Measuring the effect of metacompetence in EFL pronunciation learning

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Outline

1. Background and question
2. Method
3. Results so far (data from 2 months)
4. Future directions

1 Background

phonological metacompetence Dziubalska-Kołaczyk (2002), Wrembel (2005)

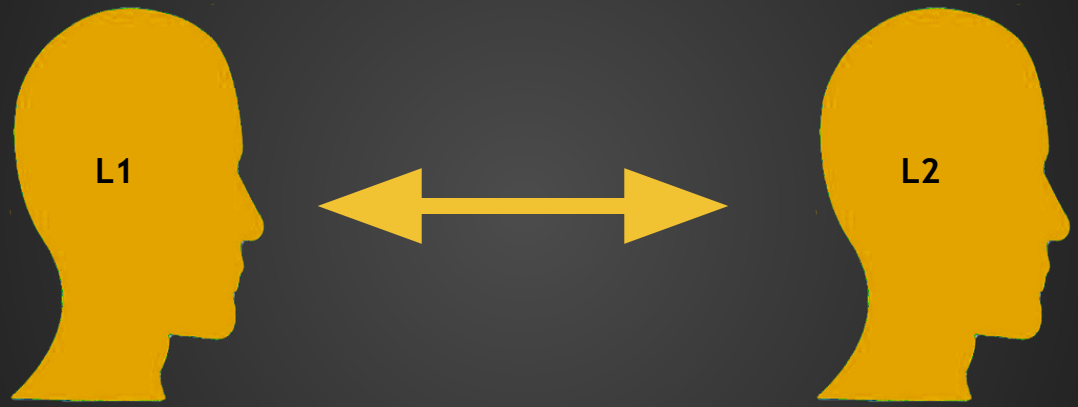
1. metalinguistic awareness
2. L1 competence
3. explicit instruction

1 Background

metalinguistic awareness

Image: http://goo.gl/0VSbCT

1 Background



L1 competence

1 Background

explicit instruction

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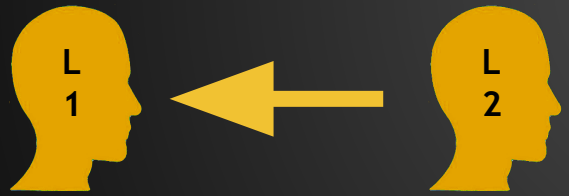
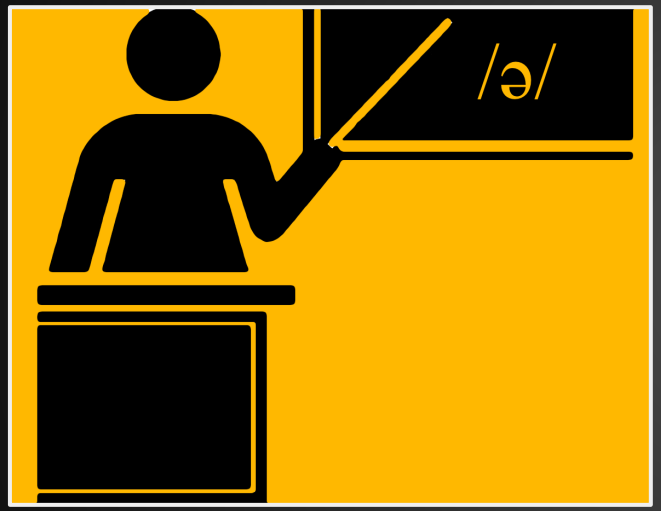
2 Question



Does theory matter or is practice alone enough?

Image: http://goo.gl/ib6zsy

3 Aim

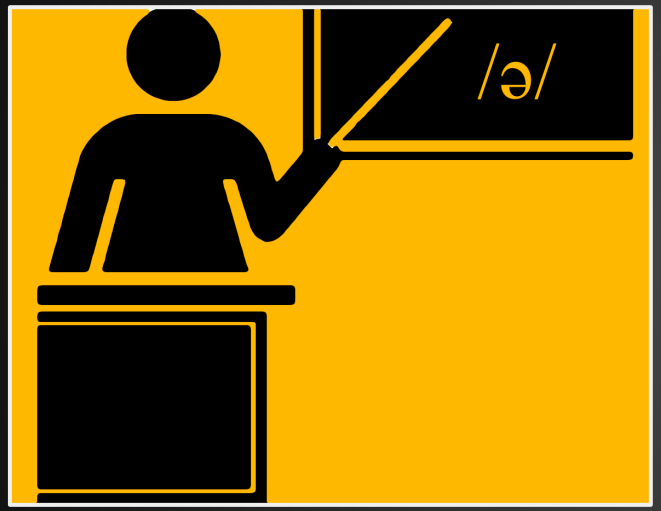


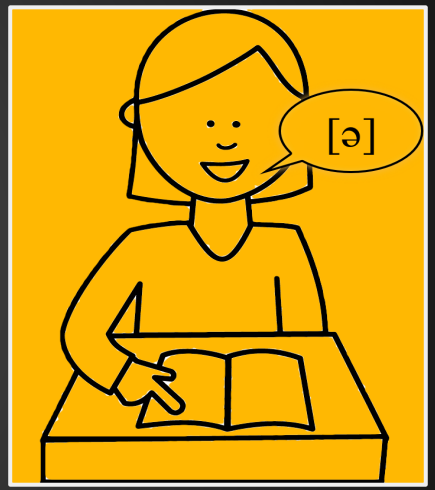
theoretical English phonetics

practical English pronunciation

Images: http://goo.gl/XJIKQ8 http://goo.gl/PfPsgo

3 Aim





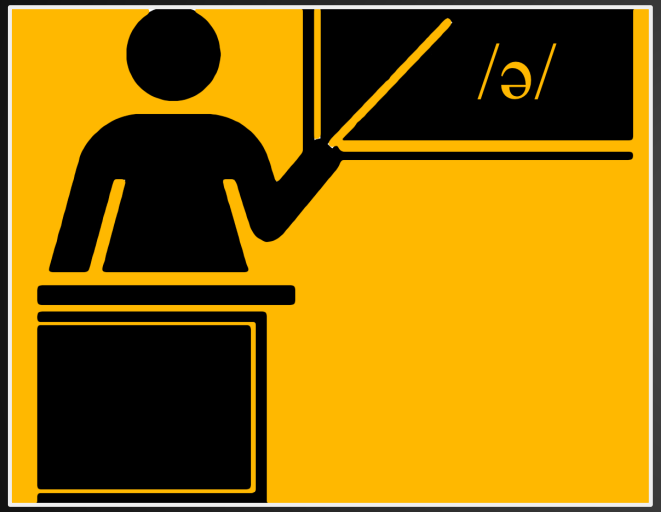
theoretical English phonetics

behaviour, performance

practical English pronunciation

performance

4 Method: Online data

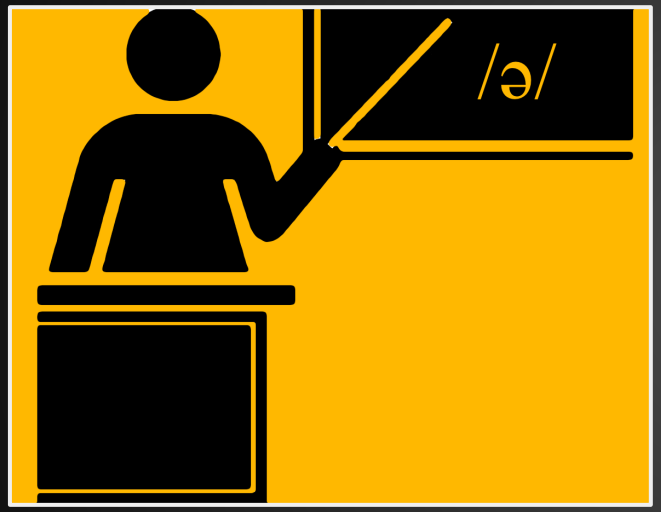


How is behaviour measurable?

