

# Method based on CAL in Teaching French as a Foreign Language in Technical Institution for Specific Purposes

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## Abstract

This article examines the CAL (Curriculum for Applied Learning) in the teaching of foreign languages for specific purposes. A reason why a student want to be an engineer is the love for the technology. Engineers are always looking for new and updated technologies. This article will consist of a system where we are confronted with new innovations and new ideas in the field of teaching French as a foreign language. CAL is implemented intensively in teaching students of 1 to 4 years at the Engineering institution (VIT-University). In particular, this article analyzes the effectiveness of the implementation of the CAL in the teaching of French for specific purposes.

**Keywords:** *Improvement of education; French language; CAL & Non-CAL modes; Experiential learning; case study; technological institutions*

## I. Introduction

**Curriculum for applied learning (CAL)** enables learners to understand fundamental theories and concepts through application and practice by providing students with opportunities to explore their career aspirations and orientation for life-long learning in specific areas. CAL is intended to increase the students' potential talents with opportunities to develop their knowledge, skills, values and attitudes in different contexts based on or real life. CAL based courses are designed as per the principles of balance, coherence, articulation and responsiveness. Students who have studied CAL-mode courses equip themselves to demonstrate and apply their acquired knowledge effectively in meaningful tasks. The context of an Applied Learning course is generally close to students' daily life experiences. In the process of learning-by-practising, students develop their learning-to-learn capabilities, internalise knowledge, and build up their confidence.

Present study investigates how French as a foreign language teachers and students perceive CAL. In the light of this research, their rationale behind the

techniques, activities and methodology they use in the classroom is discussed.

### 1.1 Advantages of CAL

Learning through CAL-mode benefits the learners through motivation and commitment to learn the language. CAL provides engineering students a platform to develop their reading, writing, speaking and listening skills that can be used in the workplace. For example, communicating in basic French while placed in Francophone countries, interacting in French with their French-speaking guests, marketing their products in Francophone countries etc.,. CAL provides a meaningful context for the learning process with both theoretical concepts and practical skills. Curriculum for Applied learning (CAL) in action Applied learning is a valuable approach that can be used at all levels of education, proves effective in teaching French as a foreign language in Indian technological institutions.

It is intended to enrich the learning experiences of students of varying learning needs, particularly those who will benefit from a strong practical

orientation in their learning. Experience is the best approach for the smooth conduct of learning which can be applied and demonstrated. Bringing the scenario into the classroom and urging the learners to demonstrate. Such activities define experiences; they become knowledge deepening the goals and objectives. Student-learners are encouraged to apply their knowledge in French as a foreign language in the class-room activity with adequate foundation to attain successful experience. Acquisition of knowledge through applied learning curriculum brings in the real-life or real world context into the classroom environment. Experiences gained by engineers are meaningful and purposeful; curriculum is designed to be used by the learners in a real situation. Transformation occurs from a simple classroom experience to an everlasting learning experience. In a CAL classroom learner tends to internalize the knowledge in the French language and weighs the acquired knowledge with future implications. The purpose of learning French as foreign language and its application has to be assessed identifying the intention as per the corporate demands the experience is chosen for a better outcome among the students.

In any foreign language classroom for the fullest experience and effective learning through CAL involves sound knowledge of topics prepared with strong background information over the context and environment where the experience will serve.

### **1.2 CAL-mode and Non-CAL mode**

The differences between CAL-mode and Non-CAL mode are numerous. The sample size of the French language class in CAL-mode learning is relatively small as opposed to traditional teaching or Non-CAL mode. In general teaching-learning process the objectives are general, whereas the objectives are specific in the CAL-mode teaching-learning process. Both the learner and the teacher work practically in the given situation reducing the complexities which occur in general classroom teaching. The class size is numeric specific reduced to 25-30 for the effective one-on-one

learning process and the content prepared as per the needs of engineers to sustain in the industries. CAL- mode permits high control of practice and time rituals.

## **II. Methods**

In order to have an extensive study towards the learners' perception over Curriculum for Applied Learning (CAL) in technological institutions in Indian context and to discuss its effectiveness a quantitative method was used to investigate the effectiveness of CAL mode teaching learning process. Test was conducted and Students' Learning Outcome (SLO) was assessed quantitatively in both Non-CAL mode (General teaching-learning process) and CAL-mode (Curriculum for Applied Learning) by the researcher and corroborating with the subject expert. Two question papers were prepared separately and validated by the experts to capture effectively the purpose of study.

## **III. Findings**

### **3.1 Characteristics of Respondents**

Participants of this study were the professional students who undergo their Under-graduation program in various Engineering streams. They have the option of learning foreign languages among the other foreign languages offered in the technological institution. Most of the students prefer learning French as a foreign language (Français Quotidien) under FFCS (Fully Flexible Credit System) for 2 credits. With a class strength of 30, multi-cultural background from every corner of India, most of them are bi-lingual or polyglots.

Majority of the stakeholders were from the School of Computing Science and Engineering comprising of 63% of the total sample population, 17% of the students from the School of Electrical Engineering and 13% of them from the School of Mechanical and Building Sciences and 7% of them from the School of Information Technology (SITE).

