

Open source (human) language learning



openwords

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Lamma Island, Hong Kong

Open source (human) language learning

Building a webapp



Open in two senses

- 1) #opensource and #OER
- 2) Content is editable (markup language)

Social enterprise

revenue and impact maximization, not profit maximization.

Exit as #WorkerCooperative #E2C

Open source (human) language learning



**Webapp & problem expression
language (OWML):**

Language general (anything in unicode)

Enables:

Sentence construction, phonetics,
reading, writing, simple vocabulary,
conjugation.

Language learning software

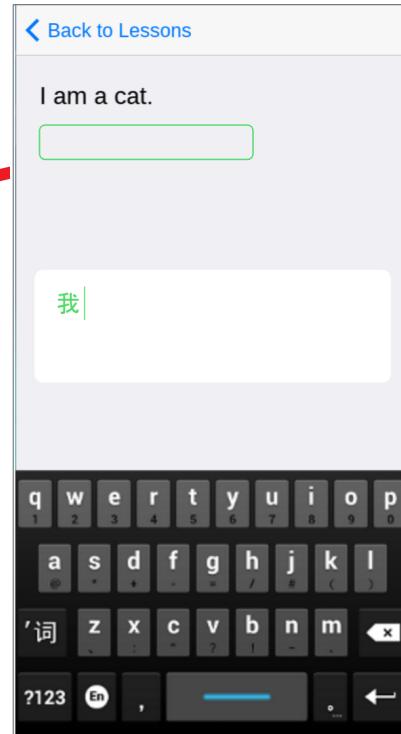
Proprietary



Open source



What does Openwords look like?



```
1 //openwords lesson file
2
3 =ss
4 *[I am a cat.]
5 *[ ][ ][ ]
6 #[ 我 ]
7 #[ 是 ]
8 #[ 一只 ]
9 #[ 猫。 ]
10 %[ 你 ][ 不是 ][ 狗。 ][ 一支 ]
11
12
13 =ss
14 *[I am a cat.]
15 *[]
16 #[ 我是一只猫。 ](type-in)[ 我是一只猫 ]
    (type-in)
```

What does Openwords look like?

[Back to Lessons](#)

māo 

猫

cat

...

[Back to Lessons](#)



An island is a piece of ground that is surrounded by a body of water such as a lake, river or sea. Water is all around an island. Islands are smaller than continents.

The largest island in the world is Greenland, unless Australia is believed to be an island.

...

```
1 //openwords lesson file
2
3 =sr
4 *[māo][ ](sound-out::URL)(image-out::URL)
5 *[ 猫 ]
6 *[cat]
7
8
9 =sr
10 *[ ](sound-out::URL)(image-out::URL)
11 *[An island is a piece of ground that is
surrounded by a body of water such as a lake,
river or sea. Water is all around an island.
Islands are smaller than continents.]
12 *[The largest island in the world is Greenland,
unless Australia is believed to be an island.]
```

What does Openwords look like?

The screenshot shows a mobile application interface for language learning. At the top, there is a blue navigation bar with a back arrow and the text "Back to Lessons". Below this, the main content area displays a sentence in French: "Je [] pour aller au travail." A green rectangular input field is positioned over the blank square bracket where the verb should be placed. Below the sentence, there is a white button bar containing four green buttons with white text: "marche", "marchais", "marchent", and "marché". At the bottom of the screen, there are five small circular dots, with the second dot from the left being blue, indicating the current step or selection.

```
1 //openwords lesson file
2
3
4
5
6
7
8
9
10 =fb
11 *[Je ][ pour aller au travail.]
12 #[marche]
13 %[marché][marchent][marchais]
```

Openwords Markup Language (OWML)

- Represents human language learning exercises
Language learning exercise expression language
- Simple, human readable, text-based
- Similar in purpose to the more general GIFT exercise expression language
(Moodle)



OWML:

<https://github.com/Openwords/OpenwordsWebapp/wiki/Openwords-Problem-Markup-Language-v0.2>

GIFT:

https://docs.moodle.org/37/en/GIFT_format

GIFT

examples – missing word problems

Mahatma Gandhi's birthday is an Indian holiday on {
~15th
~3rd
=2nd
} of October.

since {
~495 AD
=1066 AD
~1215 AD
~ 43 AD
}
the town of Hastings England has been "famous with visitors".