theoretical English phonetics

behaviour, performance

4 Method: Online data



Previous studies *(e.g. Lechowska 2005)*

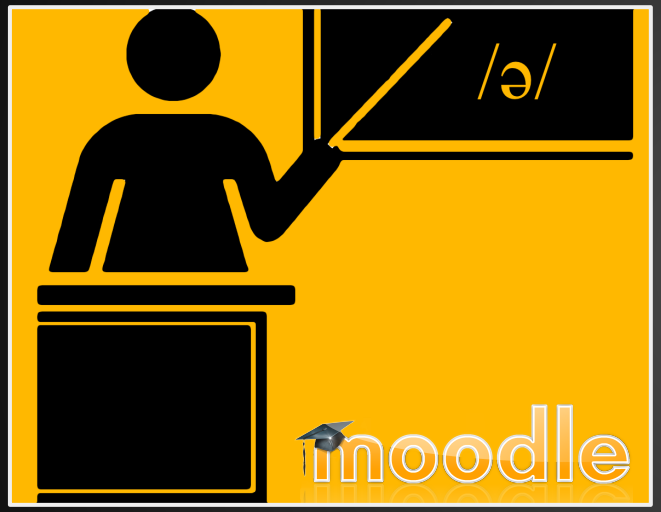
class observation

questionnaires

theoretical English phonetics

behaviour, performance

4 Method: Online data



Our blended approach:

online course (Moodle)

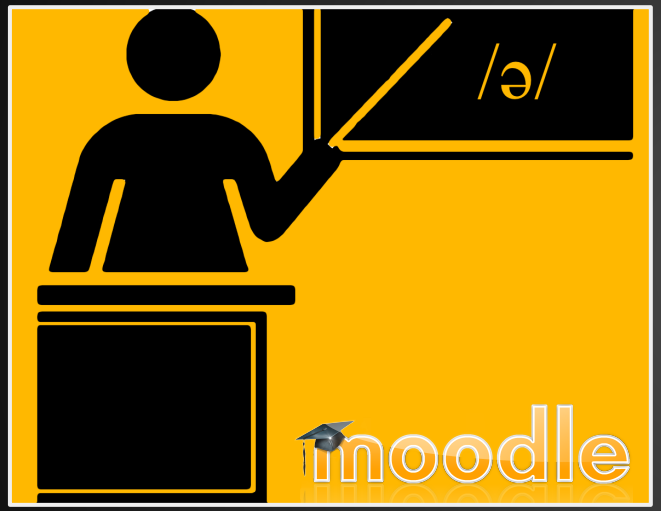
30 tutorials (90 mins each)

theoretical English phonetics

behaviour, performance

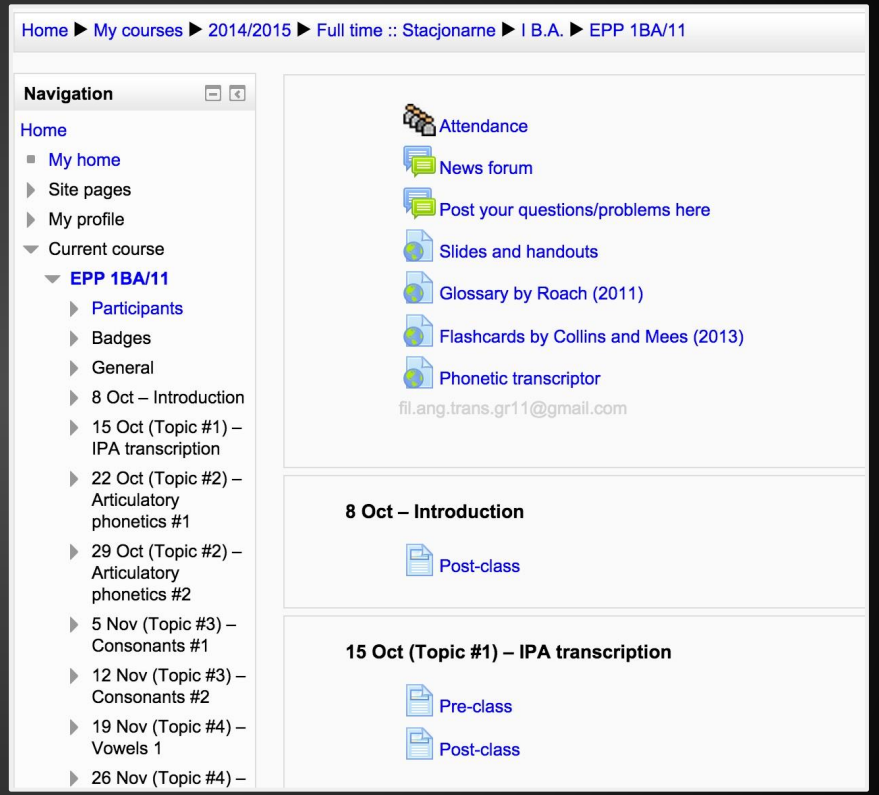
Image: http://goo.gl/ZuaBBm

4 Method: Online data



theoretical English phonetics

behaviour, performance



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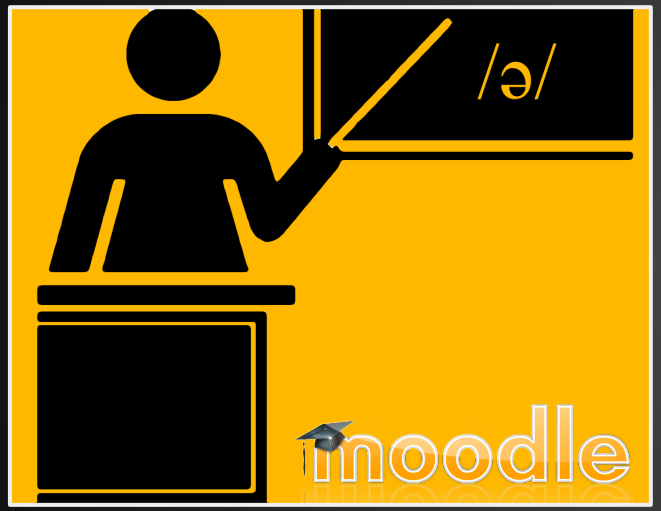

theoretical English phonetics

behaviour, performance

Aim

After this class, you should be able to:

