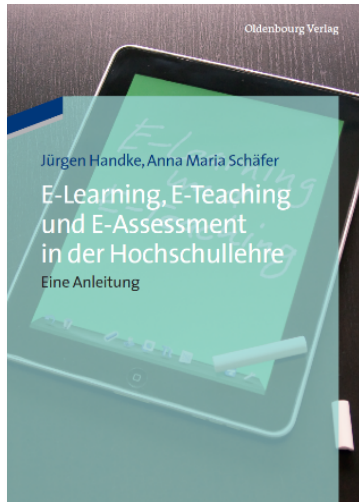


Education in the 21st Century

Electronic Assessment

9 February 2017, Lugano, J. Handke



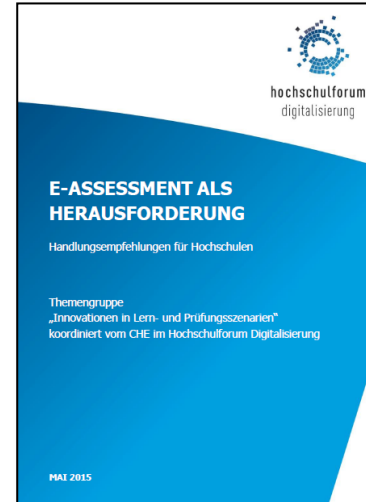
2012

Handke, J./Schäfer, A.M.



2015

Handke, J.



2015

HFD, AP #3



2016

HFD, AP #15



... some of our milestones ...

2000



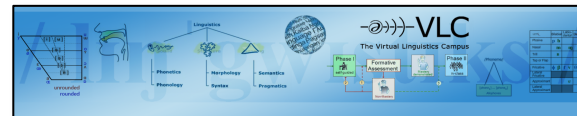
2006

**INVERTED
CLASSROOM**

2009

E-Assessment (summative)

2012



2013

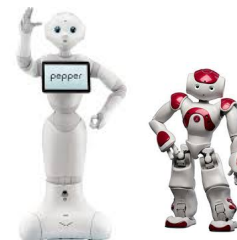
Inverted Classroom Mastery Learning
BYOD, collaborative scenarios

2016



in E-Assessment

2017 ++

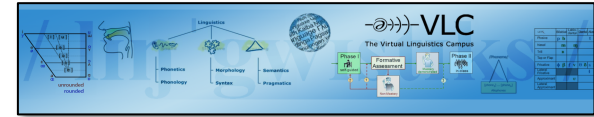




Platforms:



~ 14.000 users



~ 34.000 subscribers

~ 3.5 mill. clicks

~ 550 educational videos



Students:

- Teacher Degree (ca. 750)
- BA (ca. 300)
- MA (ca. 50)

Course Formats:

- 2-in-1
- FLOCK
- SPOOC
- MOOC
- pMOOC

E-Assessment
(on campus):

- ~ 1.000 summative e-tests/year
- ~ 10.000 formative e-tests/year

E-Assessment
(pMOOCs):

- ~ 30.000 summative e-tests/year

INVERTED CLASSROOM





1. *Digital Teaching and Learning*
2. *Scenarios of Testing*
3. *Test Types and Formats*
4. *Benefits and Consequences*





