LARA: THE LEARNING AND READING ASSISTANT

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Joint WG1 & WG3 enetCollect meeting, Lisbon, 14 March 2019
OUTLINE

• Background on COLLECTOR & LARA: what it is, how it works (Hanieh)
• Pedagogy and user testing: A case study of LARA for Icelandic (Branislav)
BACKGROUND

CALLECTOR

• Three year project funded by Swiss National Science Foundation
  • (Apr 2018 – Dec 2021)

• Linked to enetCollect (CA16105) under SNSF COST funding

• Top-level goal: social network for crowdsourcing CALL content

• Two kinds of content: speech and text

LARA

• Subproject started Q3 2018

• Informal international collaboration: University of Iceland, Ferdowsi University of Mashhad, Samara National Research University, others!

• Top-level goal: text content
  • to help teachers create specific reading material
  • to help students learn a language by reading

https://www.unige.ch/collector/
DEMO: PETER RABBIT
Mr. McGregor was on his hands and knees planting out young cabbages, but he jumped up and ran after Peter, waving a rake and calling out, ‘Stop thief!’

Peter was most dreadfully frightened; he rushed all over the garden, for he had forgotten the way back to the gate.

He lost one of his shoes among the cabbages, and the other shoe

“Personalised concordance”
Mr. McGregor was on his hands and knees planting out young cabbages, but he jumped up and ran after Peter, waving a rake and calling out:

'Stop thief!' 

Peter was most dreadfully frightened; he rushed all over the garden, for he had forgotten the way back to the gate.

He lost one of his shoes amongst the cabbages, and the other shoe amongst the potatoes.

rabbit

Translation

'Once upon a time there were four little Rabbits, and their names were-- Flopsy, Mopsy, Cotton-tail, and Peter.

'Now my dears,' said old Mrs. Rabbit one morning, 'you may go into the fields or down the lane, but don't go into Mr. McGregor's garden: your Father had an accident there; he was put in a pie by Mrs. McGregor.'

Then old Mrs. Rabbit took a basket and her umbrella, and went through the wood to the baker's. She bought a loaf of brown bread and five currant buns.

He found a door in a wall; but it was locked, and there was no room for a fat little rabbit to squeeze underneath.

He was so tired that he flopped down upon the nice soft sand on the floor of the rabbit-hole and shut his eyes.

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Back to alphabetical index

Back to hyperlinked text
segir hún
i símann:
"Tina er komin.
þá getur þú sjálf
sagt henni þetta." 

Mamma lítar á Tinu:
"Komaðu, Tina.

sjálfur

Translation: English
Grammar information

— Degar mamma sér Tinu segir hún í símann: "Tina er komin, þá getur þú sjálf sagt henni þetta." 


— En Tina sér hvað er að. Hún er oft bilveik sjálf. 

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なきました

→ 100万人の人がそのねこをかわいがり100万人の人がそのねこがしんだときなきました。

→ 王先生はたたかいのまっさいいちょうにねこをだいてなきました。

→ 船のりはぬれたでうきんのようになったねこをだいて大きな声でなきました。
そして遠いみなと町のこうえんの木の下にねこをうめました。

→ 手品つかいはまっぷたたになってしまったねこを両手にぶらさげて大きな声でなきました。

→ よほよほのおばあさんはよほよほのしんだねこをだいて一日じゅうなきました。

→ ぐらぐらの頭になってしまったねこをだいて女の子は一日じゅうなきました。
そしてねこをねの木の下にうめました。

→ ねこははじめてなきました。

夜になって朝になってまた夜になって朝になってねこは100万回もなきました。

Frequency index
Alphabetical index
existinglearaccontent:ru

наткнулся

— Но сразу за паразитом с огурцами, он наткнулся на самого мистера Мак-Грегора.

— Потеряв их, он побежал на четырех ногах и стал двигаться быстрее, так что я думал, что он мог бы вообще обскакать, если бы, к сожалению, не наткнулся на крыжовник и зацепился большими пуговицами на куртке. Это был синий пиджак с медными пуговицами, совсем новый.

Frequency index

Alphabetical index
کلیه

بگرو برزیزندی برای خوبان آن کلیه نورون می‌رخند.

آقا گرگ دار رفته‌ها یک کلیه بر زیر تا آماده می‌کند.

وی‌ها برزیزندی آن کلیه نورون رفته آقا گرگ به‌خودت می‌دهند.

کسی که کنست آقا گرگ به‌طرف کلیه نورون می‌رود.

نخواهای بسیار: آقا کلیه دار می‌زنند.

گرگ کلیه باشک خانه‌کرد و یک کلیه دراز به دارا افتد. بود.