- list all the Polish vowels and describe their quality; place the vowels on a vowel chart
- describe the differences between the Polish and English vowel systems
- describe the differences between the properties of Polish and English vowels
- describe the most common errors regarding the English vowel system that Polish EFL l

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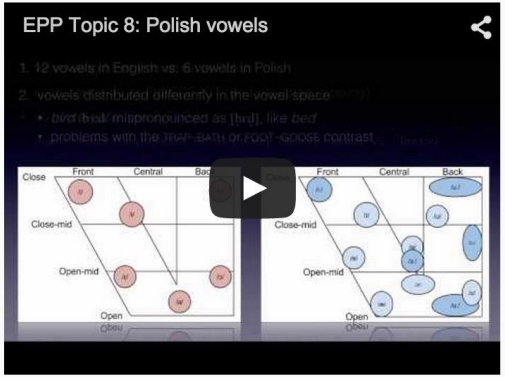
To do before the class (~ 1 hr)

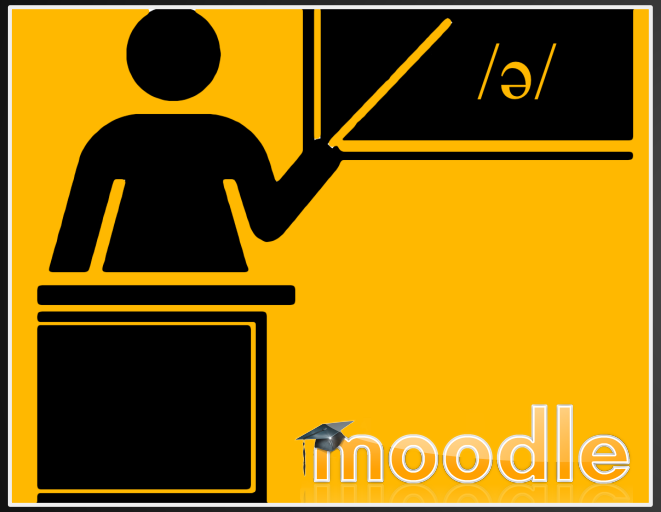
1. Because there are no good materials on the topic, I prepared my own video lecture for yo rewatched)



2. Complete this quiz to see if you understood the video lecture. (~15 mins)

3. The video lecture is based on this handout. You may want to read it, too. (~25 mins)

4 Method: Online data



theoretical English phonetics

behaviour, performance

Question 1
Not yet answered
Marked out of 1.00
Flag question
Edit question

How many vowels are there in Polish?

Select one:
- 5
- 7
- 6

Question 2
Not yet answered
Marked out of 1.00
Flag question
Edit question

How many steady-state vowels (monophthongs) are there in English?

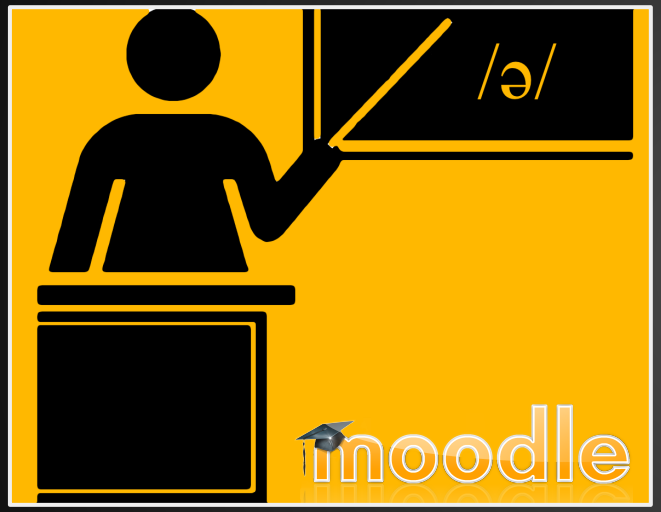
Select one:
- a. 12
- b. 14
- c. 10

Question 3
Not yet answered
Marked out of 1.00
Flag question
Edit question

Why would the perception and production of a word pair such as 'full' – 'fool' be prob
Polish EFL learners?

Select one or more:
- a. The GOOSE vowel is diphthongised, unlike the Polish /u/.
- b. Vowel length is not phonemic in Polish.
- c. Polish does not have a similar phonemic contrast in terms of auditory quality.
ear, both vowels sound very similar.