The Elements of E-Education

- Components



- Scenarios



- Stages





1

Digital Enhancement



Teaching and Learning

Platforms

Communication



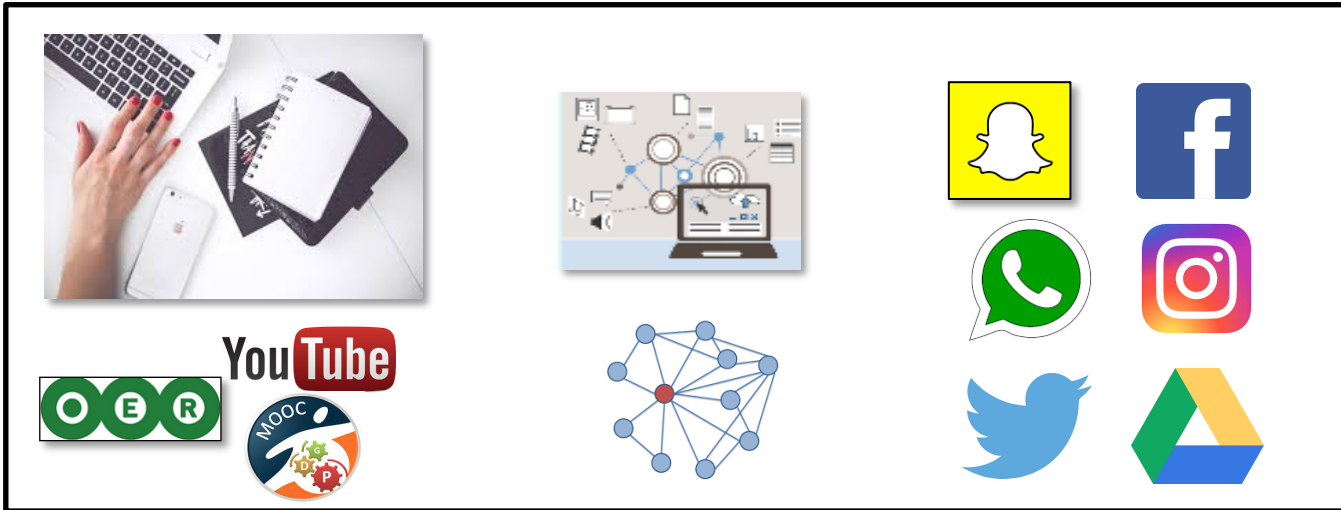
The Goal

- 1
- 2

~~Digital Enhancement~~



Digital Integration



Teaching and Learning

Platforms

Communication





The Inverted Classroom Model

1: Content Delivery



INVERTED CLASSROOM



2: Deepening





1. *Digital Teaching and Learning*
2. *Scenarios of Testing*
3. *Test Types and Formats*
4. *Benefits and Consequences*





1: Content Delivery



- In Class
- Online

2: Deepening



- In Class
- Online

INVERTED CLASSROOM

Diagnostic Test

Integrated Test

Formative Test

Live-Voting

Summative Test

Assessment of Current state

Self-Control (Gamification)

Re-Teaching? (Show Mastery)

Re-Teaching? (anonymous)

Grading (Examination)

Prior to Phase 1

immediate

in Phase 2

immediate

on request

Feedback



1. *Digital Teaching and Learning*
2. *Scenarios of Testing*
3. *Test Types and Formats*
4. *Benefits and Consequences*





Selection Analysis



Listening



Counting



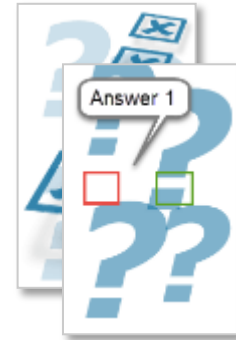
Transcr.



Input

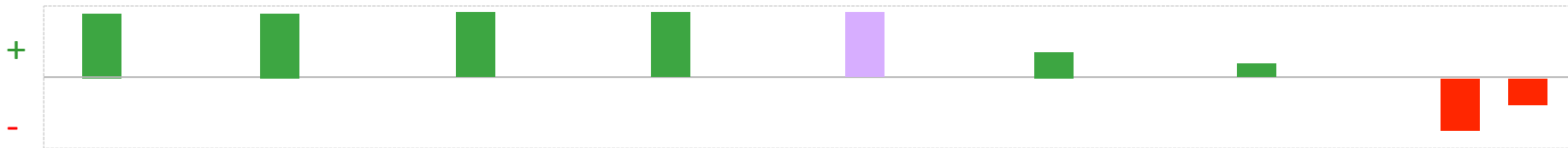


Drag/Drop



Choice

Benefit (Content)



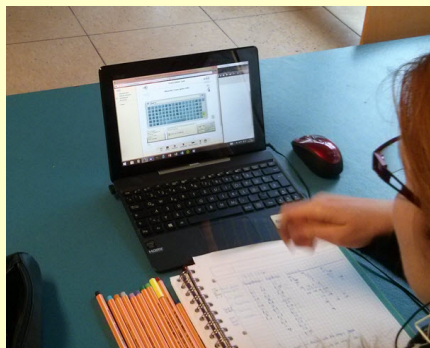
Benefit (administrative)

- correction effort
- result transmission
- objectivity



- ▶ About the Exam
- General Questions
- Input Task
- IPA Consonants
- Transcribing RP Words
- Transcribing AmE Words

Finish Exam



Diagnostic Test

Active: 15 October 2015, 13:59:00 CEST - 15 October 2015, 16:00:00 CEST

This e-exam consists of the following components:

Test	Type	Description	Weight in %	No. of questions	Time allowed (mins.)	Status
General Questions	Multiple Choice	General questions about the class	50	50	00:37:30	Access
Input Task	Naming Task	Questions about the class	20	20	No time limit	Access
IPA Consonants	Listening Task	Identification of IPA consonants	10	30	No time limit	Access
Transcribing RP Words	Transcription Task	The phonemic transcription of RP words	10	12	No time limit	Access
Transcribing AmE Words	Transcription Task	The phonemic transcription of AmE words	10	12	No time limit	Access

- knowledge survey
- formative effects via additional offers



Test your knowledge and analyze the type of word!



