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Asian Language Teaching and Learning – The Influence of Technology on Students' Skills in SL Classroom

LANGUAGE TECHNOLOGIES & DIGITAL
HUMANITIES 2016

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Faculty of Arts, University of Ljubljana

Outline

1. Mobile learning and language teaching
2. Introduction of MemAsia project
 1. Motivation and objectives
 2. Preliminary research
 3. Construction of materials
 4. Presentation of software
 5. Results
3. Commentary and conclusions



Introduction of MemAsia project

- **Asian** language education and technology
- Supported by **EU** social funds 2015/2016
- Three researchers, 4 languages
 - Japanese
 - Korean
 - Hindi
 - Sanskrit
- Introduction of **memory algorithms** to classroom study



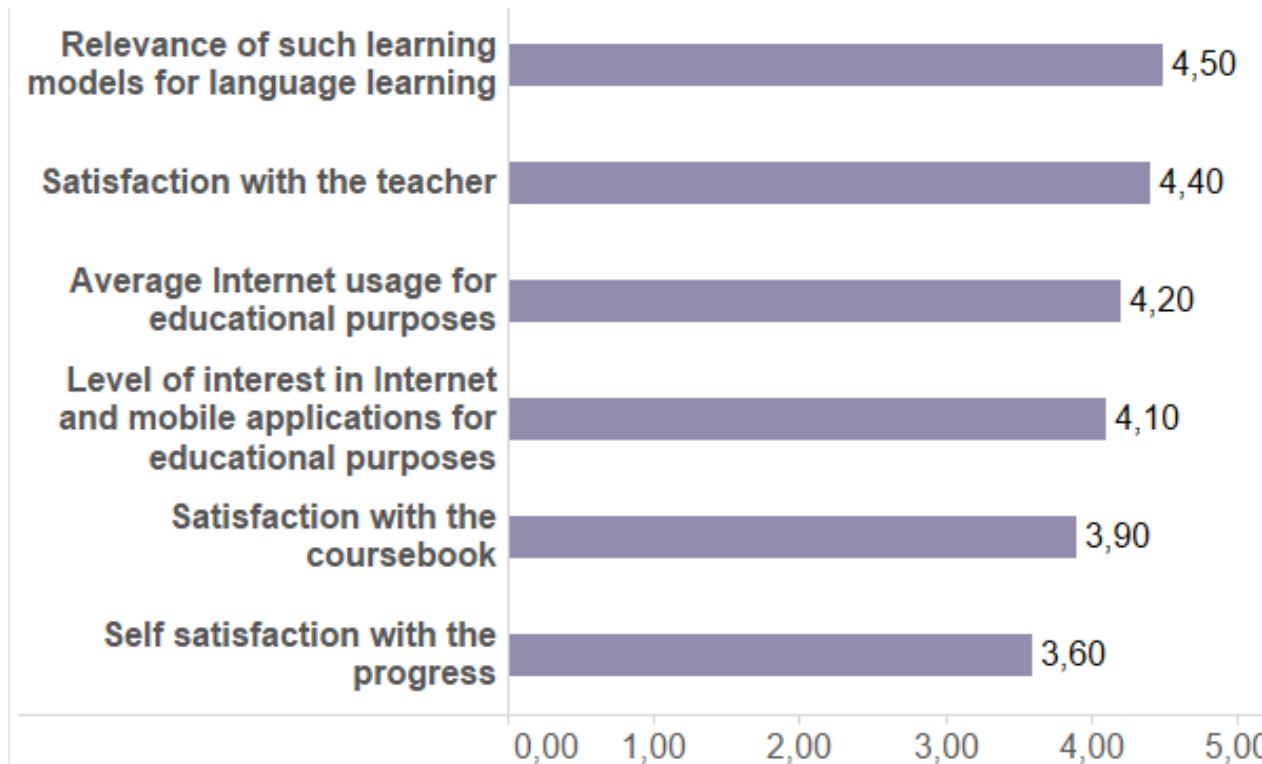
Asian languages in Croatia: motivation for this project