4 Method: Online data

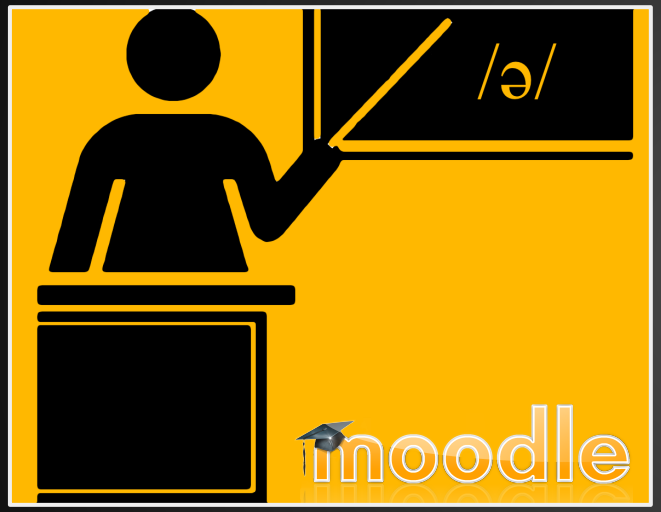


theoretical English phonetics

behaviour, performance

Image: http://goo.gl/YnQ5Vn

4 Method: Online data



theoretical English phonetics

behaviour, performance

events can be *logged*

4 Method: Online data

moodle

While Moodle is great for

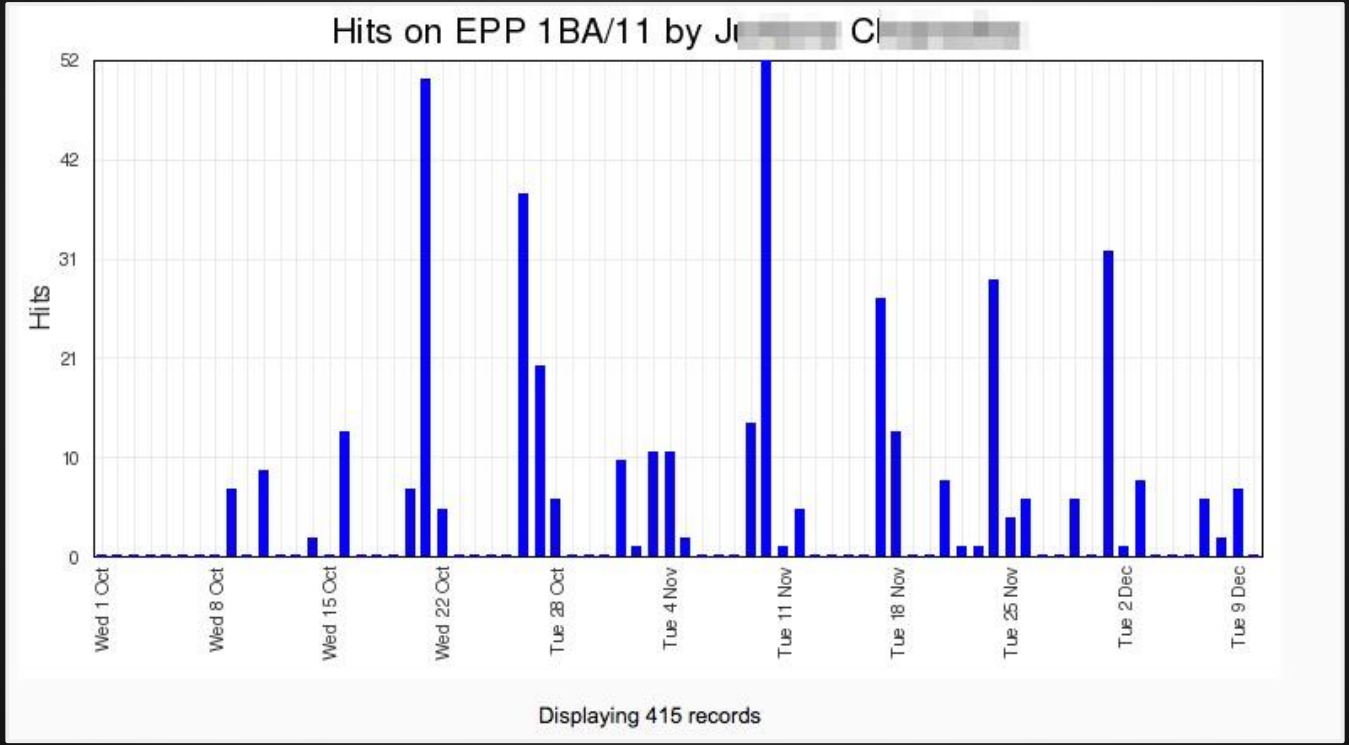
hosting content,

its reporting module

isn’t very helpful

4 Method: Online data

moodle



4 Method moodle

19 Nov (Topic #4) – Vowels 1

Pre-class	11 views	Tuesday, 2 December 2014, 11:19 PM (8 days 3 hours)
Free practice quiz: Vowels 1 – English vowels (post-class)	1 views	Tuesday, 25 November 2014, 9:22 AM (15 days 17 hours)

26 Nov (Topic #4) – Vowels 2

Pre-class	5 views	Wednesday, 26 November 2014, 8:17 AM (14 days 18 hours)

3 Dec – Midterm test

If you need more phonemic transcription practice	2 views	Tuesday, 2 December 2014, 7:51 PM (8 days 7 hours)

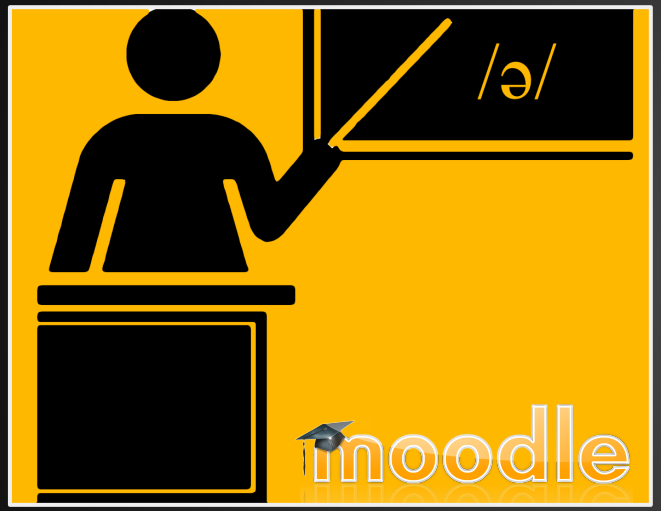
10 Dec (Topic #5) – Co-articulation 1

Pre-class	5 views	Wednesday, 10 December 2014, 8:06 AM (18 hours 44 mins)

Topic 15

Free practice quiz: IPA transcription	Grade: 7.44 / 10.00	Tuesday, 21 October 2014, 6:44 PM (50 days 9 hours)
Free practice quiz: 5-min phonemic transcription quiz	Grade: -	
Transcription practice: 10 popular brand names you've always mispronounced – until now	Grade: 8.00 / 10.00	Tuesday, 21 October 2014, 6:53 PM (50 days 8 hours)
Free practice quiz: the speech chain	Grade: 5.00 / 10.00	Tuesday, 21 October 2014, 7:10 PM (50 days 8 hours)

4 Method: Online data



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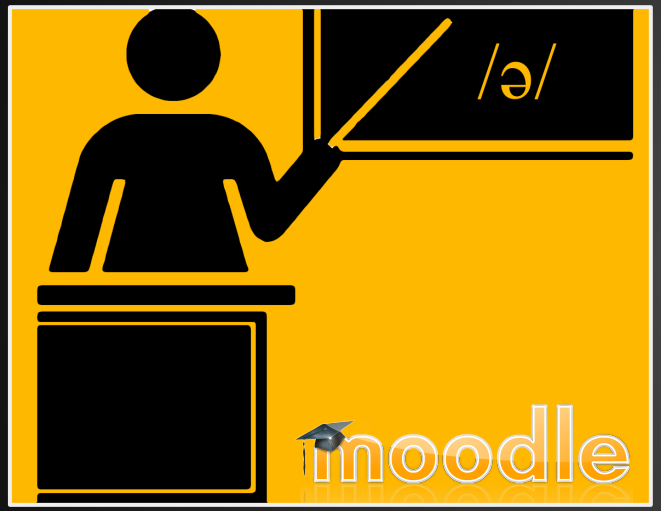

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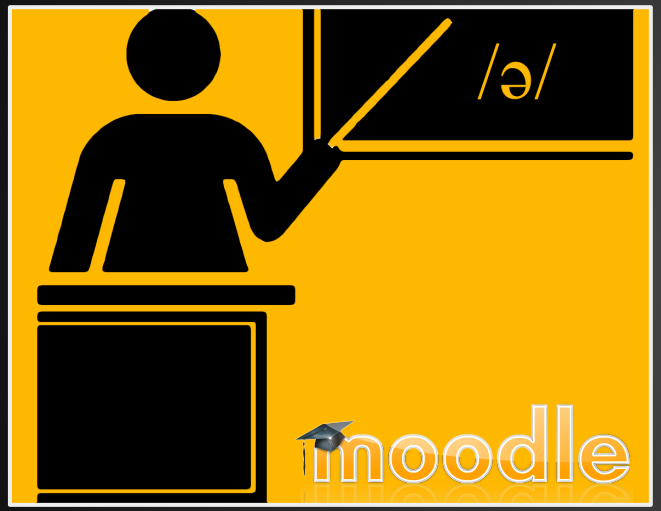
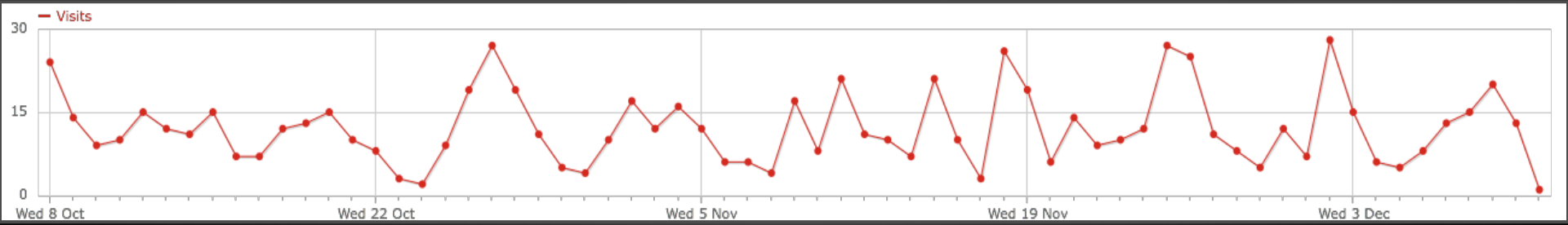