COMPUT#ER

Wrong or Right?

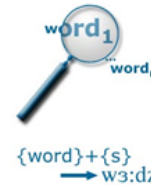
Wrong

Analysis: COMPUTE # ER

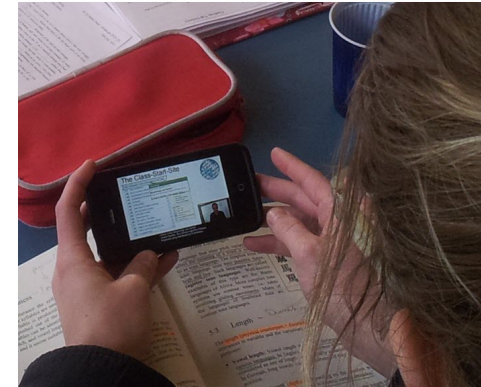
Alright.

This noun has two morphs: {COMPUTE-} and {-ER}! Note that {compute} loses its final -e when combined with {-er}

Return



{word}+{s}
→ w3:dz



Overview
Questions
Words
Analysis
Typology

Videos
Tutor
Sitemap
Return

The Interactive Tutor



The Interactive Tutor presents selected exercises. The exercises in this unit involve the following levels:

- the expert level
- the advanced level
- the standard level

In order to logout and continue with the previous score at any time **cookies** must be permitted. Your performance in the tutorial exercises will not be stored, though.



- gamification
- immediate feedback
- learner motivation
- no storage of results

Test Types

- Choice
- Drag & Drop
- Pointing



Questions about Suprasegmental Features

A type of secondary articulation is ...

True False **glottalization**

True False **labialization**

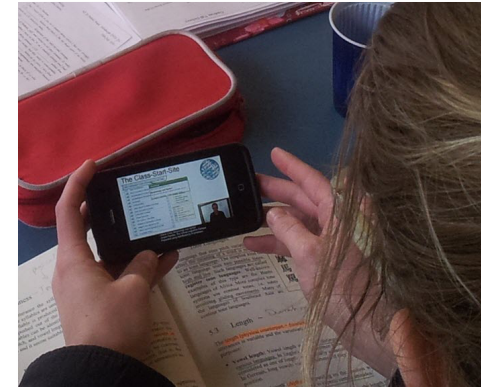
Level: Standard
 Total No. of Questions: 10
 Required for this level: 60%
 Question No.: 3
 Correct: 0 %

No of additional choices = 2.

This exercise does not involve any time limit.

Ready Help Logout ? Noise On Ask Again

+ 2 more




- survey of required knowledge
- formative effects: re-teaching or not?
- not anonymous
- storage of results

Test Types

- Single Choice
- Multiple Choice
- Dynamic Choice
- Input



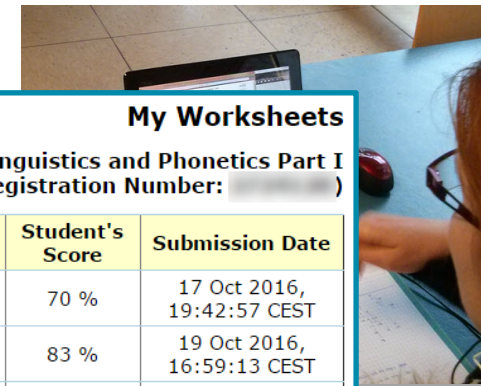
 **Questions about Suprasegmental Features**

A type of secondary articulation is ...

True False **glottalization**

True False **labialization**

+ 2 more



Level: Standard
 Total No. of Questions: 10
 Required for this level: 60%
 Question No.: 3
 Correct: 0 %

My Worksheets

Linguistics and Phonetics Part I
 (Student Registration Number:)

No.	Unit	E-Worksheet	Passed	Highscore	Student's Score	Submission Date
1	Language and Linguistics	Questions about Linguistics	Yes	100 %	70 %	17 Oct 2016, 19:42:57 CEST
2	Phonetics	Questions about Phonetics	Yes	100 %	83 %	19 Oct 2016, 16:59:13 CEST
3	Consonants	Questions about Consonants	Yes	100 %	70 %	26 Oct 2016, 18:17:28 CEST
4	Vowels	Questions about Vowels	Yes	100 %	85 %	26 Oct 2016, 18:43:43 CEST
5	Suprasegmental Features	Questions about Suprasegmental Features	Yes	100 %	73 %	6 Nov 2016, 15:56:04 CET
6	Phonetics, Phonology and the Phoneme	Questions about Phonology	Yes	100 %	78 %	9 Nov 2016, 20:47:26 CET
Overall Score for the Class:					29 %	2016-11-13 17:01:38 CET