- To find out more about Croatian learners of four target languages
 - Difficulties in learning
 - How to enhance results
 - The role of technology
- To provide a basis for construction of systematic study materials
- Long-term: to provide an e-environment for Asian languages study
 - Include in the classrooms of Croatia
 - Share all materials online for (inter)national use



Preliminary research: attitudes

- Attitudes about mobile and traditional learning



MEMAZIJA
ALGORITMI ZA PAMĆENJE I NJIHOVA PRIMJENA U
UČENJU AZIJSKIH JEZIKA

Experience prior to MemAsia

- **over 60%** of students engage with their mobile devices at least 3-4 times an hour
- only **48 out of 203** students had had a chance to engage with e-tools in their language classrooms
 - mostly students of Japanese language
- Majority have **at least once** used one of the following:
 - Duolingo, Memrise, Quizlet, Anki, Lang8, WaniKani. Resources such as Busuu, Cram, Pleco, Lingvist.io, FluentU
- Students inclined to try e-learning more
- **Memrise, Quizlet and Anki** chosen as a basis for Croatian materials



Construction of e-learning and mobile learning materials

- Goal: produce systematic materials to follow classroom curriculum for Japanese, Korean Hindi and Sanskrit
 - **All** vocabulary and grammar from textbooks
 - Divided in **levels** and standardized
 - Translated to **Croatian** (not English)
 - Accessible from any **computer or smartphone**
 - Students in need provided with phones
 - Implemented in **different courses**



Examples

- Materials can be used on both desktop and mobile platforms
- Most students use the **mobile** versions
- Note:

Applications developed by various external developers

Materials developed by MemAsia

- Presenting the examples of mobile version of applications



Example 1: Memrise

The image shows three course cards from the Memrise app. Each card features a head icon with text inside, the course title, level, and a 'CONTINUE' button. The top card is 'Memazija Japanski A1: Vokabular' at Level 0/56 with 10 words. The middle card is 'Memazija Hindski A1: Gramatika i rečenice' at Level 8/50 with 38 words. The bottom card is 'Memazija Sanskrit A2,2.: Gramatika' at Level 3/11 with 1 word.

★ 229,807 points

MEMAZIJA
ALGORITAM ZA PRAMICENJE I BRZOKOVI PRILIKOM UČENJA
10

Memazija Japanski A1:
Vokabular
Level 0/56

CONTINUE

MEMAZIJA
ALGORITAM ZA PRAMICENJE I BRZOKOVI PRILIKOM UČENJA
38

Memazija Hindski A1:
Gramatika i rečenice
Level 8/50

CONTINUE

MEMAZIJA
ALGORITAM ZA PRAMICENJE I BRZOKOVI PRILIKOM UČENJA
gram A2

Memazija Sanskrit A2,2.:
Gramatika
Level 3/11

CONTINUE

A central overlay menu with a blue background. It shows the user's profile icon, a green hand icon, and two circular buttons: a blue one for 'Classic Review' and a red one for 'Speed Review'. The text 'Learn new words' and '10 words to review' is visible. A 'CONTINUE' button is at the bottom.

★ 229,807 points

CONTINUE

MEMAZIJA

Memazija Hindski A1:
Vokabular

Learn new words
10 words to review

Classic Review

Speed Review

CONTINUE

The image shows a desktop screenshot of the Memrise website. The top navigation bar includes 'Home', 'Courses', and 'Groups'. The main content area displays a list of courses for 'Japanese'. Each course card shows the course title, level, and progress. A 'Streak Clock' widget shows '2 hours 35 mins' left to complete daily goals. A 'PRO' section highlights features like 'Difficult words, audio review, personal learning stats...' and 'More learn modes'. A 'Leaderboard' section lists top users.

memrise Home Courses Groups

Japanese Review (34) Japanese

Memazija MEMBLEM
229 words learned 229,807 points
View profile

Streak Clock
Time left to complete your daily goals
2 hours 35 mins
Change timezone

PRO
Difficult words, audio review, personal learning stats...
More learn modes
More variety
Faster progress
from \$9 per month only
Go Pro today