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CREATING LARA CONTENT

• Tagging
• Translation
• Recording
CREATING LARA CONTENT: TAGGING

1. <h1>The Tale of Peter#Peter# Rabbit</h1>
2. <h2>Beatrix Potter</h2>
3. @Once upon a time@ there were four little Rabbits, and their names were:
4. Flopsy, Mopsy, Cottontail, and Peter.
5. They lived with their Mother in a sand-bank, underneath the root of a
6. very big fir-tree.
7. <img src="01VeryBigFirTree.jpg" width="271" height="317" alt="Four little rabbits"/>
8. "Now my dears," said old Mrs. Rabbit one morning, "you may go into
9. the fields or down the lane, but don't go into Mr. McGregor's garden:
10. your Father had an accident there; he was put in a pie by Mrs.
11. McGregor."
12. <img src="02YourFatherHadAnAccident.jpg" width="279" height="302" alt="Mrs Rabbit and the good little bunnies"/>
<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>244</td>
<td>rabbit</td>
</tr>
<tr>
<td>245</td>
<td>radish</td>
</tr>
<tr>
<td>246</td>
<td>rake</td>
</tr>
<tr>
<td>247</td>
<td>rather</td>
</tr>
<tr>
<td>248</td>
<td>rest</td>
</tr>
<tr>
<td>249</td>
<td>room</td>
</tr>
<tr>
<td>250</td>
<td>root</td>
</tr>
<tr>
<td>251</td>
<td>round</td>
</tr>
<tr>
<td>252</td>
<td>run</td>
</tr>
<tr>
<td>253</td>
<td>run after</td>
</tr>
<tr>
<td>254</td>
<td>rush</td>
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<td>255</td>
<td>s</td>
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<td>256</td>
<td>safe</td>
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<tr>
<td>257</td>
<td>sand</td>
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<td>258</td>
<td>say</td>
</tr>
<tr>
<td>259</td>
<td>scare</td>
</tr>
<tr>
<td>260</td>
<td>scare-crow</td>
</tr>
<tr>
<td>261</td>
<td>scr-r-rich</td>
</tr>
<tr>
<td>262</td>
<td>scratch</td>
</tr>
<tr>
<td>263</td>
<td>scratch</td>
</tr>
<tr>
<td>264</td>
<td>scutter</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## CREATING LARA CONTENT: RECORDING

<table>
<thead>
<tr>
<th>ID</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>50748</td>
<td>Once upon a time there were four little Rabbits, and their names were-- Flopsy, Mopsy, Cotton-tail, and Peter.</td>
</tr>
<tr>
<td>50792</td>
<td>They lived with their Mother in a sand-bank, underneath the root of a very big fir-tree.</td>
</tr>
<tr>
<td>50770</td>
<td>'Now my dears,' said old Mrs. Rabbit one morning, 'you may go into the fields or down the lane, but don't go into Mr. McGregor's garden; your Father had an accident there; he was put in a pie by Mrs. McGregor.'</td>
</tr>
<tr>
<td>50771</td>
<td>'Now run along, and don't get into mischief. I am going out.'</td>
</tr>
<tr>
<td>50772</td>
<td>Then old Mrs. Rabbit took a basket and her umbrella, and went through the wood to the baker's. She bought a loaf of brown bread and five currant buns.</td>
</tr>
<tr>
<td>50773</td>
<td>Flopsy, Mopsy, and Cottontail, who were good little bunnies, went down the lane to gather blackberries:</td>
</tr>
</tbody>
</table>
COMING SOON: THE LARA PORTAL

- The first step in creating CALLector social network
- Easier way for teachers to create LARA content
- Personalized LARA pages for students’ reading history
- Will be available in the middle of April.
DISTRIBUTED LARA: “READING PROGRESS”
to take out of it, and burning with curiosity, she ran across the field after it, and fortunately was just in time to see it pop down a large rabbit-hole under the hedge.

![Image of a character]

In another moment down went Alice after it, never once considering how in the world she was to get out again.

**hole**

**Translation**

← He was so tired that he flopped down upon the nice soft sand on the floor of the rabbit-hole and shut his eyes. (§)

← CHAPTER I. Down the Rabbit-Hole

← and burning with curiosity, she ran across the field after it, and fortunately was just in time to see it pop down a large rabbit-hole under the hedge.

← The rabbit-hole went straight on like a tunnel for some way, and then dipped suddenly down, so suddenly that Alice had not a moment to think about stopping herself before she found herself falling down a very deep well.

← Alice opened the door and found that it led into a small passage, not much larger than a rat-hole: she knelt down and looked along the passage into the loveliest garden you ever saw.

**Frequency index**

**Alphabetical index**
DISTRIBUTED LARA: CUSTOMIZING CONTENT

Mr. McGregor was on his hands and knees planting out young cabbages, but he jumped up and ran after Peter, waving a rake and calling out, 'Stop thief!' 

Peter was most dreadfully frightened; he rushed all over the garden, for he had forgotten the way back to the gate.

He lost one of his shoes among the cabbages, and the other shoe amongst the potatoes.

---

run

Translation

'Now run along, and don't get into mischief. I am going out.' 