Images: http://goo.gl/9mmv42 http://goo.gl/aoA7IB

4 Method: Online data

PIWIK



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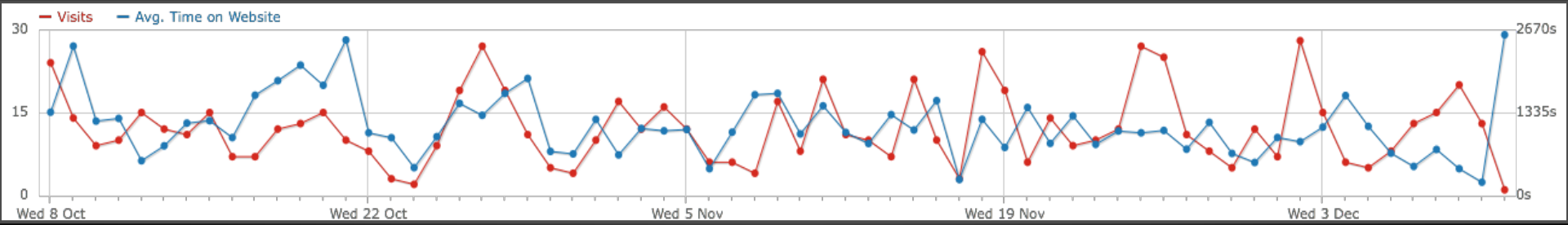
PIWIK



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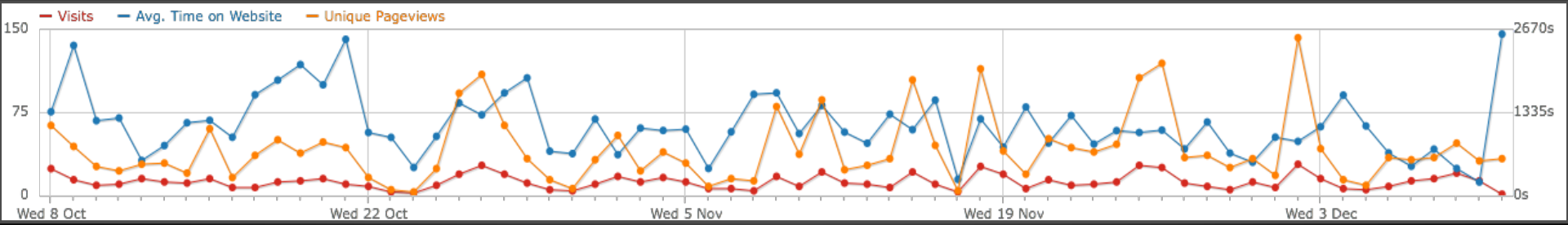
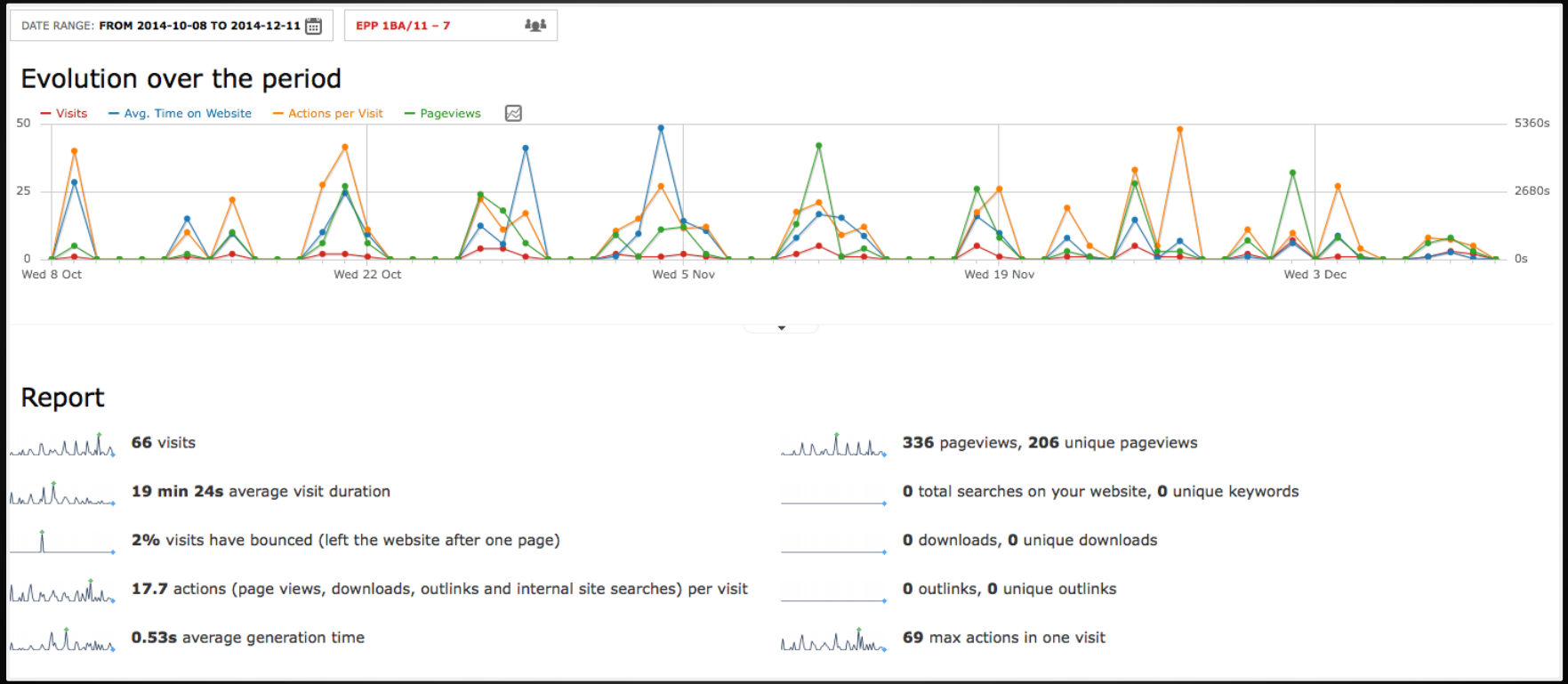


