

Efficacy of Computer Assisted Language Learning for self-learners of Engineering.

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Abstract: Each year teachers encounter learners with distinct personalities, with diverse temperaments (as learners may come from different pockets of a country), and with high aspirations. Meeting these demands may throw a challenge to the teaching community. In this volatile environment teacher has to constantly reinvent new approaches of teaching and redesign methods of teaching, to help the learner. Hence it is being impractical to meet by the traditional methods. Further, the tradition has also shifted from a restricted classroom to virtual classroom, physical teacher to a virtual teacher. Widespread use of technology has led to revolutionary changes in the process of language acquisition. Especially, computer assisted language learning (CALL) acts as a juggler in the hands of a graduate learner. CALL offers innumerable opportunities to learn beyond the class room environment. This paper focuses on the Inevitability of Internet - based Computer Assisted Language Learning (CALL) for self-learners of Engineering in the global age. This paper also examines the expeditious acquisition of language by using CALL in contrast with the conventional classroom setting.

Keywords: CALL, Self-learning, Engineering, Approaches.

Introduction

In 1835 Macaulay tailored English education to Indians to cater to the needs of British administration. Nearly two centuries later the present generation has realised the inner urge to learn English for their personal needs. This impulse made them to discover alternate methods for effective learning. This quest ended up by landing on CALL which is dynamic in nature and also works as a catalyst to provide flexible learning environment. CALL may not serve as a substitute for teacher but definitely scaffolds the learning process. CALL evolved as a user friendly device with its different forms. 1. Behaviouristic CALL (1950-1970), 2. Communicative CALL (1970-1980) 3. Integrative CALL (1990 onwards).



Fig.1 Evolution of CALL over a period

Thus adhering to all the requirements of learners at different ages. With due gratitude to china, for laying a road of electronic literacy through its highly cost effective devices availability in the markets of subcontinent. Even the graduates in the isolated places of India could become a dexterous user of a computer hence web based learning and acquisition of electronic wisdom became a reality as recommended by NCFTE 2009's E-Learning (National curriculum Framework for Teacher Education)

Teaching approaches of graduate teachers

Macaulay minute (1835) to recent Acharya Ramamurthy Committee (1988), India has become an international laboratory for all ELT experts (from Grammar translation method to constructivist approach and then to the most recent reciprocal approach) to experiment with English language teaching and learning as it offers varieties of

learners who invariably bring their culture into teaching as well as learning. Hence the stakeholder is puzzled and wandering in the world of methods, approaches and techniques. Remedy came in the form of CALL where the

learner can carve his own curriculum and design his own syllabus on par with his cognitive requirement. Undoubtedly in a traditional classroom effective teaching is happening but an effective learning is not taking place as teachers seek comfort in the known methodologies and seldom try to peep into learners' minds thus rote teaching results into rote learning has become the order. Wherein universities lament that even post-graduates do not communicate properly. If things have to fall in line, some where we need to strike a balance between learning and teaching. To balance this CALL is introduced. Graded material is available in CALL. learner can set pace in accordance with his usage as there is no predetermined syllabus hence no bogging down by curriculum and can revisit the areas of interest as many times as possible. It shields students from teacher's prejudices and branding thus, holistic learning happens. Even disabled students and dyslexics can avail this kind of opportunity without anticipation of any personal humiliation.

Self-learning through CALL

Self-learning through CALL makes all the impossible challenges in language learning at graduate level become possible. Learner can improve all the aspects of language like listening, speaking, reading and writing by accessing the following CALL programs.

Grammar: Longman Grammar Software;
Grammar Expert Plus;
Tense Buster (Clarity Software);
Grammar Mastery (ALA);
Grammar Rom (Addison Wesley Longman);
Grammar 3D: Contextualized Practice for Learners of English (Heinle & Heinle).
Reading: Read It! Study Skills (Clarity Language Consultants) (EAP reading);
Rocket Reader (1998) (a speed reading program); ReadFlex (Speed Reading);
Reading for English (Athelstan) (Reading Comprehension);
SEEN: Tutorials for Critical Reading (KenCD Software) (tutorials designed to develop analytical thinking and critical reading skills);
Accelerated Reader (Advantage Learning Systems).
Writing: Paragraph Punch (a writing tutor for effective paragraph);
Write Express Easy Letters (effective business letters);
Power Editing (an interactive tutorial on how to edit and revise sentences);
Report Writer for Science and Engineering Reports (Clarity Language Consultants) (EFL/ESL report science and engineer writing).
Speaking, Pronunciation & Listening: Learn to Speak (The Learning Company);
English Pronunciation (1997-98) (Okanagan University College);
Dragon, Naturally Speaking (A voice recognition program);
See It, Hear It, Say It! (Course ware Publishing International);
Accent Improvement (Speak Ware);
Real English (Wiser Software).
Integrated Skills / Courseware: Ellis (CALI), Dynamic English (DynEd);
English Discoveries (Berlitz);