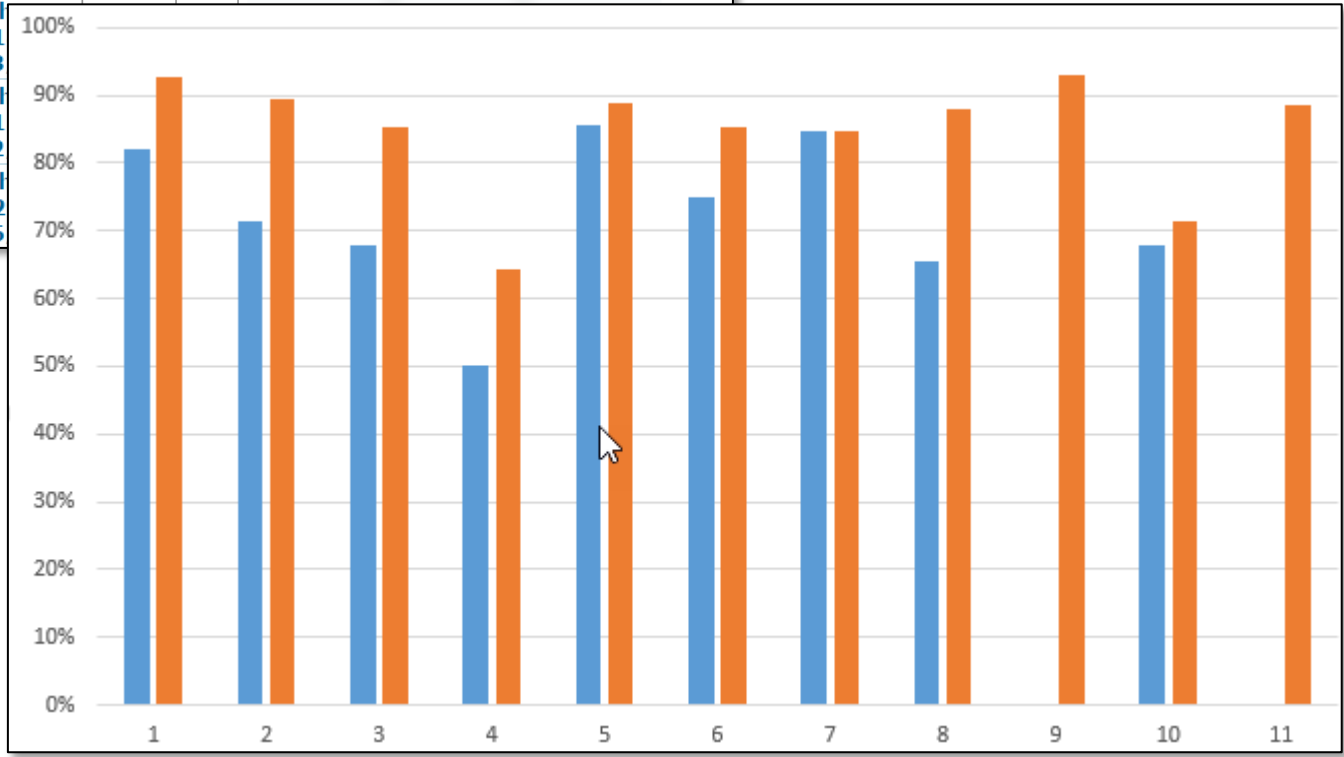


Formative Tests and Attendance

<input type="checkbox"/>	20	Show	7	Show 30% (6/16)	None	Ms. E			
<input type="checkbox"/>	21	Show	7	Show 33% (7/16)	None	Ms. E			
<input type="checkbox"/>	22	Show	7	Show 29% (6/16)	None	Mr. C			
<input type="checkbox"/>	23	Show	7	Show 30% (6/16)	None	Ms. C			
<input type="checkbox"/>	24	Show	7	Show 31% (3/10)					
<input type="checkbox"/>	25	Show	7	Show 31% (2/10)					
<input type="checkbox"/>	26	Show	7	Show 32% (6/19)					



SS 2016
Varieties of English
n = 34



■ Mastery (Ø 77 %) ■ Attendance (Ø 84 %)