Classroom integration objectives

Openwords in K12 and university classrooms:

Teacher interviews and classroom tests revealed development priorities:

- MVP
-
- ✓ 1. Basic webapp (reads and presents learning problems)
 - ✗ 2. Performance tracking and learning management system (LMS) integration (Moodle)
 - ✗ 3. GUI problem builder

Classroom minimal viable product (MVP)

Advantages of Openwords webapp & OWML

I. Tailor for your institution (openness)

Replicates some paper materials

II. Follow your student performance

III. Automate grading

IV. ...but with audio

V. Private learning experience

VI. Use *alongside* classroom

Deployment in K12 in China

Study on Integration of Chinese and Western Curriculum

Geng Niu, ESL Instructor *



北大附属宿迁实验学校

PEKING UNIVERSITY EXPERIMENTAL SCHOOL (SU QIAN)

Project Name 项目名称 Study on Integration of Chinese and Western

Curriculum 中西融合课程研究



Revenue model:

University/school subscription:

- Teachers track learner performance data
- (learner data are private)
- Underfunded schools can gain gratis (free) access

Tech consultation:

- We build lessons with the learning institution

Many others available...

See -->

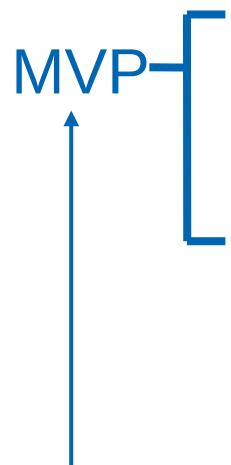
Open Business Model Canvas



The state of Openwords

Presently dormant

Large technology base exists, in webapp and problem expression language.



- MVP
 - ✓ 1. Basic webapp (reads and presents learning problems)
 - ✗ 2. Performance tracking and learning management system (LMS) integration (Moodle)
 - ✗ 3. GUI problem builder

Classroom minimal viable product (MVP)



Ocean Editors

oceaneditors.com

An #E2C enterprise (Exit to Community)

HOME SERVICES PRICING ABOUT EDITORS TESTIMONIALS CONTACT

中文 ENGLISH

Ocean Editors

SUBMIT WRITING

Professional, affordable English language editing



Marc Bogonovich, Ph.D
CEO, Editor



Jeff Melton, Ph.D
Lead Editor



Future - Current challenges

I. Identify clients/classrooms

Collaborate with institution/instructor
to build tech in classroom

II. Open source community home ***

III. Extend Openwords Markup Language (OWML)

handle multiple correct answers
analyze GIFT vs. OWML

IV. Improve navigation system

V. LMS integration

(LMS = Learning Management System)

VI. GUI OWML builder

HTML5 or JavaScript?

Creating a Lesson

"Problem UI Preview"
(only a suggestion)

Problem 1

Problem Type: fb

Problem-Line: Je @ au travail.

Answer-for-Blank-1: marche

Wrong-Answer/s: marchons |
 marchent | marchais

New Problem

Problem Type:



Links

Openwords.com
Openwords.org

GitHub (in transition to Gitlab) & Openwords Markup Language:

<https://github.com/Openwords/OpenwordsWebapp/wiki/Openwords-Problem-Markup-Language-v0.2>

Press:

<https://globalvoices.org/2017/01/31/building-a-sustainable-open-source-platform-for-language-learning/>

Exit to community (#E2C, worker coop in our case):