Of the respondents who participated in the learning process through Non-CAL mode and

CAL-mode: 70% (21) were male and 20% (9) were female.

The following Table shows the distribution of the participants in terms of Engineering schools and gender:

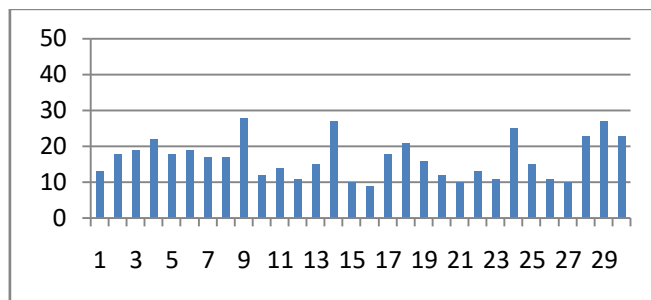
Table1. Tabulation for Engineering Schools and gender

Schools	Count in %	No. of studs	Male	Female
SCSE	63 %	19	13	6
SMBS	13 %	4	2	2
SITE	7 %	2	2	0
SELECT	17 %	5	4	1
<b>TOTAL</b>	<b>100 %</b>	<b>30</b>	<b>21</b>	<b>9</b>

### 3.2 Overview of engineering students learning French as a foreign language through NON-CAL & CAL modes

Learning activities prescribed in the French language classroom as per the CAL are dynamic and changing, providing the richest learning exposure. Engineering students are involved to experience such learning with Visuals, Audio and Kinaesthetic. Firstly, students were taught French as a foreign language in a Non-CAL mode and then in CAL-mode. Outcome based education of the Non-CAL mode and CAL-mode are documented systematically pertaining to the learners' intentions and quality outcomes. Engineering students in the French language classroom are assessed by the researcher and the subject expert based on the specific learning goals and quality objectives that which are identified during the experiential learning. The obtained data from the evaluation of the experiential learning process determines if the objectives of the learners are met in the target language. Learner's progress and accomplishments are documented.

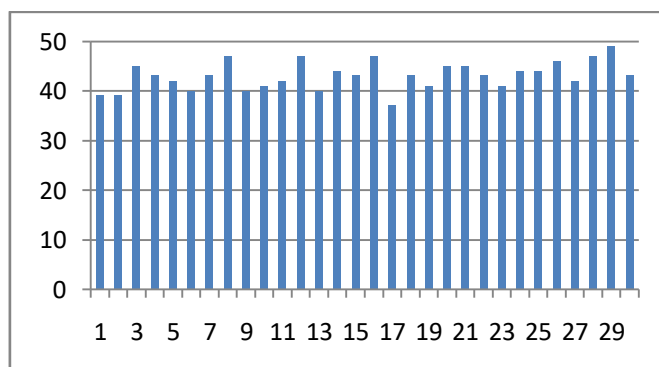
### 3.3 Researcher Non-CAL mode



mean (AVERAGE)	16.8
sigma (STD. DEV.)	5.653195617
mean-2.0sigma	5.493608765
mean-1.5sigma	8.320206574
mean-sigma	11.14680438
mean-0.5sigma	13.97340219
mean+0.5sigma	19.62659781
mean+1.5sigma	25.27979343

Range of Marks			No. of students
			30
			Non-CAL
0	-	10	4
11	-	20	18
21	-	30	8
31	-	40	0
41	-	50	0

### CAL-mode

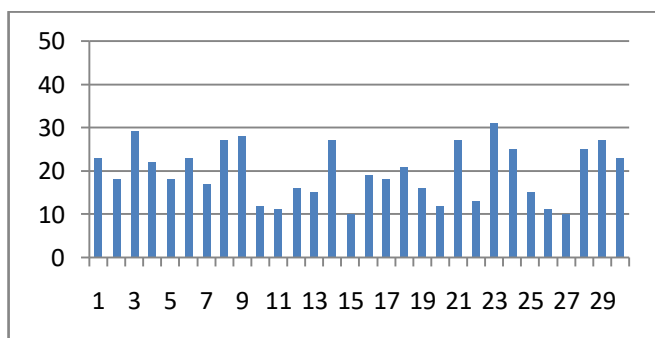


Range of Marks			No. of students
			30
			CAL
0	-	20	0
20	-	44.4865582	21
44.4865582	-	47.32634125	8
47.32634125	-	50	1

mean (AVERAGE)	43.06666667
sigma (STD. DEV.)	2.839783058
mean-2.0sigma	37.38710055
mean-1.5sigma	38.80699208
mean-sigma	40.22688361
mean-0.5sigma	41.64677514
mean+0.5sigma	44.4865582
mean+1.5sigma	47.32634125