4 Method: Online data

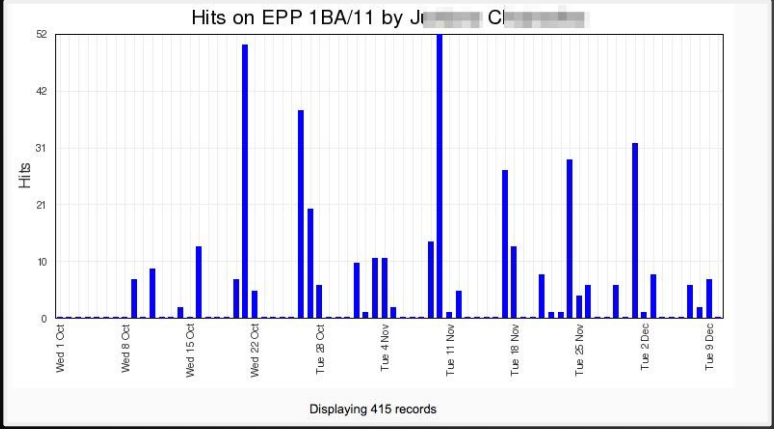
PIWIK

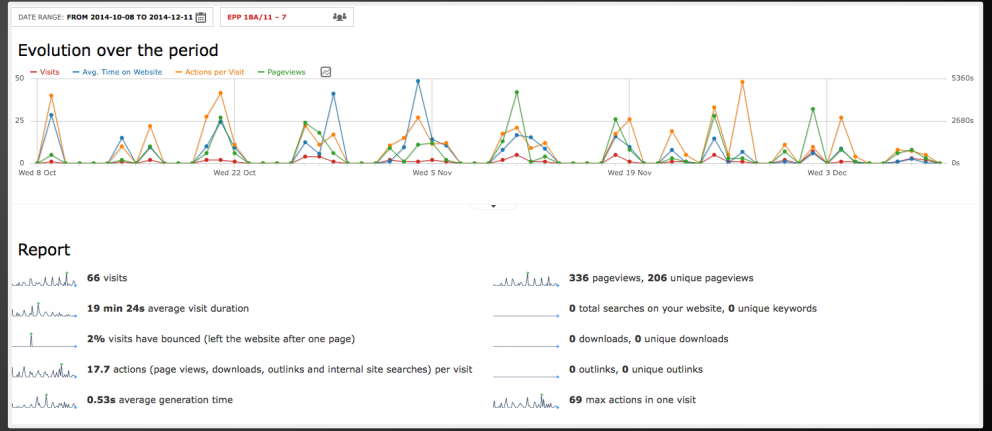


4 Method: Online data

moodle

PIWIK





4 Method: Online data

User IP address

User Moodle ID

Date and time of click

Page being viewed

User IP address (anonymised e.g. 192.xxx.xxx.xxx)

User Moodle ID

Date and time of click

Page being viewed

Time on page

Page viewed prior to the current page and after it

Files that were clicked and downloaded

Browser, operating system, brand of device used (desktop, tablet, mobile, etc.)

4 Method: Offline data

Image: http://goo.gl/JbWa6T

4 Method: Offline data

sociolinguistic interview

- Polish spontaneous speech
- Polish wordlist
- English spontaneous speech
- English reading passage (*Stella*)
- English dialogue
- English wordlist
- mimicry test

4 Method: Offline data

sociolinguistic interview

- Centre for Speech and Language Processing at the Faculty of English AMU
- Audacity for recording and editing
- Praat for analysis

4 Method: Offline data

pronunciation analysis *(wordlists)*

- impressionistic and instrumental analysis
- variables (consonants)
  - rhoticity (e.g. *water*, *forget*)
  - place of articulation (7 pairs, e.g. PL *dok* – EN dock)
  - aspiration (e.g. *pin*, *bin*, *spin*)
  - voicing / devoicing (e.g. *bad* – *bat*)

4 Method: Offline data

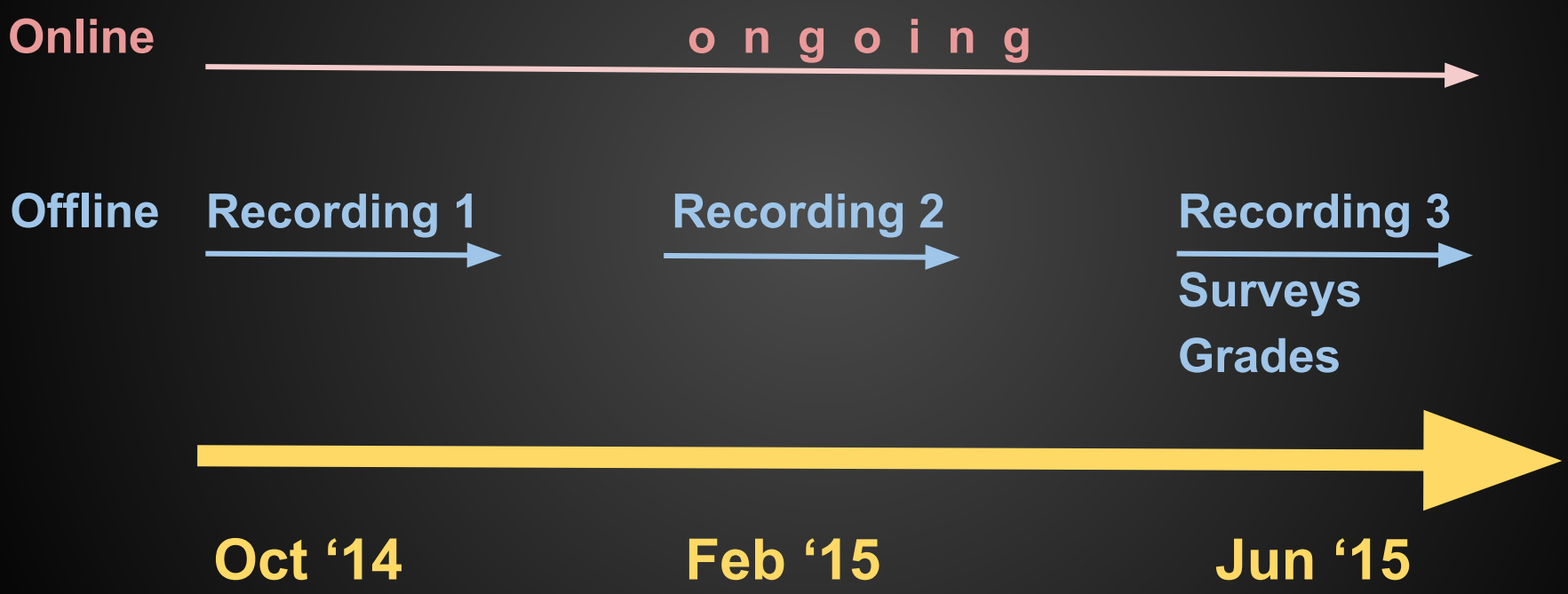
online survey

- age, birthplace, places of residence, education
- L2/L3 age of acquisition and current level
- documented medical hearing/speech impediment