Ø 2 of Ø 29 students are not prepared



- survey of required knowledge
- formative effects: direct reaction in class
- anonymous

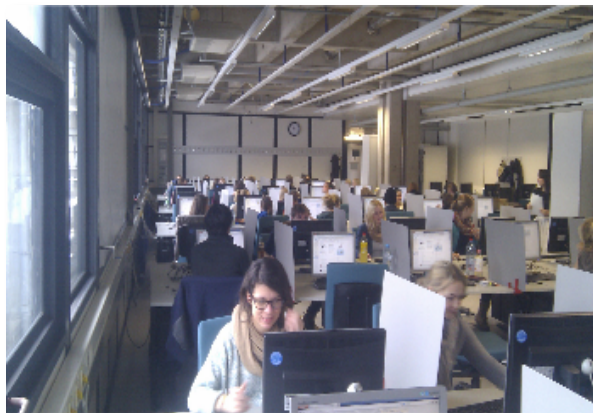
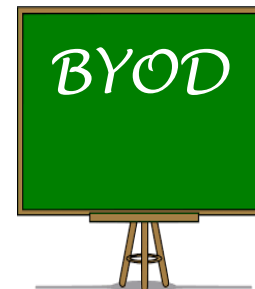


E-Exam

Active: 11 February 2017, 09:59:00 CET - 11 February 2017, 11:30:00 CET

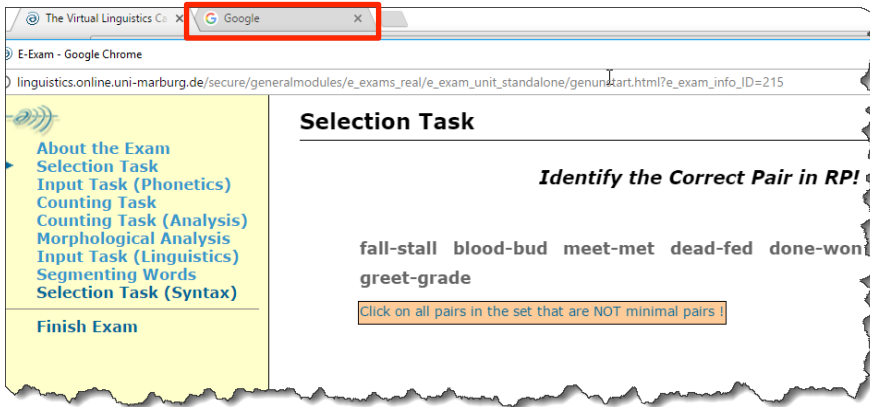
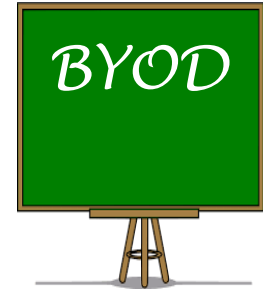
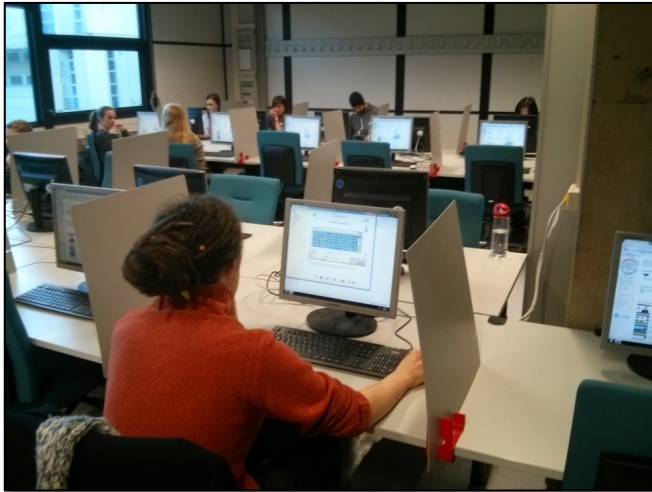
This e-exam consists of the following components:

Test	Type	Description	Weight in %	No. of questions	Time allowed (mins.)	Status
Counting Task (Analysis)	Counting Task	Counting elements in context	10	10	No time limit	Access
Input Task	Naming Task	Questions about the class	30	30	No time limit	Access
EMnE Consonants	Listening Task	Identification of EMnE Consonants	10	10	No time limit	Access
Selection Task	Selection Task	Elements in context	20	20	No time limit	Access
Counting Task	Counting Task	Counting elements in context	30	15	No time limit	Access



Test Types

- Selection Tasks
- Counting Tasks
- Input Tasks
- Audio-Based Tasks
- Segmentation Tasks
- grading
- certification