Leaderboard

1. smellyeye	13,050
2. kendoka_v	6,446
3. Shin314	5,319
4. Rhivi	4,528
7. Memazija	0

More

Memazija Japanski A1:
Rečenice i gramatika
10 / 134 words learned
Review (10) Learn

Memazija Japanski A1:
Vokabular
10 / 768 words learned
Review (10) Learn

Memazija Japanski A2:
Rečenice i gramatika
0 / 180 words learned
Learn

Memazija Japanski A2:
Vokabular
7 / 751 words learned
Review (7) Learn

Example 1: Memrise

Ready to learn Ready to review Ignore

おはよう (ございます)	dobro jutro	
こんにちは	dobar dan	
こんばんは	dobra večer	
さようなら	doviđenja	
おやすみ (なさい)	laku noć	
ありがとう (ございます)	hvala	
すみません	oprostite; ispričavam se	

いいえ さようなら

Select the correct **Croatian** for the **Japanese** above:

1. hvala 2. dobra večer

3. doviđenja 4. knjižnica

See answer

Learn 5 new wo...

doobar dan

Type the Japanese for the Croatian above and press Enter:

こんにちは

See answer

こんにちは こんにちは! 今日は コンニチハ

q w e r t y u i o p

@ # \$ % & * + ()


↑ z x c v b n m ←

?123 日本語 実行


Example 1: Memrise

Japanese 1 90

arigatou
thank you




1/3 MEMS



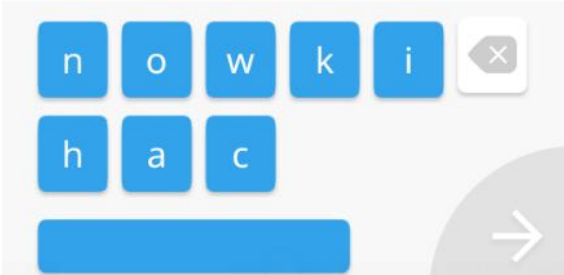
Japanese 1 180

Type the Japanese for the English

hello



Input field with a vertical cursor



Learn new words

RESULTS LEADERBOARD WORDS (3)

Your Results

- 3 words learned
- 75% accuracy
- 466 points earned

Daily goal

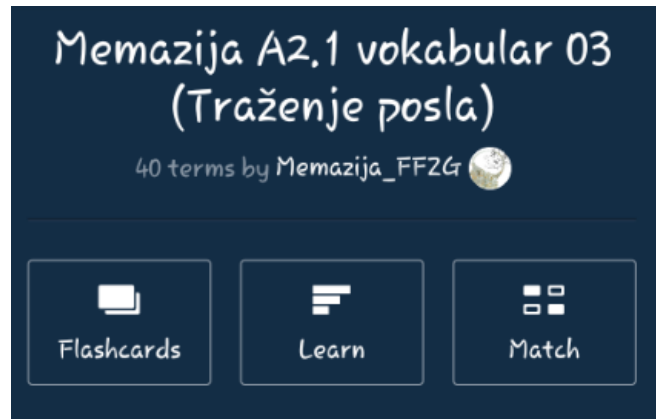
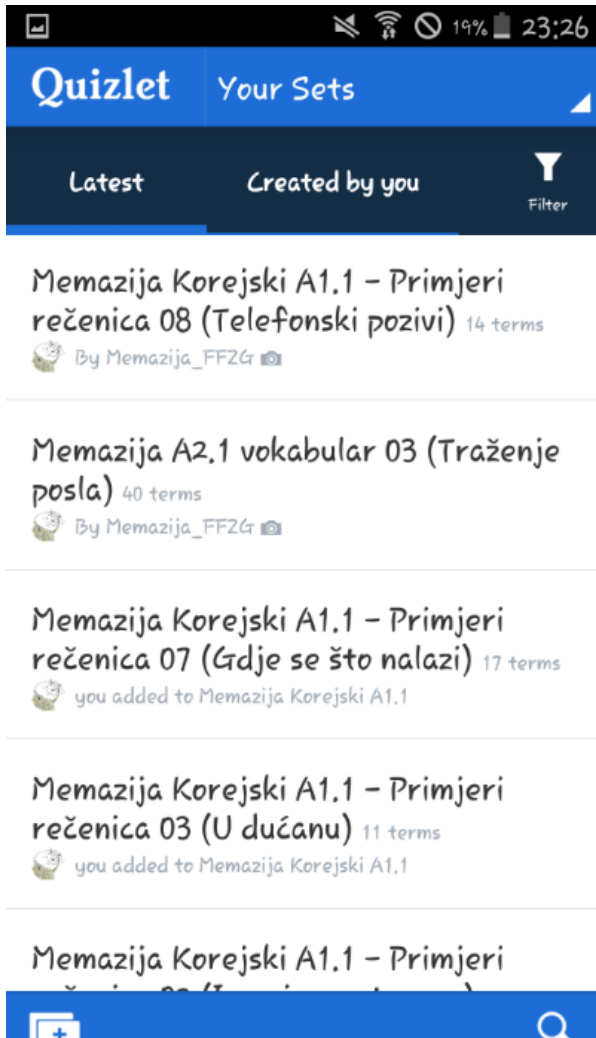
466 / 70

