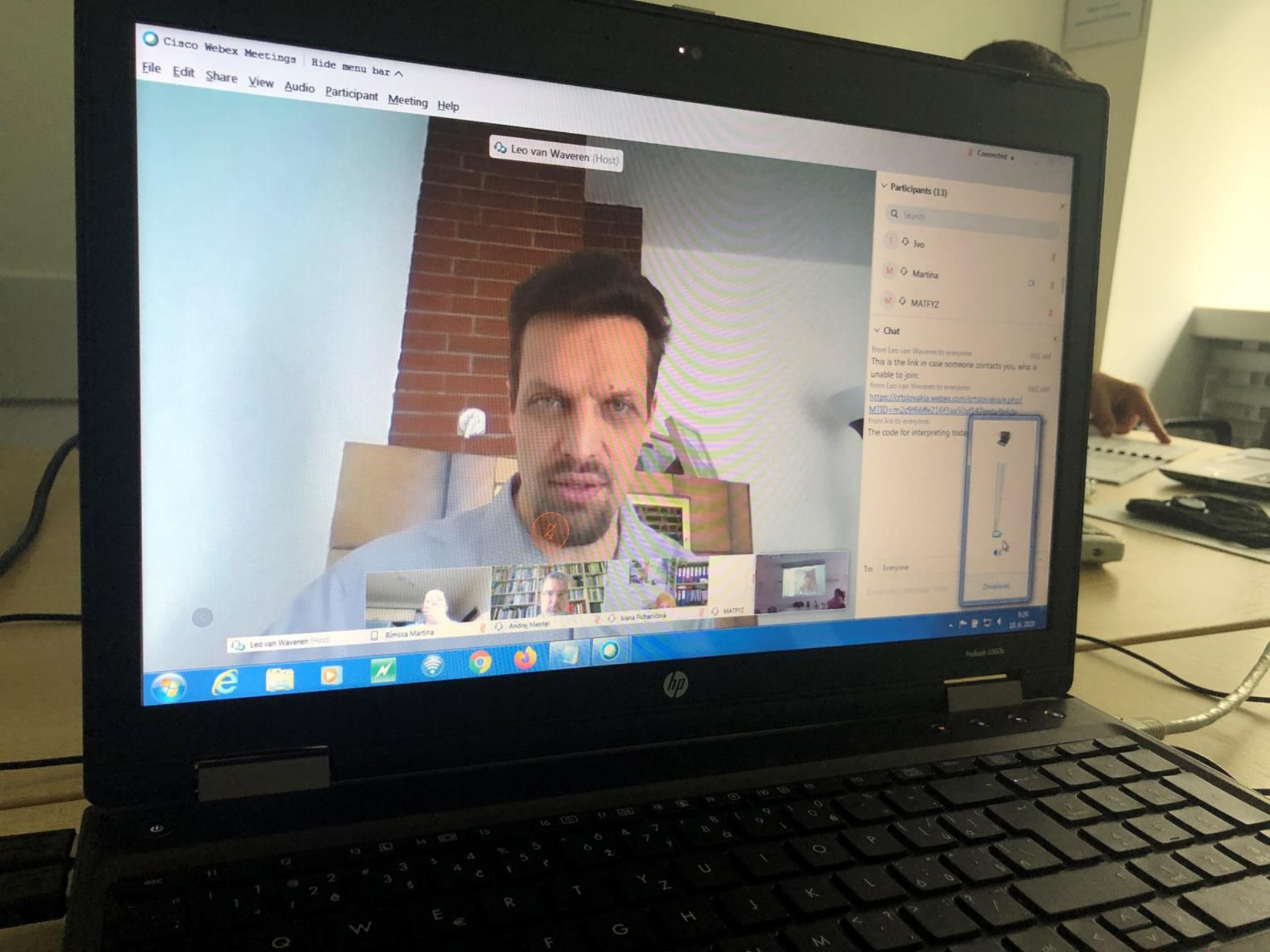
The code for interpreting today is: Er95ao
To: Everyone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Martina
MATFYZ
Chat