First “BYOD”/Exam-Statistics

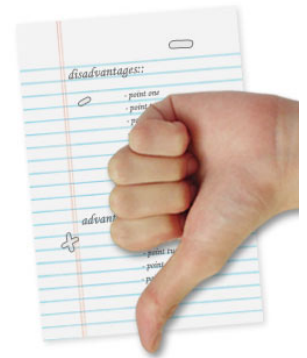
- 36 participants (all used the web)
 - 28 passed (3 x time-out)
 - 8 failed (3 x time-out)
- average time spent on web: 10 mins
- average no. of internet accesses: 18

History of English, E-Exam: 90 minutes



1. *Digital Teaching and Learning*
2. *Scenarios of Testing*
3. *Test Types and Formats*
4. *Benefits and Consequences*





“What is the benefit of
E-Assessment?”



Benefit – for whom?



The Guides



The Institution



The students



Politics



- quality assurance
- new financial sources
- new partners



- technical infra-structure
- investment
- e-assessment administration



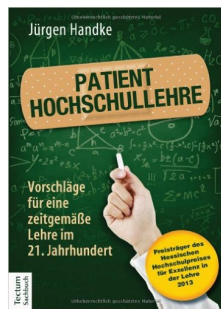
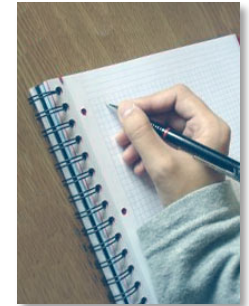


History of English, traditional (until 2010)

#Students ~ 120

Scenario	# Tests	# Students	Total
Summative (unit)	4 * 1	120	480
Summative (course)	1 * 4	120	480

#Tests = 960



Estimated correction time per test = 5 Min

=> 4.800 Min => 80 Hrs = 10 days à 8 Hrs !!

Summative (course) only, per Test = 3 Min

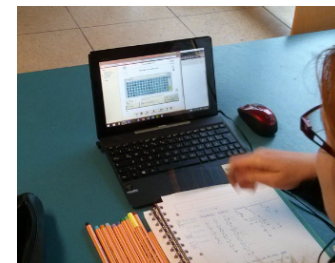
=> 1.440 Min => 24 hrs = 3 days à 8 Hrs !!

Correction time
per test:
5 - 10 Min.



History of English, ICM, On Campus, WT 2014/15 #Students = 147

Scenario	# Tests	# Students	Total
Diagnostic	1 * 4	124	494
Integrated	42	?	?
Formative	13	147	1.911
Live-voting	13	?	?
Summative (Unit)	4 * 1	141	564
Summative (Course)	1 * 4	147	588



#Tests = 3.557
(10.671 Min. ~ 178 Hrs. ~ 22 Days)

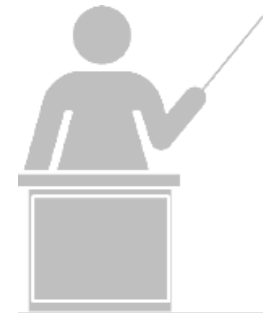
Correction effort *History of English* (E-Assessment):
4 Hrs = 0,5 working days (incl. Live-Voting = 1,0 Day) !!



- reduction of correction effort
- simple test-compilation
- immediate result statistics
- new test options



- high developmental effort
- high organisational effort
- guidance may be required
- compromises needed