SET A DAILY GOAL

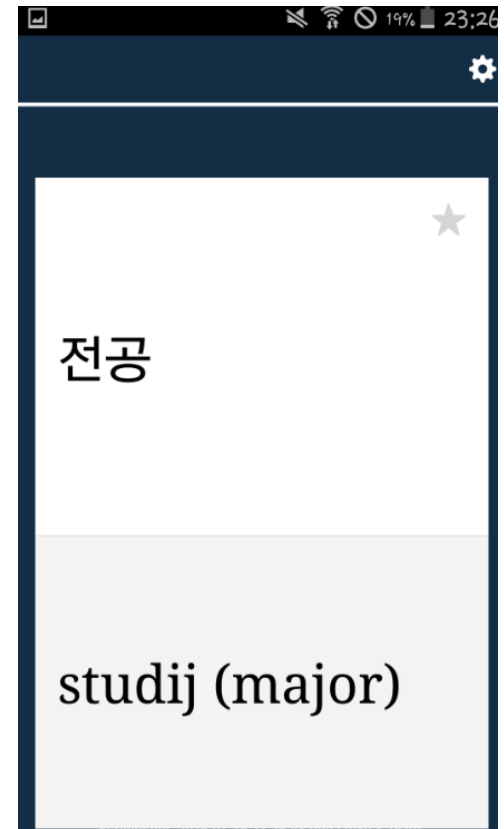
T W T F S S M

HOME CONTINUE

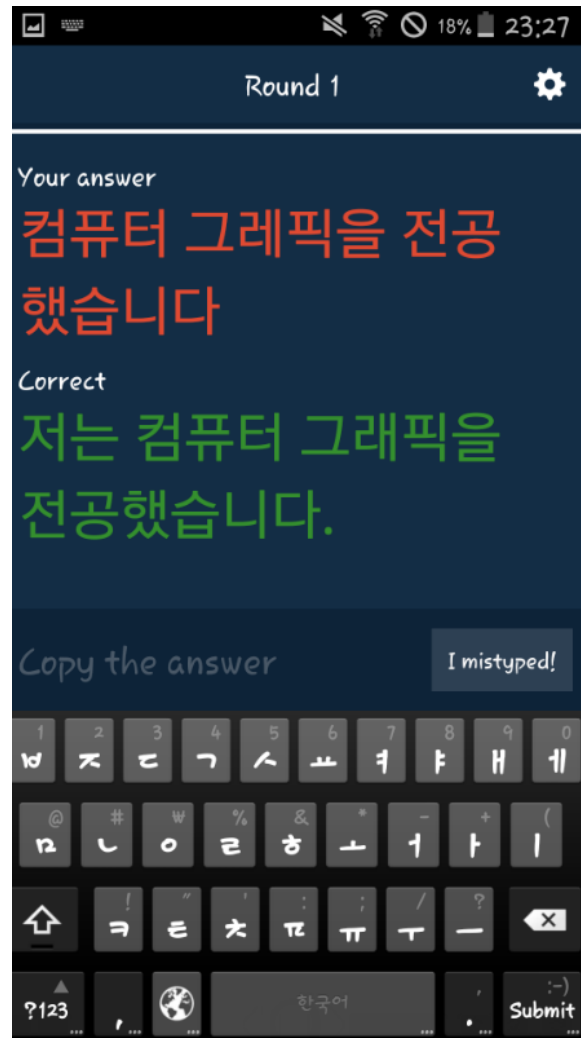
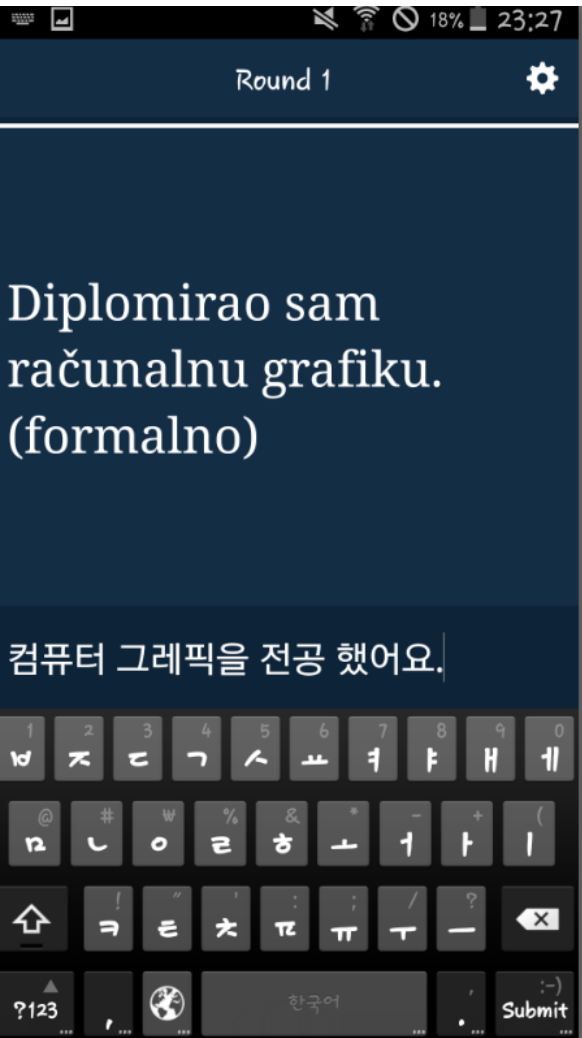
Example 2: Quizlet



전공	studij (major)	🔊	★
컴퓨터 그래픽	računalna grafika	🔊	★
경제학	ekonomija	🔊	★
한국어 교육	podučavanje korejskog jezika	🔊	★



Example 2: Quizlet



Example 3: Anki

AnkiDroid
7667개의 카드 예정 (58 min)

- Default 0 0 100
- JLPT N1 Vocab 20 3 7
- > JPNS 20 0 21
- ▼ Japanese 20 0 1
