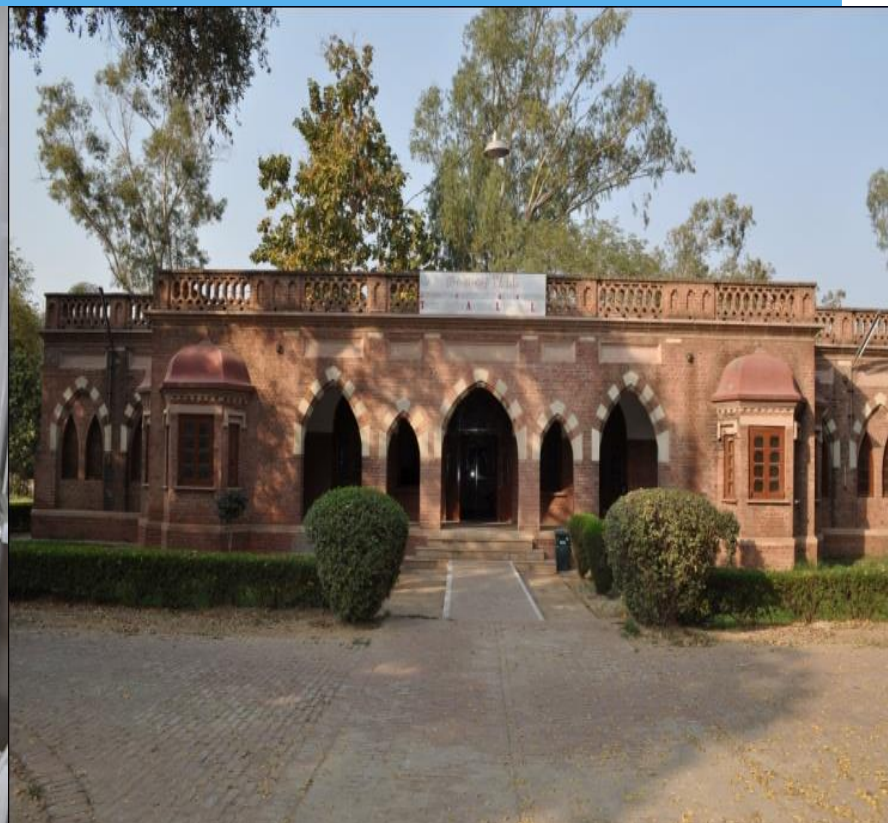


iNFORMATION-cOMMUNICATION –nEURO-cOGNITIVE Technologies Assisted Language Lab, DEI : An Overview



What is (i-c-n-c) TALL ?

* “iNFORMATION- cOMMUNICATION-nEURO- cOGNITIVE Technologies Assisted Language Lab, popularly called “(i-c-n-c) TALL”, facilitates the teaching and learning of various languages using technology and also promotes interdisciplinary research in the realms of consciousness, literature and languages.

❖ The mission objective is to develop it as world’s premier language learning cum interdisciplinary research center .

Facilities and Resources at (i-c-n-c) TALL

- Main lab with 25 computers, 3 class rooms and one lecture Hall.
- A network of computers, server with appropriate application software (Instructor server / Student Client).
- * Orell Digital language Lab software facilitates the learning of any language effortlessly.
- * Resources are available on-campus and can be accessed and used off-campus as well .

Multilingual Translators

- ❖ The lab is equipped with Two ‘Multilingual Electronic Translators – ECTACO 500 AL’.
- ❖ ECTACO 500 AL is one of the best translators available in the world because of its ability to translate numerous languages on the fly.

Artificial Intelligent Tools- Chat Bots

- ❖ Artificial Intelligent tools -“Chat Bots” are available. The following Chat Bots are currently being used :
- ❖ Alice ESL Bot is useful for Practicing English.
- ❖ Leslie Linguo is an ESL-oriented *chat robot* and dictionary with text-to-speech feature to practice oral and written communication in *English*.
- ❖ ESL Robot lets one practice English.
- ❖ Andy Bot is a friendly robot which can be used by beginners to converse in English. One can learn language by actually using it in a conversation. One can take grammar lessons and learn new words every day!

Access to Various Useful links, Websites and Apps

- ❖ The Lab has access to various useful links, websites, and apps for language learning:
- ❖ British Council online tools, ESL Gold, ESL.net, 101 Languages of the World, Sanskrit learning tools, Online Sanskrit Sandhi tool, Online Sanskrit newspaper, Online Sanskrit dictionaries, Online Sanskrit Newspapers, Sanskrit thesaurus, Monier Williams Sanskrit-English Dictionary, <http://lexica.indica-et-buddhica.org/dict/lexica>, Monier Williams Online Dictionary [English to Sanskrit], Sanskrit OCR tool,



**Initiatives Taken in
Interdisciplinary Research and
language teaching at (i-c-n-c)
TALL : A Bird's Eye View**

Neuroaesthetics : Research Initiative in Collaboration with Center for Consciousness Studies, DEI



As an inaugural interdisciplinary research initiative at (i-c-n-c)TALL, experiments were conducted in Neuroaesthetics to study the impact of various literary texts on human brain and also personality using Magnetoencephalography (MEG).