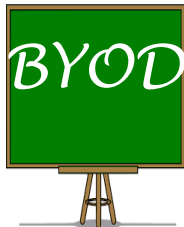


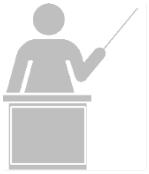
The Students



- fast result transmission
- objectivity
- possibility of guessing

- objectivity
- high difficulty level

E-Exams +  = tests become more difficult



Guides

- Coaching
- more media competence
- testing of new formats



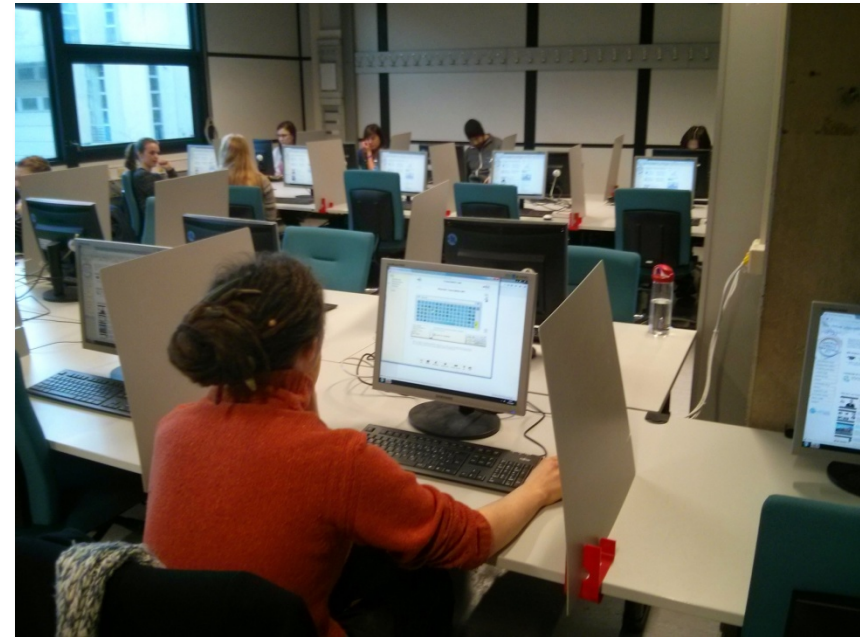
Students

- high self-responsibility
- E-Assessment as a standard
- high media competence



Institution

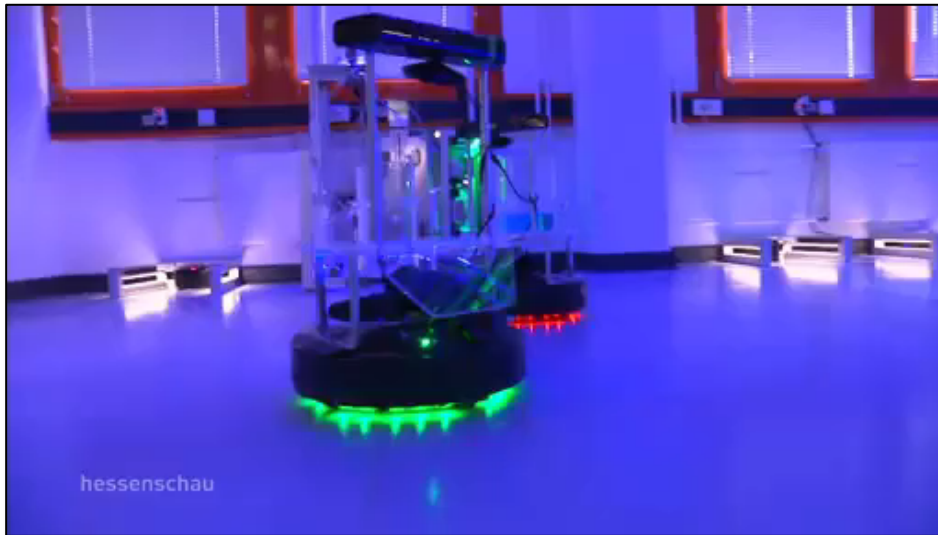
- creating incentives
- building the technical infra-structure
- simple e-assessment-administration





The Future is already here! (Gibson, 2003)

- ICM, 2-in-1, FLOCK
- SPOOC, MOOC, pMOOC
(part of our curriculum)



- mobile assessment
- robot assistance
- collaborative assessment

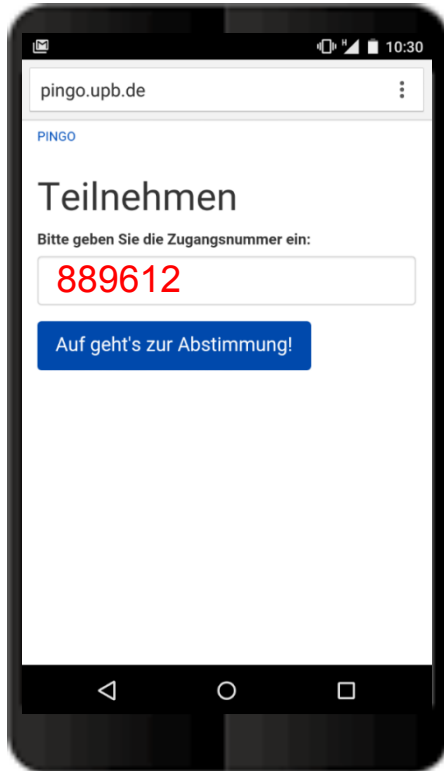


Thanks for your attention !

Jürgen Handke
handke@uni-marburg.de



<http://pingo.upb.de>



POLoob – Tgt



Identify the Correct Pair in RP!

park-pack mud-mood can't-shan't mould-should
wane-rain her-Sir

Click on all minimal pairs in the set !