4 Method: Overview

	Practical English pronunciation skills	**Theoretical knowledge of English phonetics**
Direct measures of success in acquiring English pronunciation	• student performance in the practical pronunciation course (grades from tutorials/exam) • impressionistic and instrumental analysis of students' recorded performance using Praat	student performance in the theoretical phonetics course (grades from tutorials/exam)
Indirect measures of success in acquiring English pronunciation	surveys of: • self-reported gains • satisfaction	

4 Method: Roadmap



4 Method: Participants

Image: http://goo.gl/fQwlYy

4 Method: Participants

14 students (British pronunciation model)

- age 19–20
- 12 Female, 2 Male
- Poznań or in its vicinity
- L1 Polish
- L2 English (B2–C1), age of acquisition 5–16 (mean 9.9)

5 Results so far

Online data

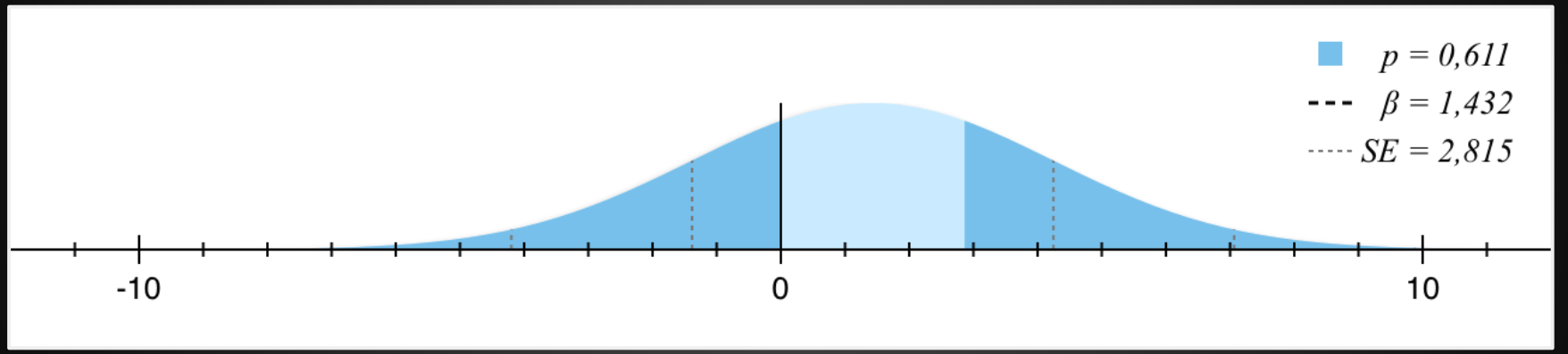
- first 2 months

Offline data

- Still no 2nd round of recordings (TBD in Feb)
- Today, recordings *(Polish and English wordlist)* used only to categorise learners at course start

5 Results so far

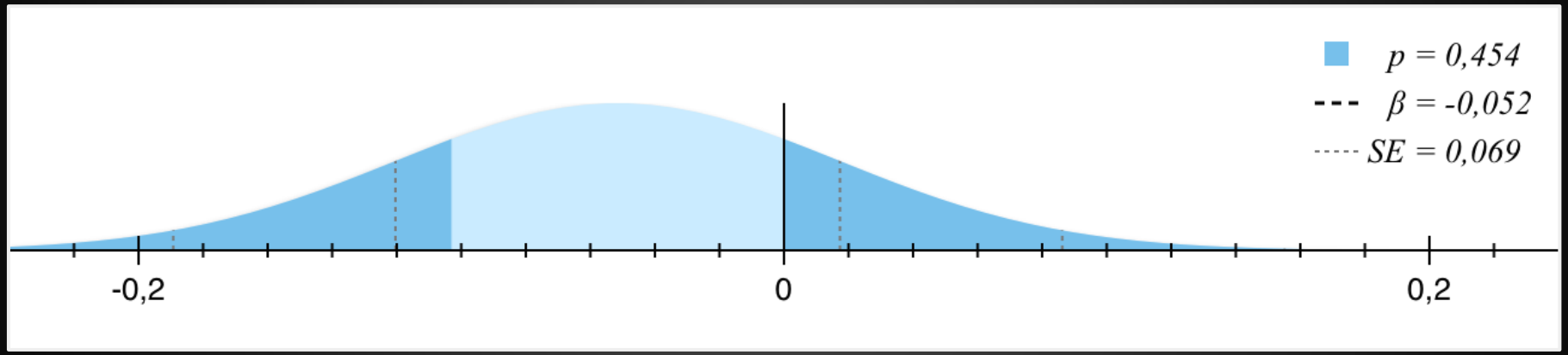
Outcome variable = phonetics course midterm grade



Predictor variable 1. Pronunciation level at course start based on Recording 1 (estimated coefficient)

5 Results so far

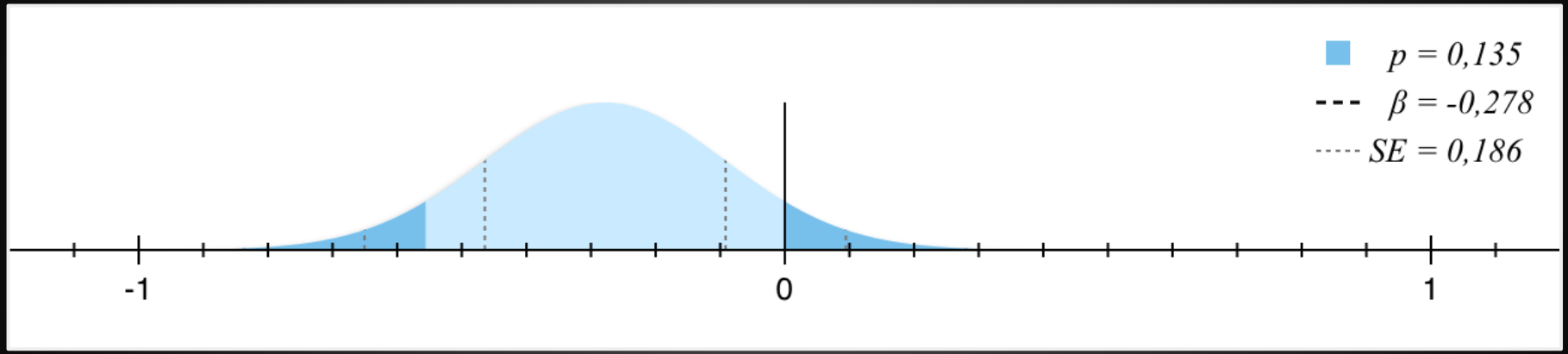
Outcome variable = phonetics course midterm grade



Predictor variable 2. Online phonetics course: number of visits (estimated coefficient)

