



Virtual Lab

as a teaching learning tool for Languages



Date and Time

19 November, 2024

from 10:00 AM to 11:00 AM, Tuesday



Resource Persons

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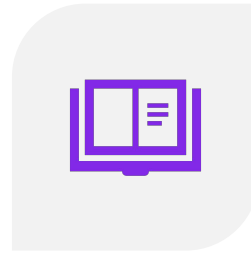


Outline

- Language learning
- Lab as an affordance for language learning
- Eco-system of virtual labs
- Current available language labs
- How to use these?
- Demonstration of labs

Language Learning

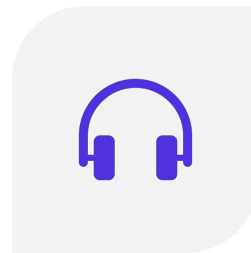
Effective Instruction requires attention to all 4 aspects



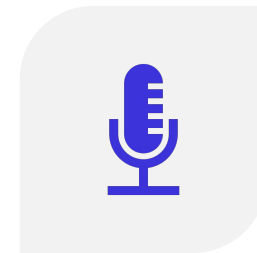
READING



WRITING



LISTENING



SPEAKING

Reading



To help familiarise with constructs and usages.



To build vocabulary with context



Improve comprehension

Writing



Knowledge of grammar and spelling



Vocabulary and how/when to use



Mapping ideas to words/sentences



Most energy usually spent here in LL

Speaking



Pronunciation of words



Intonation in sentences



Impromptu sentence
formation

Listen

**Pronunciation –
decoding**

**Comprehension
from oral input**

More in
Language
learning

Composition

Review a writing

Speech

Conversation

Research paper

Language Labs

No experiments as in science lab to do!

But LL requires large amount of practice...

Prompt constructive feedback essential...

Language Lab as a way to achieve this!

Need a large repository

Virtual labs for Language learning

Approach used:

- Drill and practice, Game based labs
- Data set used is easy to extended for more sentences and words.
- Hints and help as required
- Intuitive Feedback
- Subject based affordance
 - Word repository
 - Sanskrit - Inflection, Hindi translation etc.
- Levels are added (based on difficulty) in most of the activities for maximum coverage of topic

Eco-system

Theory relevant to the lab

Understanding of the process
and its implications

The core
simulator

Lab affordance : words
repository, hints, images etc.

Review questions,
references

Language lab under Diksha

English

- Currently 20 labs developed focussed on mostly the 'W' aspect.
- Few labs developed on listening also (under review)

Hindi

- Focus on Grammer: Noun, Adjective, Samas, varn vichar etc.

Sanskrit-

- 4 activities released and more developed under review



ENGLISH LABS

- Learning Prepositions of Location
- Learning Prepositions of Location (Picture Dictation)
- Correction and Omission Activity
- Learning Preposition of direction
- Passive to Active Voice Conversion
- Active to Passive Voice Conversion
- Tense Conversion
- Improving Comprehension Skills
- Direct to Indirect Speech
- Reported Speech
- Subject-Verb Agreement
- Singular to Plural Conversion

संस्कृत

॥ देववाणी संस्कृत ॥

- धातु-रूपाणि
- सर्वनाम शब्द रूप
- संज्ञा शब्दरूप
- एकवचन - बहुवचन शब्द --[वचन परिवर्तन]

Under review

- उचित रूपम्
- संधिः
- वर्ण विच्छेद
- पत्रलेखनम्
- चित्रवर्णनम्

Online Labs (Olabs)

क्रियापद

संज्ञा

समास

क्रिया

उद्देश्य

क्रिया शब्दों को सीखना।

शिक्षण के परिणाम

छात्र विभिन्न प्रकार के क्रिया शब्दों की पहचान करने में सक्षम होंगे।

पूर्व-ज्ञान:- इस गतिविधि के लिए छात्र को संज्ञा और सर्वनाम का ज्ञान आवश्यक है।

शुरु करें

वचन

प

पत्रलेखन

Developed by: C-DAC Mumbai

Funded by: Ministry of Electronics and Information Technology || Ministry of Education
Government of India