Total No. of Sets: 10
Set No.: 3
Name: Juergen Handke

This exercise does not involve any
time limit.

- Click on all pairs in the set that are NOT minimal pairs in: KNOW-NO ...
- Click on all pairs in the set that are NOT minimal pairs in: SAND-SOUND ...
- Click on all minimal pairs in the set in: PARK-PACK ... N HER-SIR
- Click on all pairs in the set that are NOT minimal pairs in: FALL-STALL ...
- Click on all pairs in the set that are NOT minimal pairs in: THEIR-HARE ...
- Click on all minimal pairs in the set in: HURT-SHIRT ... FAIR-FARE
- Click on all minimal pairs in the set in: LAUGH-HALF ... UILD-KILLED
- Click on all pairs in the set that are NOT minimal pairs in: HALL-STALL ...




Help

Submit



Morphological Analysis of Malay

1. Ini kuda	This is a horse.	
2. Ini Ali.	This is Ali.	
3. Ali bagus.	Ali is good.	
4. Ali menjual kuda itu.	Ali sells that horse.	
5. Kuda Ali bagus.	Ali's horse is good.	
6. Jualan ini bagus.	This merchandise is good.	
7. Kuda ini dijual oleh Ali.	This horse is sold by Ali.	
8. Ali penjual kain.	Ali is a cloth seller.	

Isolate the Malay word for engl. 'this' (det.).



Add. Symbols

Total No. of Questions: 10
Question No.: 1
Name: Juergen Handke

This exercise does not involve any time limit.

- Isolate the Malay word for engl. 'this' (det.).
- Isolate the Malay word for engl. 'horse' (n.).
- Isolate the Malay word for engl. 'good' (adj.).
- Isolate the Malay word for engl. 'sells' (3.SG.PRES).
- Isolate the Malay word for engl. 'that' (det.).
- Isolate the Malay word for engl. 'merchandise' (n.).
- Isolate the Malay word for engl. 'is sold' (3.SG.PRES.PASS).
- Isolate the Malay word for engl. 'by' (prep.).



Help

Submit



Listening Tasks

Consonants (EMnE)



LET	Bilabial	Labio-dental	Dental	Alveolar	Post-alveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosive	p b			t d				k g			
Nasal											
Trill											
Affricate					ʧ						
Fricative		f v	θ ð	s z	ʃ ʒ						h
Lateral Fricative											
Approximant											
Lateral Approximant											

Total No. of Consonants: 10
 Consonant No.: 1
 Name: Juergen Handke

This exercise does not involve any time limit.

Your answer has been stored!

Draw

Help



Submit



How many items ...?



How many consonants are in "psycholinguistics"?

Total No. of Items: 20
 Item No.: 1
 Name: Juergen Handke

This exercise does not involve any time limit.

- How many consonants are in "psycholinguistics"?
- How many phonemes can you find in "pragmatic"?
- How many plosives are in /pætən mætʃɪŋ/?
- How many diphthongs does /trævəl eɪdʒənt/ exhibit?
- How many consonants does the word "knowledge" contain?
- How many peaks are in "collateral damage"?
- How many phonemes does "enormous" exhibit in RP?
- How many consonants are in "phonology"?



Help

Submit



Transcription Tasks

Phonemic Transcription (RP)



A Word to be transcribed: "margittrauf"

ma:gittrauf

i:				ɑ:	ɔ:		u:	ɜ:				ai	ɔɪ	'
ɪ	e		æ	ɒ			ʊ	ə	ʌ			ei		
p	t	k		f	θ	s	ʃ	tʃ		h		au	əʊ	
b	d	g		v	ð	z	ʒ	dʒ	j			ɪə	ʊə	
m	n	ŋ										eə		
r	l	w												

Total No. of Words: 3
Word No.: 1
Name: Juergen Handke

This exercise does not involve any time limit.

x margittrauf
o beepthengprofs
o pid



Help

Submit

Questions about *English Linguistics*



The 'central' component of a speech act that describes what the speaker does by uttering a sentence is known as the ...

Total No. of Questions: 20
Question No.: 1
Name: Juergen Handke

This exercise does not involve any time limit.

- The 'central' component of a speech act ... tence is known as the ...
- When a lexeme comes to refer to only par ... ing we have a case of ...
- Which syntactic function is in a copular ... ionship with another one?
- What is the complement in [I find him a funny guy.]?
- Which types of major sentence may occur without an overt subject?
- What is the pink area referred to?
- What is the verb in [My other daughter is called Jessica.]?
- What is the verb in [We will be walking down the street.]?



Help

Submit