English Language Development (Jostens);
Rosetta Stone (Fairfield Language Technologies);
Planet English (Uni search Ltd and the University of New South Wales);
Issues in English (Protea Software);
Active English (Course ware Publishing International).
Examples of CALL vocabulary games are: Spelling Games, Spelling Bee and Magic Hat, Scrambled Word, Word Worm, Hangman, Word Order, Find a Word, Word Puzzles, Spelling Buddy, Cross Words, I Love Spelling (DK multimedia), Scrabble Deluxe (Virgin Games) (Computerized version of the board game), etc.
Popular reference CD-ROM programs are Microsoft Encarta 99 <<http://www.iac-onencarta.com/>>,
Longman Dictionary of American English, Oxford Picture Dictionary CD-ROM (1997) <<http://www.oup-usa.org>> and BookShelf <<http://www.Microsoft.com>>.
Microsoft Encarta Interactive World Atlas 2000 <[Http://www.microsoft.com](http://www.microsoft.com)>
Roget's thesaurus.com <<http://www.thesaurus.com/>>,
WordWeb, (a thesaurus /dictionary),
Collins On-Line Dictionaries, American Heritage Dictionary (Softkey);
Longman Multimedia Dictionary, Grammar Reference (US English grammar usage), American Heritage Talking Dictionary (The Learning Company).

But CALL demands highly self-motivated learning from the users side, She/he should not succumb to deviations pop up in the system, especially youngsters the most vulnerable users of internet should never deviate from their goals and should determine with a strong will that they are their own gurus and can rewrite the history of learning with their own keyboard and mouse, then only the abstract learning of ancient education system beckons to a new education system sketched by the self-learners become concrete. Collaborative and cooperative learning is also possible when the learners share same intellect and seriousness among the members of the group, otherwise deviations take place and that eventually leads to a compromise on quality and the very purpose won't be served and doesn't result in the desired success of synergy .

Overcoming pronunciation hindrances

Unmatched pronunciation of the teacher with native pronunciation will misguide the students to mispronunciation. In international communication mispronunciation leads to misunderstanding. Intelligibility is the need of the hour, neutral accent should be acquired through indigenous English speakers by listening to them through web resources, and thus inherent change takes place over a period of time. Online classes on pronunciation help in developing one's intonation, facilitate comparison subsequently increases the morale of the learner.

Help desk for Research

Abundance of available modes of learning material pave research in the selected field as authentic materials and inaccessible literary survey becomes hither accessible and comes in to drawing room of the user. Thus enhances the scope for scientific reasoning, logical rationale and helps the researcher to scale new heights. Constant interaction

with the experts of the chosen domain across the boundaries becomes possible, thus it contributes to the development of knowledge societies. Knowledge and expertise can be sought across the table from Antarctica to Andaman erasing geographical boundaries. Spreading of wisdom extends to far-flung areas which remained secluded from mainstream at a very negligible cost in comparison to hiring experts of core areas which can be easily afforded and procured by every knowledge seeker. Inputs thus sought can be put to fruitful use and may percolate into the lowest strata of the society. After crossing these horizons, time is the very precious thing in the modern world but in CALL, classes are not time bound to buy a word from British Empire “the sun never sets on CALL”.

Easy remembrance through CALL

Visual representation leaves an indelible mark in the memory, the colourful animations help in creating vivid images on their cerebral canvas as the ancient Chinese proverb illustrates:- “Tell me – I forget, show me- I remember, involve me- I understand “. Audio visual images can create an impact on mental faculties of anyone. Speech visualization and audio visualizations help in emulating the styles of native speakers. It improves the pronunciation and enunciation of learners in a great way. Material design and plethora of instruction through animations and information in different colours on CALL triggers motivation among learners. Thus yesteryear passive listeners step into an area of constructing knowledge so they develop a critical eye instead of remaining as mute spectators in the classroom.

Scope of CALL

Memory of a teacher in regard to list of synonyms, antonyms and etymology is negligible in comparison to a machine with an endless giga bytes of storage capacity available in super computers and the choice it offers for selection of a word needed especially for poets and authors. Thus it prompts creativity to a wide imagery. In addition to this teacher may not provide equal opportunities to everyone in the classroom for speaking as time is the limitation. In the provided time error correction while using language may not get done. Equal attention to all the students is near to impossible. In contrast, CALL can be used at any time, at any place, for any topic at his desired pace. So CALL addresses individual differences and diverse interests. Often, these days teachers depend on computers for teaching difficult concepts, in such situations it is always suggested to opt for direct learning as no distortion takes place, because there will not be any information gap in the channels of communication. And also to chase away the monotony in the classroom, CALL has Story boards which help in learning grammar rules glamorously and also fosters grammar awareness through grammar checkers.