 - Study Group 20 0 1
 - Memazija-Hangeul 18 1 3
 - Memazija-Kanji 0.4 20 13 18
 - Nihongo So-Matome N1 Grammar 20 3 50
 - Ultimate Geography 10 0 156
 - 完全マスター 1級文法問題 対策例文 20 10 10
 - 맞춤 학습 세션 27

Studied 0 cards in 0 minutes today

Memazija-Hangeul
1분 남음

18 1 3



čamac

< 1 min 다시
1 d 관참음
4 d 쉬음

Memazija-Hangeul
1분 남음

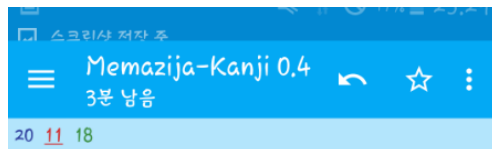
18 0 2



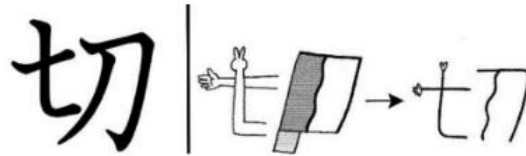
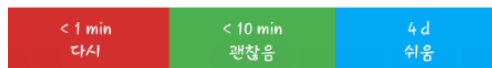
đurđica