<https://www.colorado.edu/lab/medlab/exit-to-community>

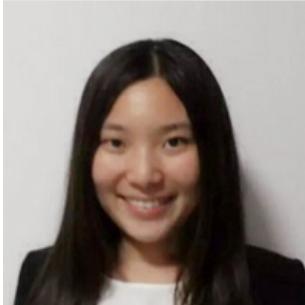
Social Media:

[@openwords@mastodon.social \(Mastodon\)](https://@openwords@mastodon.social)
[@Openwords \(Twitter, Instagram\)](https://@Openwords.twitter.com)

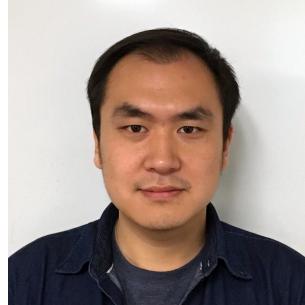
Team



Marc Bogonovich
Founder



Mercury Luo



Geng Niu
ESL, Education



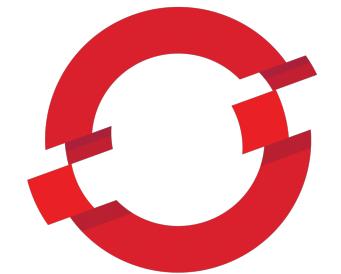
Shenshen Han
Founder, CTO



Open source
community

Thank you

#opensourceHK
#openshift



OPENSHIFT

{S} OPEN SOURCE
HONG KONG

Questions



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Post section:

For educators interested in opensource, please contact me to consider joining the OERworldmap.org

OER = Open Educational Resources

OER – Open Educational Resources

OERworldmap.org

Marc Bogonovich

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OER – Open Educational Resources

Openly licensed:

Courses

Lessons

Software/Edtech

Learning Management Systems (LMS)



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Open educational resources

From Wikipedia, the free encyclopedia

Not to be confused with [Open education](#).

Open educational resources (OER) are freely accessible, [openly licensed](#) text, media, and other digital assets that are useful for teaching, learning, and assessing as well as for research purposes. There is no universal usage of [open file formats](#) in OER.

The term OER describes publicly accessible materials and resources for any user to use, re-mix, improve and redistribute under some licenses.^[1]

The development and promotion of open educational resources is often motivated by a desire to provide an alternate or enhanced [educational paradigm](#).^[2]



Contents [hide]

- 1 Definition and scope
- 2 History
- 3 Advantages of Open Educational Resource
- 4 Disadvantages of Open Educational Resource
- 5 Licensing and types
- 6 OER policy
- 7 Research
- 8 Open Educational Practices
- 9 Costs
- 10 Institutional support
- 11 Initiatives
- 12 International programs
- 12.1 OER global logo adopted by UNESCO

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20  of 875 results, ordered by relevance  **Jan Neumann**