But Peter, who was very naughty, ran straight away to Mr. McGregor's garden, and squeezed under the gate.

Mr. McGregor was on his hands and knees planting out young cabbages, but he jumped up and ran after Peter, waving a rake and calling out, 'Stop thief!' 

After losing them, he ran on four legs and went faster, so that I think he might have got away altogether if he had not unfortunately run into a gooseberry net, and got caught by the large buttons on his jacket. It was a blue jacket with brass buttons, quite new.

An old mouse was running in and out over the stone doorstep, carrying peas and beans to her family in the wood.

Peter got down very quietly off the wheelbarrow; and started running as fast as he could go, along a straight walk behind some blackcurrant bushes.

Peter never stopped running or looked behind him till he got home to the big fir-tree.

when suddenly a White Rabbit with pink eyes ran close by her.
DISTRIBUTED LARA: MOST CONTENT IS MULTIMEDIA

Multimedia: 95.8

Text: 3.6
DISTRIBUTED LARA: DISTRIBUTED CONTENT
Pedagogy and User Testing:

A Case Study of LARA for Icelandic
MOTIVATION

Initial idea
- Text content to help people learn a language by reading
- Key questions that LARA helps answer:
  - Where have I seen that word before?
  - How is that word/sentence pronounced?
  - What does that word/sentence mean?

Pedagogy
- Reading comprehension is the product of three main factors:
  1. Considerate texts,
  2. The compatibility of the reader’s knowledge and text content, and
  3. The active strategies the reader employs to enhance understanding and retention, and to circumvent comprehension failures.

(Palincsar & Brown, 1984)
að koma

Translation: English
Grammer Information

Tína fer í frí.
Tína á hliði.
"Mámmi, kómð og sjáðu, ég get gert
með tvær boltum." að koma, arrive
Tína kemur inn um bakdýrnar.
"Mámmi, hvar veru?"

EXISTING LARA CONTENT : ICELANDIC

USER TESTING OF LARA FOR ICELANDIC

Methodology

Questionnaire (31 questions):
- Participant’s background
- Perceived usefulness with a Likert-scale (1-5) (Davis, 1989)
- Open questions about assessment of digital tools (Nesbitt, 2013)

Place: language classroom at University of Iceland

Participants: learners of Icelandic

Device: laptop computer & headphones

Text: Tína fer í frí by Esther Skriver (2700 words)

Time: 10 min. for instructions, 60 min. for reading, 20 min. for questionnaire

Pilot testing

- 21 learners of Icelandic as a second language
  - 19 beginners, 2 intermediate
- Gender: 10 women, 8 men, 1 other, 2 don’t want to say
- Nationality: 11 Filipinos, 2 South Koreans, 2 N. Americans, 1 from Canada/Israel/Italy/Pakistan/Tunisia/Vietnam
- Age: 21-41 y.o.
Questions about the application and learning effect

Using this application gives me greater control over my reading task.
21 responses

Using this application improves my understanding of the Icelandic text.
21 responses

Using this application allows me to accomplish more reading tasks than would otherwise be possible.
21 responses

Using this application saves me time.
21 responses

Using this application allows me to accomplish more reading tasks than would otherwise be possible.
21 responses
The reading task would be difficult to perform without this application.

Using this application makes it easier for me to learn vocabulary.

Using this application enhances my effectiveness in reading.

Using this application makes it easier for me to learn grammar.

Compared to using books, using this application improves the quality of reading Icelandic texts.

Using this application makes it easier for me to learn pronunciation.
Do you like this application?
- yes, helps me a little rather than reading alone, I like it because of the things it allows to do simultaneously, ...

Have you had any problems while using this application?
- no, minor issues, at first yes but wen I will use it often then I will use it properly, text can accidentally move sideways, not adaptable to many browsers, slow on iPad otherwise great, some mistakes in translations and voice, ...

Would you like anything changed or added?
- no, meanings of colour coded words, adding a short introduction, maybe the translation of the whole sentence, add explanations about grammar, add synonyms and antonyms, add also a female voice, ...

How is the design?
- good, perfect, beautiful, basic, simple helpful, well organised, monotonous but functional, spacing could flow smoother, do not segment the text too much, more pictures and larger text, add some interactive activities, ...

How are the on-screen instructions?
- clear, could be improved, easy to navigate, I was clueless in the beginning but when I tried to explore it it is worth it, I don’t get the use of back to alphabetic text, ...

How were the explanations your lecturer gave you in class before you used this application?
- good, clear, helpful, ...

Does this application meet your needs as a learner?
- yes, funny story and useful grammar, personally I need to practice more with examples but this is definitely helpful and saves us a lot of time, almost completely – some questions about sentence structure came to mind that were not explained

Do you have any other comments or suggestions?
- let’s use it in class, maybe some colour, some words didn’t have a sound, unlike google translate this application in all in one, you can also open it using a phone in the Puffin browser, more grammar examples and sentence composition explanations, ...

THANK YOU!