हिन्दी

- विशेषण
- विशेषण के प्रकार
- संज्ञा
- संज्ञा के प्रकार

Under Review

- वर्ण विचार
- संधि विच्छेद
- पत्र लेखन
- क्रिया
- सर्वनाम
- समास

Using the Language Labs-1

- When explaining concepts in class....
- Use to show demonstrations, to prompt students to guess answer, etc.
- Consciously giving wrong answers can be used to show the error responses and corrections.



Using the Language Labs-2

- Assign practice sessions for out of classroom activities.
- Try 10 sentences
- Can ask them to submit the report generated by system



Using the Language Labs-3

- Encourage students to practice online, till they reach a correctness level above 90%.
- Logs can be used to check (if needed) for internal evaluation, etc.



संज्ञा-शब्दरूप

Objective:
इस गतिविधि का उद्देश्य विभिन्न संज्ञा शब्दरूप [अकारान्त पुल्लिंग, आकारान्त स्त्रीलिंग, इकारान्त स्त्रीलिंग आदि] को सीखना है।

Learning outcome:
संस्कृत में संज्ञा शब्द रूप से परिचित करना। इस गतिविधि के बाद छात्र विभिन्न संज्ञा शब्दों के रूप को पहचान पाएंगे।

START

संज्ञा - शब्दरूप

Instructions : Complete the shabdруп table by dragging appropriate words from the word list.

अकारान्त पुल्लिंग बालक

विभक्ति	एकवचनम्	द्विवचनम्	बहुवचनम्
प्रथमा		बालकौ	बालकाः
द्वितीया	बालकम्	बालको	
तृतीया	बालकेन		बालकेः
चतुर्थी	बालकाय		बालकेभ्यः
पंचमी	बालकात्	बालकाभ्याम्	
षष्ठी	बालकस्य	बालकयोः	
सप्तमी	बालके	बालकयोः	
सम्बोधन	हे बालक !		हे बालकाः !

Word List

- बालकः
- बालकान्
- बालकाभ्याम्
- बालकाभ्याम्
- बालकेभ्यः
- बालकानाम्
- बालकेषु
- हे बालको !

अकारान्त पुल्लिंग बालक

विभक्ति	एकवचनम्	द्विवचनम्	बहुवचनम्
प्रथमा	बालकः	बालकौ	बालकाः
द्वितीया	बालकम्	बालको	बालकान्
तृतीया	बालकेन	बालकाभ्याम्	बालकेः
चतुर्थी	बालकाय	बालकेभ्यः	बालकेभ्यः
पंचमी	बालकात्	बालकाभ्याम्	बालकानाम्
षष्ठी	बालकस्य	बालकयोः	बालकेषु
सप्तमी	बालके	बालकयोः	बालकेभ्यः
सम्बोधन	हे बालक !	हे बालको !	हे बालकाः !

Correct (Green), Incorrect (Red), Prefilled (Yellow), View feedback (Info icon)

SUBMIT CLEAR SHOW ANSWER

Feedback

यह स्थान पंचमी में बहुवचनम् शब्द का है। कृपया सही शब्द चुने।

OK

Incorrect (Red), Prefilled (Yellow), View feedback (Info icon)

Teachers can contribute to language labs

- Contribute ideas
- Help in identification of hard spots
- Volunteer to add more examples/data in the existing labs.



DEMO

<https://diksha.gov.in/virtuallabs.html>



THANK YOU

Reach us at: etu@cdac.in and vidyakashetu@gmail.com

Conclusion



Under the MoE virtual lab initiative, a good collection of labs for a range of subjects is coming, including languages.



We invite you to try this, and share your feedback.



If there are areas of language learning which you think are difficult areas for students, kindly share with us.



Contact us at etu@cdac.in, vidyakashetu@gmail.com