**EXPERT**

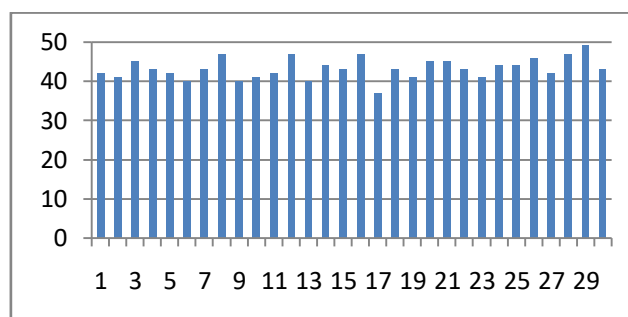
*Non-CAL mode*



Range of Marks			No. of students
			30
			Non-CAL
0	-	10	16
11	-	20	5
21	-	30	13
31	-	40	10
41	-	50	0
mean (AVERAGE)			19.63333333
sigma (STD. DEV.)			6.386857915

DEV.)	
mean-2.0sigma	6.859617504
mean-1.5sigma	10.05304646
mean-sigma	13.24647542
mean-0.5sigma	16.43990438
mean+0.5sigma	22.82676229
mean+1.5sigma	29.21362021

*CAL-mode*



Range of Marks			No. of students
			30
			Non-CAL
0	-	10	0
11	-	20	3
21	-	30	1
31	-	40	12
41	-	50	14

mean (AVERAGE)	43.23333333
sigma (STD. DEV.)	2.661129308
mean-2.0sigma	37.91107472
mean-1.5sigma	39.24163937
mean-sigma	40.57220403
mean-0.5sigma	41.90276868
mean+0.5sigma	44.56389799
mean+1.5sigma	47.2250273

**3.3 Comparison**

From the experimental data over the performance of students in French language classroom pertaining to both Non-CAL and CAL modes as

observed by the researcher and the subject expert, there is a huge oscillation in the scores of the students ranging between 10 and 30 being the highest. But, in CAL-mode, there is a consistency in the scores of the students ranging between 40 and 50 the highest. Furthermore, huge difference in the outcome of the students. Apparently CAL makes the learning of French as a foreign language easier compared to Non-CAL mode. To illustrate the effectiveness of CAL-mode, the tables given below show that there is a huge difference in the class-averages of the tests conducted after teaching in both Non-CAL and CAL-modes. There is a drop in standard deviations of both Non-CAL and CAL-modes as observed from the tests by the researcher and the subject expert separately.

*Researcher*

	Non-CAL	CAL
mean (AVERAGE)	16.8	43.06666667
sigma (STD. DEV.)	5.653195617	2.839783058

*Expert*

	Non-CAL	CAL
mean (AVERAGE)	19.63333333	43.23333333
sigma (STD. DEV.)	6.386857915	2.661129308

**IV. Conclusion**

This study shows that engineering students learning French as a foreign language benefit from the course taught through CAL-mode, it is a proven useful mode and French language learning and teaching process through Curriculum for Applied Learning is strongly accepted. The sample respondents show that there is an increase in the class average compared to the class average of Non-CAL mode in the tests conducted by the researcher as well as subject expert. There is a drastic improvement in the scores of the students after learning the course in the CAL-mode. Applied learning curriculum involves the learners

actively in the learning process within the classroom. Lastly, French language course integrated within CAL-mode will be interesting and motivating.

**V. Recommendation**

Although the objectives are achieved through this study, further investigation is needed on a larger sample population of engineering students from various technological institutions in India involving both the genders and socio-economic status.

**References :**

- [1] Blake, D. (2007). Exploring the Challenge of Applied Learning Reform. *International Journal of Pedagogies and Learning*, 3(3), pp. 58-76.
- [2] Brown, J.S., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational Researcher*, Vol. 18, No. 1. (Jan. – Feb., 1989), pp. 32-42
- [3] Curriculum Development Council. (2001). *Learning to Learn – The Way Forward in Curriculum Development*. Hong Kong: CurriculumDevelopment Council.
- [4] Curriculum Development Council. (2002). *Basic Education Curriculum Guide – Building on Strengths (Primary 1 – Secondary 3)*. Hong Kong:Curriculum Development Council
- [5] Dewey, J. (1938). *Experience and Education*. New York, USA: Collier Macmillian.
- [6] Education Commission. (2000). *Learning for Life, Learning through Life – Reform Proposals for the Education System in Hong Kong*. Hong Kong:Education Commission.
- [7] Hannafin, M., Land, S., Oliver, K. (1999). *Open learning environments: Foundation, methods, and models*. In C. M.
- [8] Herrington, J., Parker, J. & Boase-Jelinek, D. (2014). Connected authentic learning: Reflection and intentional learning. *Australian Journal of Education*, 58(1), pp. 23–35.
- [9] Kolb, D. (1984). *Experiential Learning: Experience as the source of Learning and Development*. New Jersey USA: Prentice-Hall.
- [10] National Society for Experiential Education. Presented at the 1998 Annual Meeting, Norfolk, VA

- [11] Reigeluth (Ed.), *Instructional-design theories and models. A new paradigm of instructional theory* Volume II (pp. 115-140). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- [12] Texas Education Agency. *Career and Technical Education*:<http://www.tea.state.tx.us/cte/index.html>
- [13] Victorian Curriculum and Assessment Authority (Australia). *Victorian Certificate of Applied Learning (VCAL)*
- [14] <http://www.vcaa.vic.edu.au/vcal/index.html>