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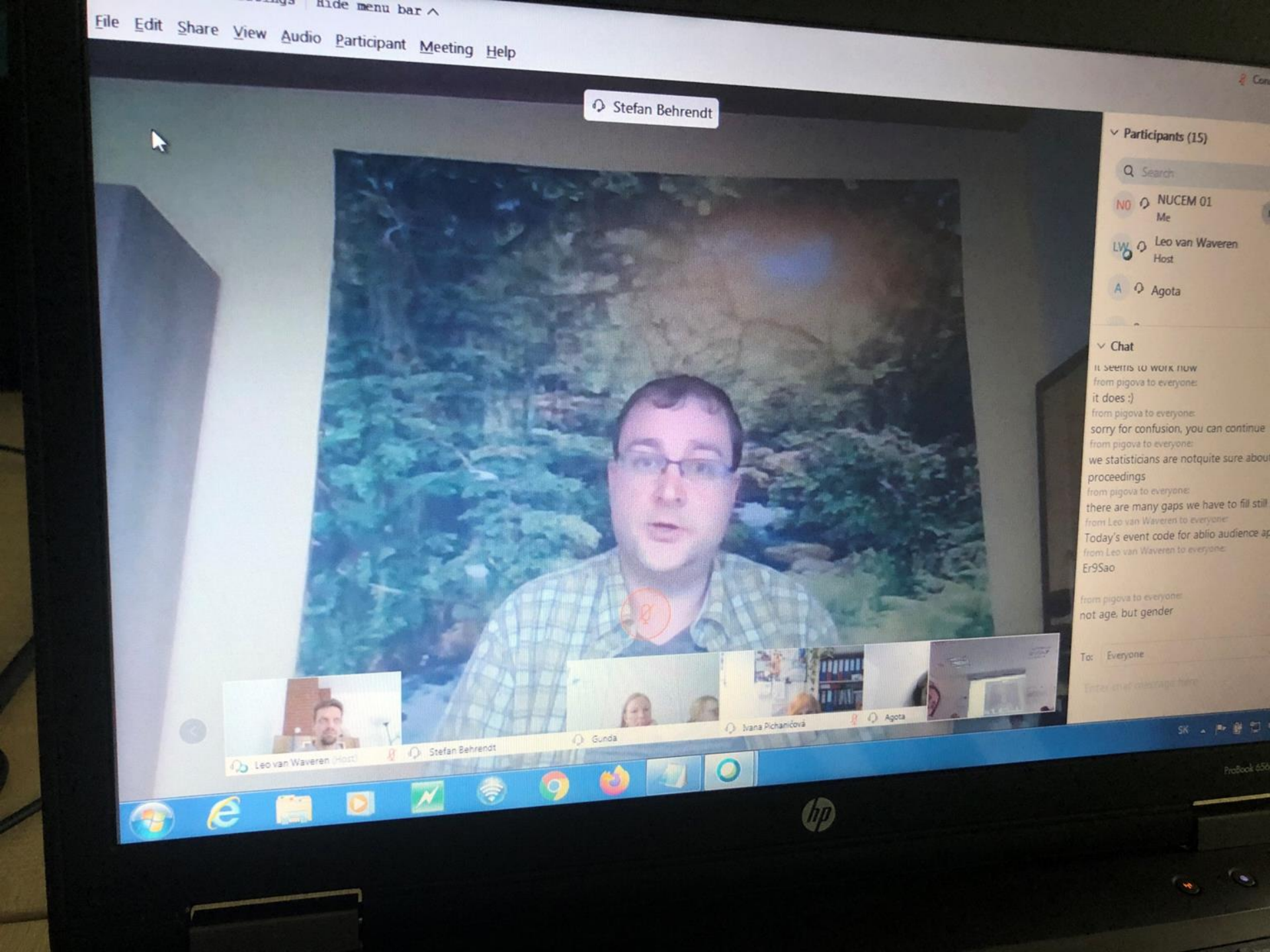
The code for interpreting toda
To: Everyone
Leo van Waveren (Host)
Rimska Martina
Andrej Mentel
Ivana Pichanicova
MATFYZ