▪The results were presented at the international conference “The Science of Consciousness”, Tucson, University of Arizona held in April from 25-30 ,2016



“Learning English Through Maps : Biographies Sketched”: Workshop in collaboration with Department of English , Kiel University, Germany



In March 2015 (i-c-n-c) TALL organized a three day workshop in collaboration with Kiel university, Germany on “Learning English Through Maps : Biographies Sketched” for the students of 8th std. It was an experiment to test if “Sketching Personal Maps” can be used as an effective technique by cognitive scientists and cognitive linguists to assess the cognitive and expressive abilities of various learners

One Week English proficiency courses during Winter Camps at DEI



During the winter camps at DEI, one week English proficiency courses are organized at i-c-n-c (TALL). Till now two such crash courses have been organized for students from 6th to 10th.

Listening comprehension and speaking skills have been important components of the packages offered to children.

ELL (English Lab Class) – Core Component of the DEI Curriculum from Class 1 to Undergraduate Level

- ❖ English Lab Classes are run for the children Of DEI Primary School and DEI Saranashram. School .
- ❖ Special English Lab Classes have been launched for Pre-Intermediate level students.



The students are divided into two groups according to their competence – Group A - -Low Beginners, Group B - Average Learners.

- ❖ The Department of English runs four compulsory lab courses as part of the undergraduate English programme.
- ❖ The students are evaluated on the basis of the practical assignments based on the topics covered in the class throughout the semester covering four important skills – reading, writing, speaking and listening.



Restoring the Glory of Sanskrit Language : Objective of (i-c-n-c) TALL

- * One of the primary objectives of (i-c-n-c-)TALL is to conserve and disseminate the treasure of Sanskrit language , the language of Gods, language of transcendental consciousness by using ICT .
- * This multi cultural and multi lingual lab cum research center endeavours to motivate Sanskrit scholars to pursue research in neuroscience, cognition, computational Sanskrit and Science of Consciousness using EEG, MEG and fMRI installed at DEI.

Initiatives being taken at DEI (i-c-n-c) TALL to revive the glory of “language of Spiritual Consciousness”

- * Sanskrit Language Learning material is being prepared by DEI Sanskrit Department. The lessons include Listening comprehension exercises, videos of short stories, narration of the *Shlokas* of the *Bhagvadgita* and their explanation, grammar, essays on a variety of topics, videos for conversation, etc.
- * As pert of this noble initiative DEI Sanskrit Department has launched ICT based Sanskrit Work Experience Course STM 101 for undergraduate students

Dayalbagh School of Languages : Taking Language Learning to Virtual Level !

- * Dayalbagh runs School of Languages where Indian regional languages and selected foreign languages are taught.
- * This session a noble attempt has been made to teach Oriya with ICT. Lessons are being recorded at (i-c-n-c) TALL.
- * The class is held every Saturday from 3.15 to 4.30 PM.
- * Gradually we aim to make other languages also ICT based.

*** An Outline of the Proposed
Programmes at (i-c-n-c)
TALL : A Five Year
Implementation Plan (2017-
2021)**

Establishment of “(i-c-n-c) TALL Psycholinguistic Lab”

- * To promote interdisciplinary studies and research, a Psycholinguistic lab would be set up. It would be equipped with software for Speech Analysis, and study of auditory as well as Visual Language Processing. Tests designed to assess verbal fluency, receptive and expressive language skills, as well as auditory processing and comprehension. Boston naming test, (BNT), Clinical Evaluation of Language Functioning (CELF), Controlled Oral Word Association Test (COWAT), Multilingual Aphasia Examination, Peabody Picture Vocabulary Test, (PPVT), Test of Written language (TOWL) etc. Longitudinal studies will be accomplished on groups of students of different grades, in order to map their cognitive development along with their language development.

Establishment of “(i-c-n-c) TALL-Linguistic Counselling Center” –

- * The center would provide counselling facilities with reference to psychological causes in the case of speech disorders such as stuttering and stammering etc. The center would cater to the needs of slow learners. The psychologists from the DEI Psychology Department will provide guidance and assistance with regard to ‘milestone’ of language development or norms related to every developmental stage i.e. 0-2 years (infancy), 2-6 years (early childhood), 6-12 years (middle childhood) and 12-16 years (adolescents).

Development of Digital Library

- * Digital Library with archiving of rare ancient Sanskrit Texts, Scriptures along with resources in English and other languages would be developed to open up a huge ocean of knowledge. The proposed software for the development of Digital library would be Greenstone software. The resources can be accessed in campus as well as off campus.

Interdisciplinary and International Collaboration

- * Launching collaborative programmes with the University of Waterloo's language lab and interdisciplinary research in consciousness, language teaching, Neurotheology, Devotional literature Neuroaesthetics, Neurolinguistics etc.