Teachers get tired and irritated to repeat the concepts already taught but CALL gives innumerable examples for infinite times. Teachers cannot sustain equal interest 365 days, that doesn't mean machines do not have wear and tear, but, here the degree of proficiency is high and relentless service is provided. Error correction is instantaneous so students need not wait for the incubation period to complete or to know the results. Post-mortem of results may not help

much for learners, it is like moratorium. Teacher is expected to be a conjurer to do multi-tasking like imparting knowledge to all levels of learners at their speed, motivating them as a philosopher, sometimes biased by syllabus to be in the good books of administration, to act as a facilitator, to create a negotiating environment, at times needs to spy on notorious people. Despite these she/he should be a creator of ever new concepts in teaching. This makes the teacher to fail in meeting the needs of students. But all this can be done by CALL with a click & pic.

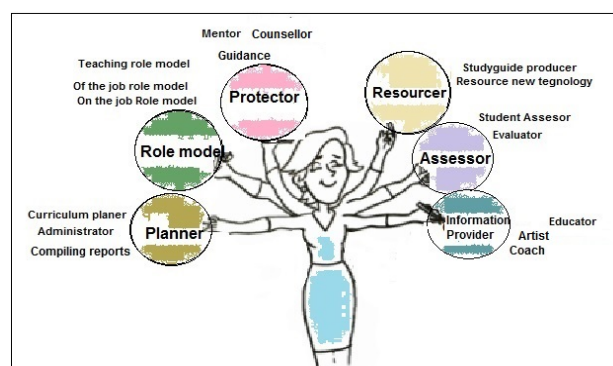


Fig.2 Multi task -Teacher In the classroom

For every teacher class room is a laboratory and the output is in the decimals of value addition made to learning. Is this addition visible? This is unquestionably absent. With due respect to teaching community, CALL manifests the latent knowledge through the appropriate mode of learning chosen by them. Knowledge is not born in solitary environment but in a society of individuals hence culture is a dovetail of prudence thus, internet helps learners to interact with the people of targeted language and can get a glimpse of their culture which makes acquisition of language a cake walk as language is culture & context bound. It even helps them to understand that translation is not the method to pick up the language. Blogs and wikis add icing to the cake with unending scope for learning hence no dearth of information sought. Consequently, helps to develop writing skills and trains them to face real world challenges of written communication in all formal contexts, and assists learner to give self-ranking in comparison to global standards.

Enhancement through self-learning

Games, puzzles, dramas, animations, problem-solving techniques in CALL offers a vibrant and vivacious learning as there is no question of monotony in the content delivery. Learners find in it full of life and never get bored nor feel frustrated due to the unending availability of choice. Along with technical revolution linguistic evolution is taking place parallelly as each day sees birth of a new word in some part of the world at the same time some words may become obsolete and archaic. The religiously learnt structures of elementary school compromised in the SMS language of graduates these changes can be known very quickly through CALL.

Learners can sit in their comfort zones and axle the speed of the wheel at their will and run the content at his/ her own preconditioned specification, as there is no disgrace and

dishonour to their ego by the teacher. It boosts the confidence. Retention of learning is long-lasting as it is according to his/her fashion mode. Whereas a conventional teacher runs after the obsession to accomplish academic requirements. It focuses on skill rather on drill.

Self-evaluation

Appraisalment is another untouched area which can be addressed by CALL. As most of the competitive exams are conducted through online, hence many sample papers of all levels are available on web for self-evaluation, which students can make use of, students will learn to know what they do not know, in turn it helps in improving those areas, and eventually it leads to self-correction. In the classroom environs students may copy the assignment from the others which will not happen in the CALL due to plagiarism tool which makes learners vigilant.

Skill set for global engineers

Marc J. Riemer (in his paper English and communication skills for the global engineer) opines that engineering graduates require to meet ever increasing challenges in the global environment of the new millennium. He further stated that internet is central to various elements of engineering education. In order to stand on international professional field, Indian engineers must be able to communicate effectively in a shared tongue though they are multi lingual by nature. English is a predominant language of the internet and as communication is multifaceted all skills like Listening, Speaking, Reading, Writing (LSRW) and Pronunciation, Usage, Grammar, Spelling (PUGS) should be acquired by all the technical graduates as reinforced in Grunwald's study of competencies, required by the engineers of tomorrow. One can get self-trained in these skills through internet, which can act as an important tool in the hands of engineers. Thus it helps them to meet the requirements of industry. For instance French engineers communicated with Egyptian engineers in English during the recent building of the Cairo subway.

Conclusion

CALL is very effective for those who are Self-directed and self-motivated and they can do wonders with CALL. To direct them to achieve wonders, Effective lectures should be uploaded thence student will not get demotivated and will not get irritated to browse for his/her requisites.

Learners have another challenge with the tasks designed which may not fit into our culture but when we're acquiring global language, universal culture should also be adopted. As an adage goes "Be like a Roman when you are in Rome". Academia should also focus more on developing student centred material which gives more scope to learning rather than teaching. With humility I conclude by saying that CALL may not be a panacea but answer the

ingrained call of the learners. A paradigm shift in teaching and learning is the call of 21st century.

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