Medzinárodné hodnotenie
kľúčových kompetencií dospelých


Európska únia
NÚCEM
Hodnotenie kvality
Opera
Priorit
Opatre
Miesto realizácie
Trvanie projektu: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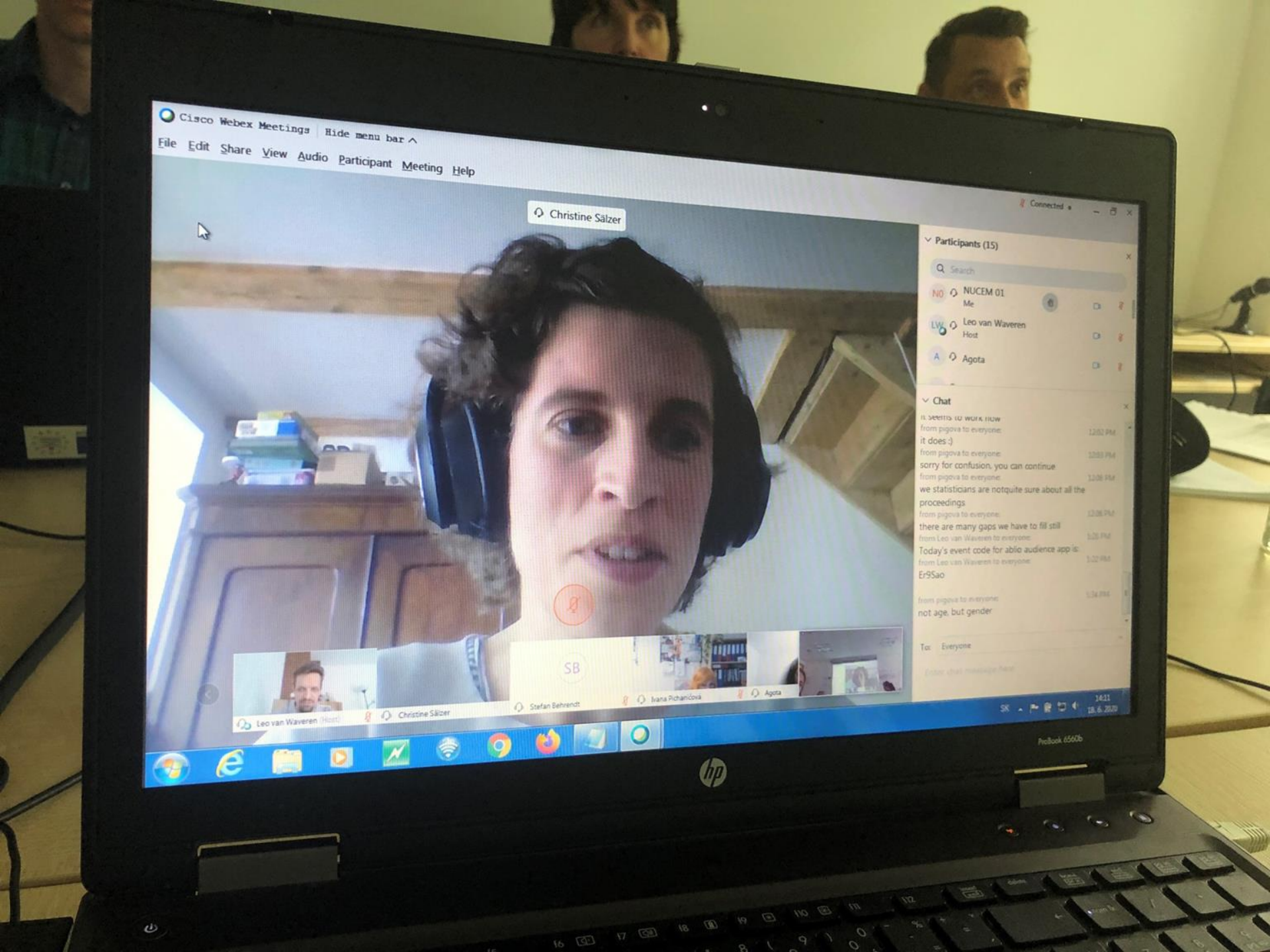
Stefan Behrendt
Participants (15)
Search
NUCEM 01
Me
Leo van Waveren
Host
Agota
Chat
it does :)
sorry for confusion, you can continue
there are many gaps we have to fill still
Today's event code for ablio audience
Er9Sao
not age, but gender
To: Everyone
Leo van Waveren (Host)
Stefan Behrendt
Gunda
Ivana Pichaničová
Agota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Christine Sälzer
Participants (15)
NUCEM 01
Me
Leo van Waveren
Host
Agota
Chat
it does :)
sorry for confusion, you can continue
we statisticians are notquite sure about all the proceedings
there are many gaps we have to fill still
Today's event code for ablio audience app is:
Er9Sao
not age, but gender
Leo van Waveren (Host)
Christine Sälzer
Stefan Behrendt
Ivana Pichaničová
Agota
ProBook 6560b