5 Results so far

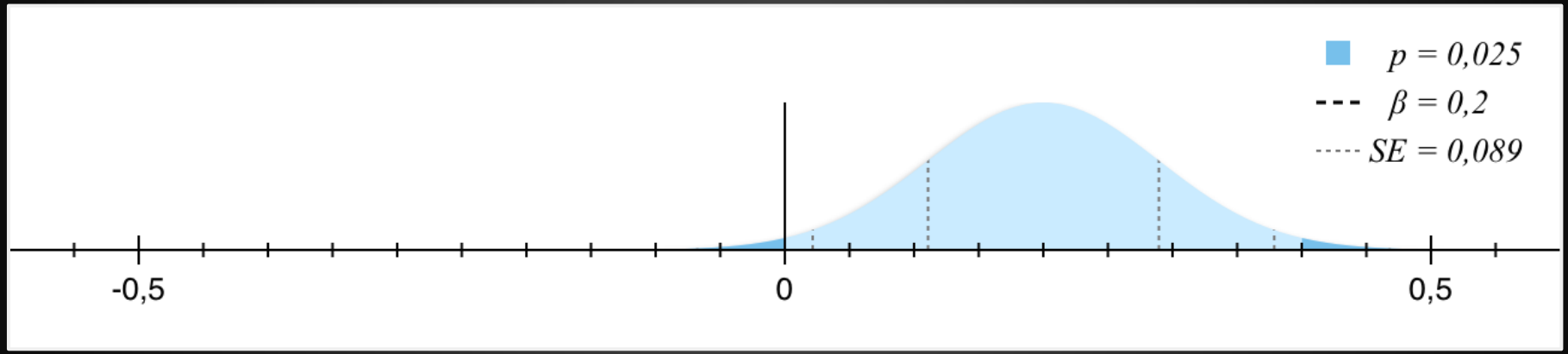
Outcome variable = phonetics course midterm grade



Predictor variable 3. Online phonetics course: avg. visit length (estimated coefficient)

5 Results so far

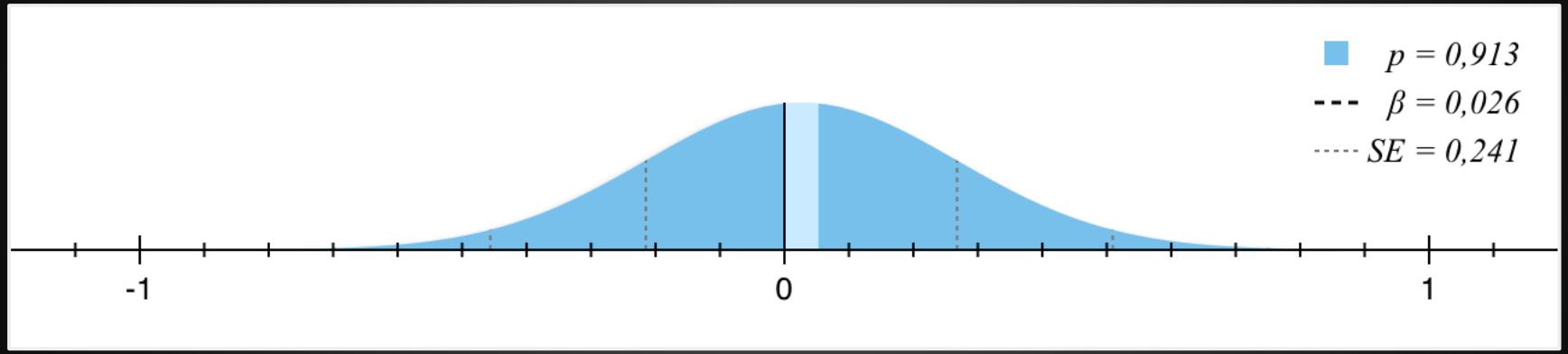
Outcome variable = phonetics course midterm grade



Predictor variable 4. Online phonetics course:
amount of pre-/post-class content covered (estimated coefficient)

5 Results so far

Outcome variable = phonetics course midterm grade



Predictor variable 5. Online phonetics course:
results from pre-/post-class quizzes (estimated coefficient)

6 Conclusions

So far, one possible predictor of
achieving success in gaining metacompetence is
the **amount of content covered in one online visit/sitting.**

6 Conclusions

- observational study: no control group…
- …due to ethical and practical issues
- users’ privacy concerns
- legal issues
- Piwik requires constant maintenance
- still, most objective measurement of pre-/post-class behaviour so far

7 Future directions

On-going **monitoring** of struggling students?

Predicting at-risk students?

7 Future directions

How do learners in an online setting actually learn?

7 Future directions

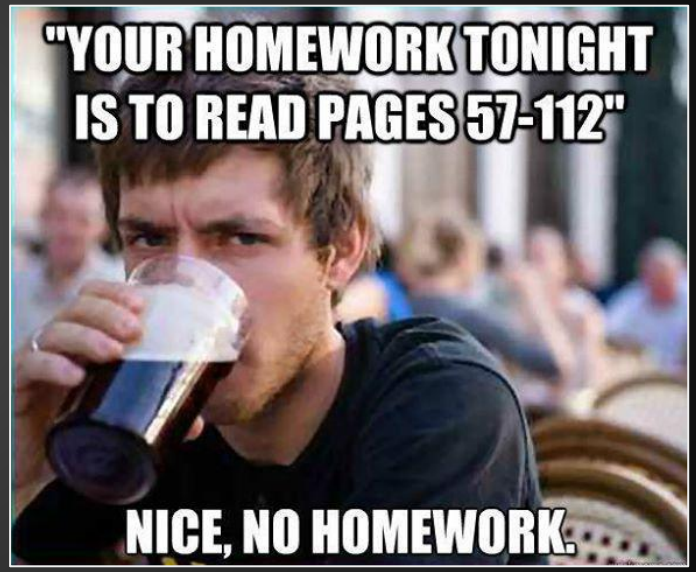
How do learners in an online setting actually learn?

teacher’s expectations

7 Future directions

How do learners in an online setting actually learn?

vs.



teacher's expectations

reality

7 Future directions

How do learners in an online setting actually learn?

teacher's expectations

	Poniedziałek	Wtorek	Środa	Czwartek
8.00			PHON AND PHON CL 602 A(ph)	PE 1 CHOICE ---
9.45		MET OF SCI Sc C1		PE 1 CHOICE ---
11.30		PHON PHON/BRIT LIT Sikor C1	SPEC VOC 1 C Chem	PE 1 CHOICE ---
13.15		ENGLISH 1 WR Jekiel 102 A(ph)	ENGLISH 1 SP 215/216 Chem	PE 1 CHOICE ---
15.00	FOREIGN LG 1 CHOICE ---	BRIT LIT 1 CL 201 A(ph)	ENGLISH 1 PH D Chem	ENGLISH 1 GR 211 Chem (did)
16.45	FOREIGN LG 1 CHOICE ---	SPEC VOC 2 316A Naucz.(ph)	LG ACQUISITION Aula Chem	LATIN D Chem
18.30	FOREIGN LG 1 CHOICE ---		HIST OF UK AND US L Aula Chem	

university's expectations

References

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