Jülicher Straße 6 Köln, Germany

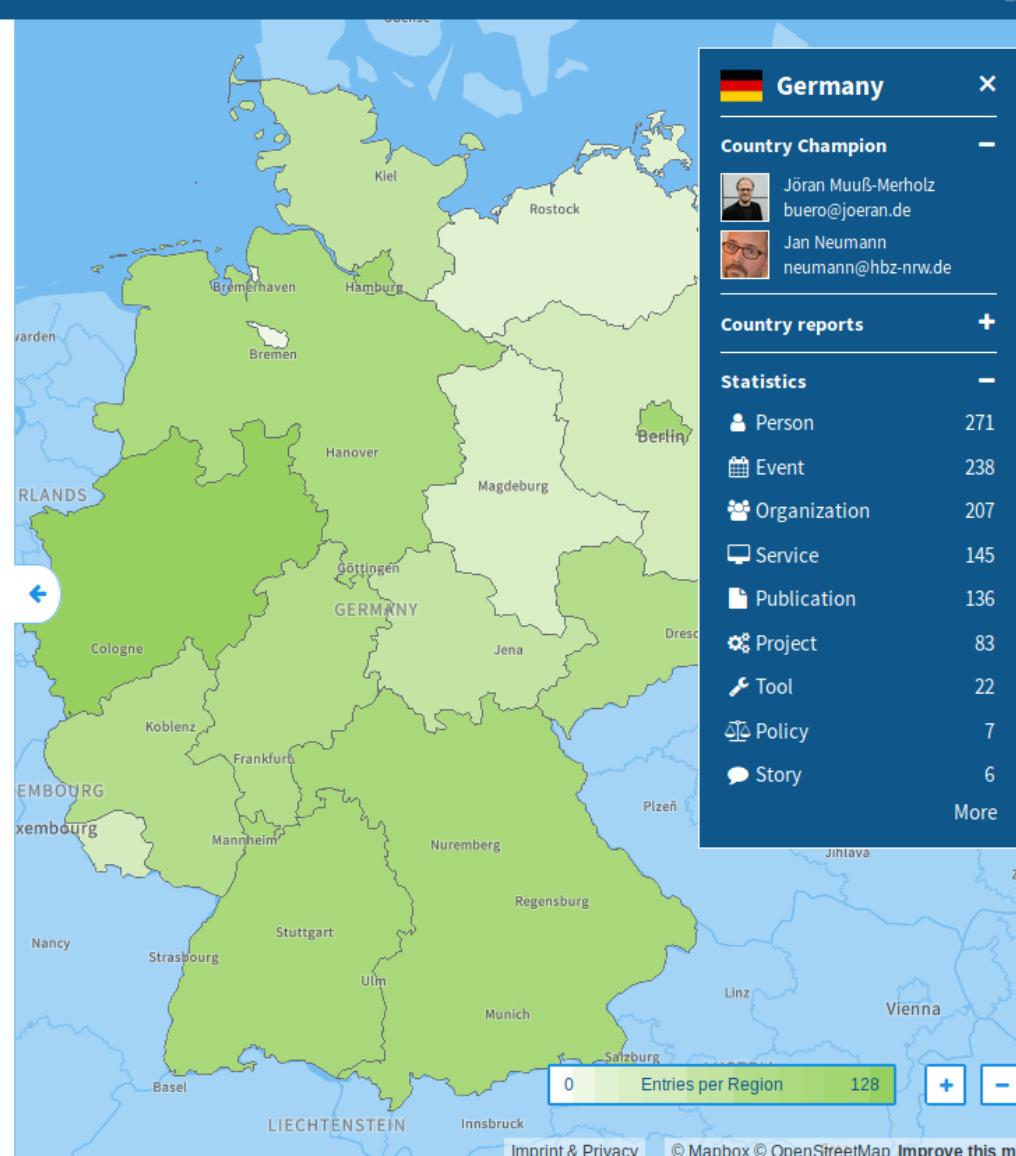
Jan L. Neumann is working as Head of Legal Affairs and Organization at the North Rhine-Westphalian Library Service Centre (hbz) in Cologne, Germany. He studied law, economy and systems thinking and has more than 15 years of experience within international project management for different publishing ... [more](#)

OER Librarian Network: Chapter Germany

Atelierhaus Pfefferberg Berlin, Germany

Das OER Librarian Network Germany ist eine Graswurzelbewegung, die aus einer Barcamp-Session des OER-Festivals 2017 in Berlin hervorgegangen ist. Ziel der Initiative ist es, Bibliothekarinnen und Bibliothekare, die sich für OER interessieren oder bereits mit OER arbeiten, zu vernetzen um Informatio... [more](#)