< 1 min 다시
< 10 min 관참음
4 d 쉬음

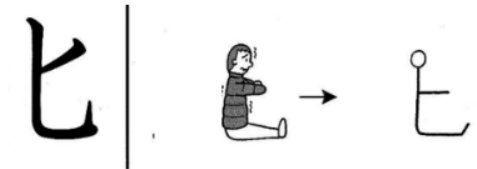
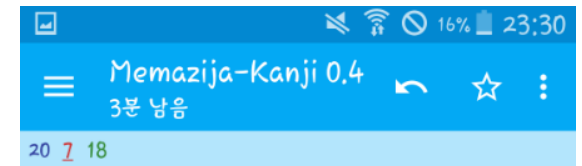
Example 3: Anki



snaga
리키, 리ョク, ちから
toliko sam SNAŽAN da mogu podići
katanu



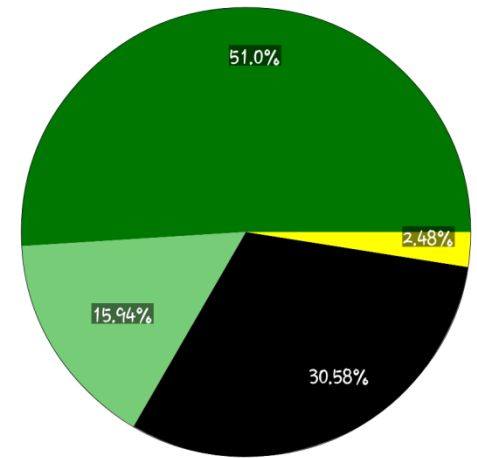
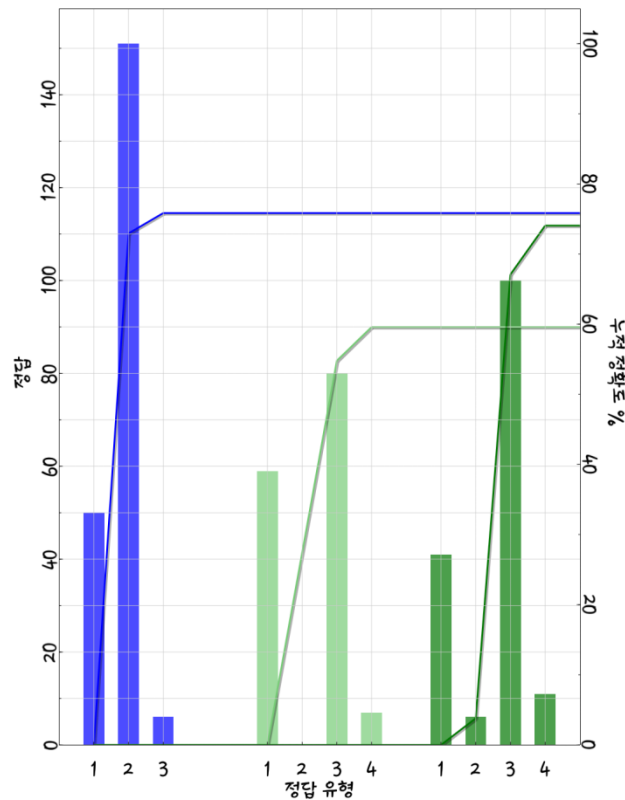
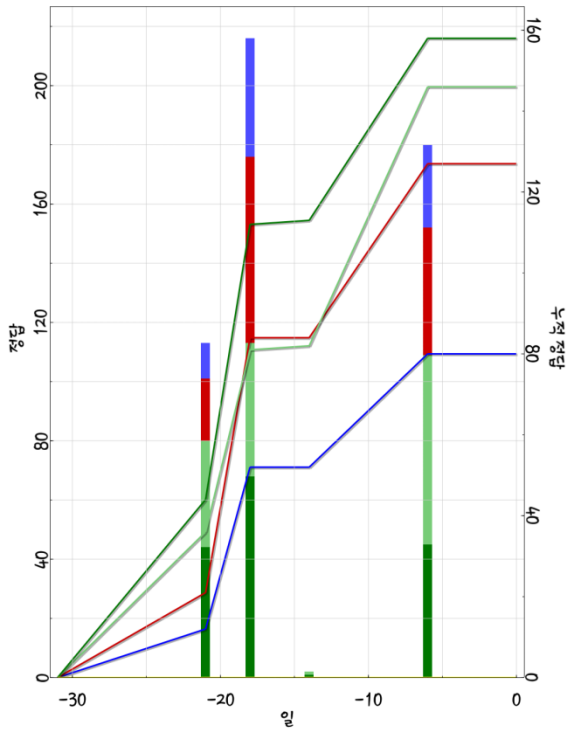
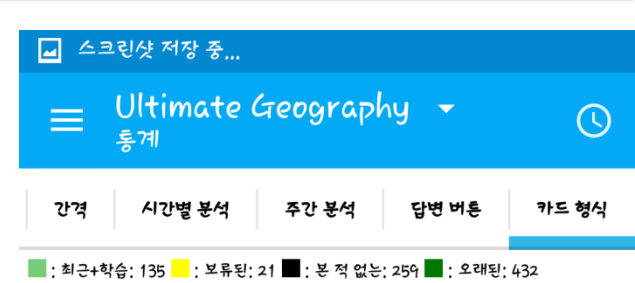
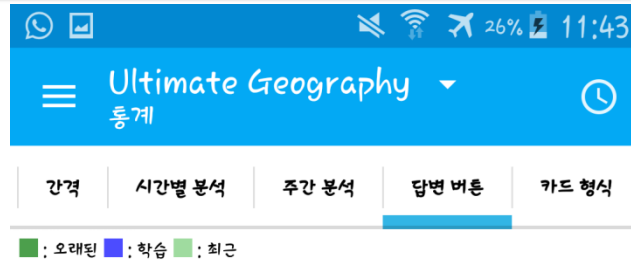
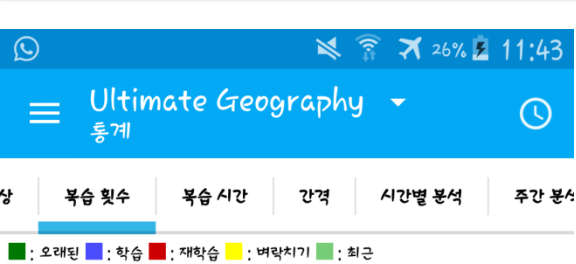
rezati
사이, 세ツ, き · ー
sedam katana koje REŽU



žlica / čovjek koji sjedi
ヒ, さじ
žlica slična "hi" u katakani, hito =
čovjek



Example 3: Anki



Results (so far)

- Students of all four languages
 - Tested every 2-3 months
 - Standardized tests on a computer
 - Measuring results and comparing with usage
- Results from **regular** users and **occasional** users significantly different
- Regular users show **~20% improvement** in test results on each testing



Additional applications

- Data from the apps can be used for various research on **memory and study issues**
- Collected and stored for future work and reference
- Insight about human memory, learning and importance of **algorithms** for spaced repetition



Conclusions, comments...

- **Most important elements** in successful implementation of mobile and e-learning in classrooms
 - **Systematic** and wholesome materials which **follow classwork**
 - **Motivation**
 - Promotion of usage by teachers (weekly quizzies)
 - Tracking and measuring progress
 - **Fun** : charts and games



Conclusions, comments...

- **Other** important elements in successful implementation of mobile and e-learning in classrooms
 - Smart **algorithm** for repetition
 - Availability and **stability** of applications
 - **Ease** of usage
 - Both for construction of materials and usage by students



Thank you for your attention!



Thank You