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Connected
Gunda
Participants (15)
Search
NUCEM 01
Me
Leo van Waveren
Host
Agota
Chat
it seems to work now
from pigova to everyone: 12:02 PM
it does :)
from pigova to everyone: 12:03 PM
sorry for confusion, you can continue
from pigova to everyone: 12:06 PM
we statisticians are notquite sure about all the proceedings
from pigova to everyone: 12:06 PM
there are many gaps we have to fill still
from Leo van Waveren to everyone: 1:21 PM
Today's event code for ablio audience app is:
from Leo van Waveren to everyone: 1:22 PM
Er9Sao
from pigova to everyone: 1:34 PM
not age, but gender
To: Everyone
Enter chat message here
Leo van Waveren, Host
Gunda
Christine Sälzer
Ivana Pichaničová
Agota
SK
14:12
18. 6. 2020
ProBook 6560b

bar
cipant Meeting Help

Leo van Waveren (Host) | Gunda | Maria Mlynarcikova | Pavol Sveda | Stefan Behrendt

University of Stuttgart
Institute of Education

Department of Pedagogics

CRITERION-REFERENCED TESTING IN SLOVAKIA ("CRT SLOVAKIA")

SRSS/S2018/071

June 2020
Steering committee

First and foremost:

We hope to find you all up and well, despite the current situation

The Ablio-event code for today is: **ErD93c**

Maps.google.com

DELL

Learning Slovakia &
National Programme for Education and Training Development Reform

(2017/18) Ministry of Education

- Background: Country-Specific Recommendation to Slovakia by EU Commision based on PISA 2015
  - performance gap gender & different socioeconomic backgrounds
  - early school leaving rate risen to 7.4 %
  - Above average number of low achievers
- More than 115 specific measures to improving the quality and accessibility of education

  ⇒Changes to national student assessment system.

Timeline of the CRT project – no changes planned

12/2018 – 03/2021

- Due to current situation, field trial will not be in grade 5 but grade 6

Evaluation of the theoretical model by external advisory board

Workshop #1

Development of theoretical model

Test development

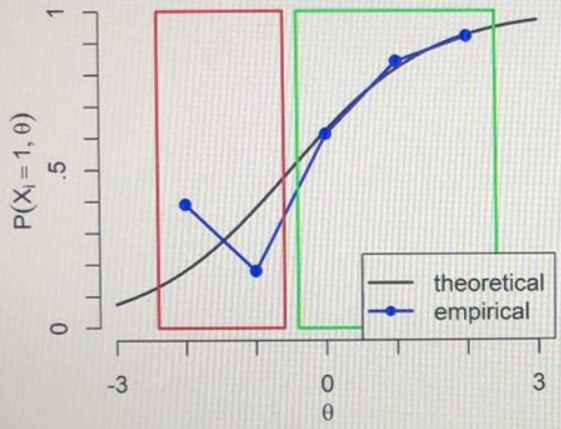
- CRT-Test development by teams with expertise in
  - Mathematics
  - Slovak Language
  - Statistics
- Development at NUCEM are led by local experts of the field (e.g. from the University) and remotly supported by Innove (Estonia) and University of Stuttgart (Germany)