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OERworldmap.org

Germany

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Search entries in Hong Kong



Tag



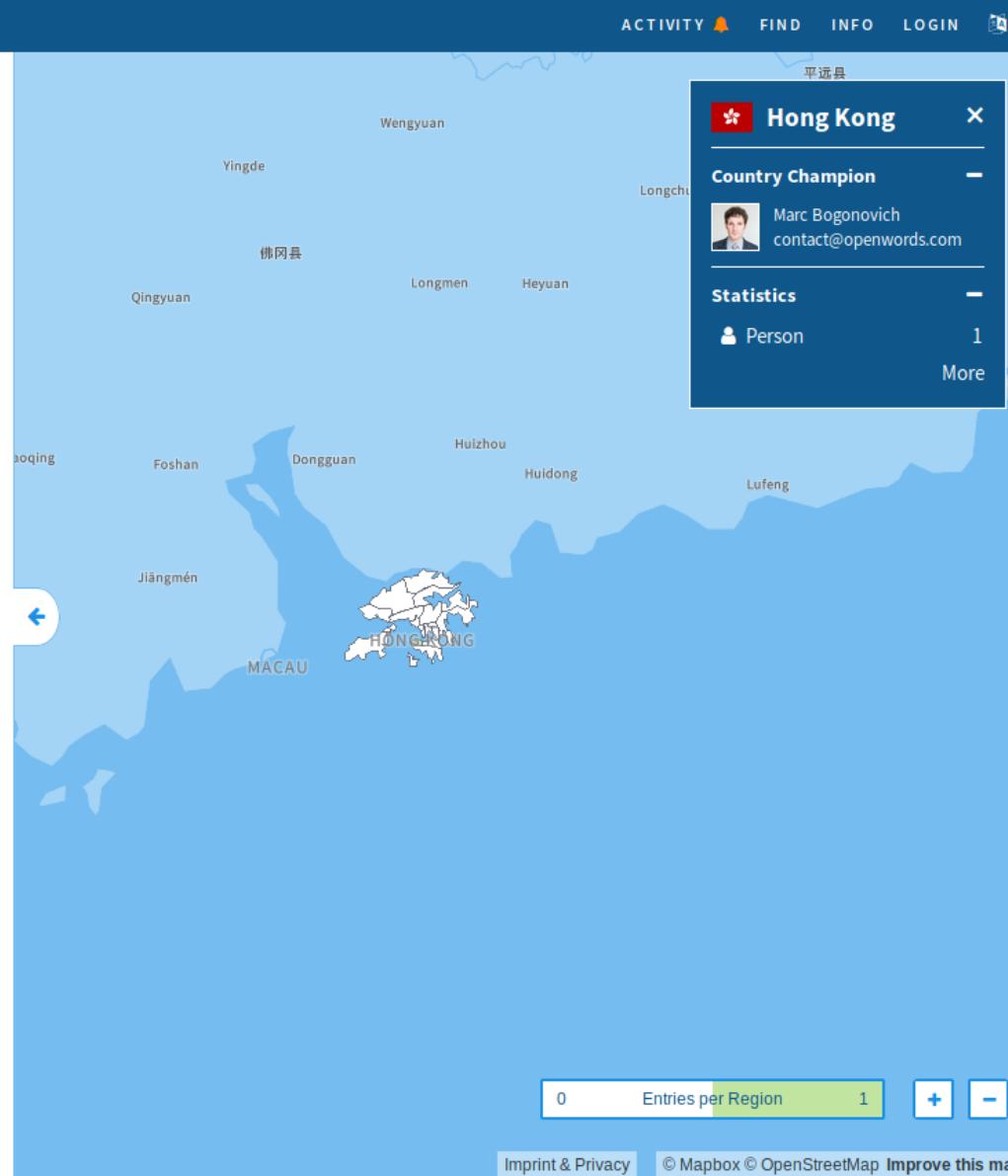
20 of 1 results, ordered by date created

Marc Bogenovich

Hong Kong

I am the founder of Openwords, an OER language learning webapp. I'm committed to building open educational resources and alternative and social enterprises that financially sustain these resources. I'm a scientist, geographer, and educator by training.... [more](#)

0-1



OERworldmap.org

Hong Kong

OER – Open Educational Resources

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