Table 3: Levels of General Mathematics Competences contrasted with different hierarchies of Cognitive Demands, alignment in a row does not indicate equivalence of levels

CRT Slovakia (Levels as further differentiation of General Mathematics Competences)	German Educational Standards (Level of Requirement [2])	TIMMS (Cognitive Domains)	PISA 2012 (Mathematical Processes)
1	Reproduce	Knowing	Formulating (situations mathematically)
2	Making Connections	Applying	Employing (mathematical concepts, facts, procedures and reasoning)
3	Generalize and Reflect	Reasoning	Interpreting (applying and evaluating mathematical outcomes)

Workshop #3 – Preparation of the field trial

Sampling methods



1. cross-effects for effect sizes

b) population probabilities

	male	female	Σ
Základná škola	.36	.36	.72
Gymnázium	.10	.12	.22
Konzervatórium	.05	.01	.06
Σ	.51	.49	

- Discussion on needed sample size
  - E-Test available at schools
  - ~20 schools for both subjects in both grades
  - T5/T9-testing conditions

➔E.g. making sure developed test

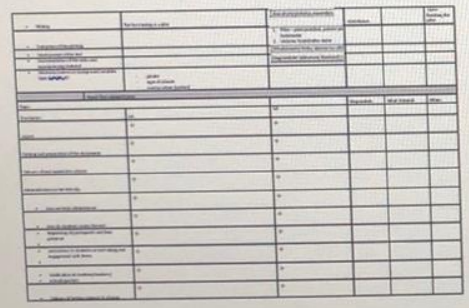
- is able to measure „high“ and „low“ performing students
- Is employed on an adequate sample to compare grade, type of school,…

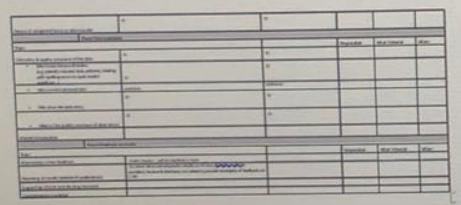
dio Participant Meeting Help

Leo van Waveren (Host) | Ivana Pichaničová | Miroslava Hapalova | Agota | Gunda | Samo Varšik

Workshop #3 – Preparation of the field trial

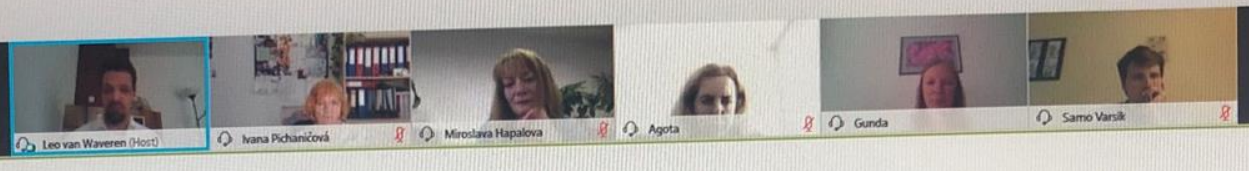
Checklist & round table





- Working in teams on best-practice check-list
  - Re-use of existing procedures
  - Clarifying remaining steps for the field trial
  - Responsibilities
  - Potential for future projects
    - E.g. to enhance feedback for schools
    - Identify teaching / learning opportunities
    - Implement additional parts of the curriculum
    - Challenges of new testing methods (remote testing of listening comprehension)
- Exchange of experiences from (inter)national testing in Estonia and Germany

DELL



Workshop #3 – Preparation of the field trial

Open topic discussion