

Computer-Assisted Language Learning: Relational implications for the didactic triangle

Jérôme (Kouassi)

Université Félix Houphouët-Boigny, Cocody-Abidjan, Côte-Ivoire

*Corresponding Author:

Jérôme (Kouassi)

Email: jrmekouassi@yahoo.fr

Abstract: This article aimed to examine the relational implications of Computer-Assisted Language Learning (CALL) for the didactic triangle. This examination revealed that the introduction of computer has some impacts on the relations (Pedagogical, Curricular, and Didactic) existing in the didactic triangle which need to be addressed with special care: The indispensable nature of the teacher's roles is undermined, for the learner does not necessarily expect his intervention in order to progress in the learning process ; CALL imposes new constraints on the teacher who has to make additional effort in terms of professional skills and research in order to transform and adapt the content offered by technological tool to classroom realities; classroom realities (environmental, linguistic, experiential, representational, intellectual, etc.) might inhibit the learner's creative and language potentialities. To improve the implementation of CALL, I suggested a more structured didactic framework which would allow the language teacher to take advantage of this major asset in order to enhance the chances to achieve more dynamic participation of the learner in his own training.

Keywords: CALL, didactic triangle, interrelations, interactions, pedagogical relation, curricular relation, didactic relation

INTRODUCTION

Technological tools in general and particularly computers are currently used in the field of education. As far as the teaching and learning of foreign languages is concerned this approach is referred to as Computer-Assisted Language Learning (CALL). This practice which is encouraged in most if not all educational systems worldwide has not left theorists and specialists in the field of education indifferent. Consequently, there has been an abundant literature in this field. Warschauer and Healey [1], Warschauer [2], Warschauer [3], and Whittaker [4] are among the theorists who have scrutinized issues relating to the implementation of CALL in second/foreign language classrooms. All recognize the relevance of CALL with a focus on the extent to which it allows learners to use language in meaningful communication situations. Their developments provide an outstanding contribution to reflections about the effective implementation of CALL in classrooms. Though I recognize the relevance of their contribution, my paper takes a different approach by examining the relational implications of this practice for the didactic triangle. Considering the theories of CALL and its implementation in second/foreign language classrooms, and taking account of its relational implications for the didactic triangle, I wonder about the didactic disposition(s) which would help improve its implementation in the classroom. The paper first identifies and explains the different relations in the didactic triangle before addressing the influence of CALL on each of them. Finally, it designs a didactic

framework for an improved approach to the implementation of CALL in the classroom.

CALL: HISTORICAL OVERVIEW AND PRACTICE

Historical Overview Of Call

According to Warschauer [2], cited in Yang [5], the history of CALL stands in three main stages. These correspond to the different periods of the history of the teaching and learning of languages. Structural behavioristic CALL which was designed in the 1950s and implemented in the 1960s and 1970s focused on the discrete elements of language through repetition, explanation of grammatical structures and translation. Communicative CALL was born at the end of the 1970s and at the beginning of the 1980s following objections against behaviorist approaches and the advent of PCs (Personal Computers). It encourages the use of technological tool as a didactic aid; learners use language forms, generate ideas and learn grammar inductively. Integrative CALL puts the stress on both the integration of the different language skills and that of technology to language learning process.

According to Kern and Warschauer [6], cited in Yang [5], the recent history of language teaching reveals three theories which have influenced the use of computer technology in the teaching of languages with the aforementioned structural-behavioral approaches at the starting point. With their cognitive/constructivist view, cognitive approaches place the learner at the core

of learning process. The learner constructs new knowledge through problem-solving and testing hypotheses which allow him to use his current knowledge in order to acquire new ones [5]. Socio-cognitive approaches mark a change of paradigm from the interaction of the learner with the computer to his interaction with other persons through this tool. They highlight the mediating role of the computer in interactive human communication.

It then appears that the computer, an unavoidable technological tool in contemporary society, is an undeniable didactic aid used in the classroom according to different approaches with diverse outcomes. In order to have more insight into the different dimensions of the implementation of CALL, one needs to scrutinize the way it is practiced in classroom situation.

The Practice Of Call

The practice of CALL occurs generally in the context of Blended Learning. Traditionally, this term refers to the use of different teaching methods for the training of learners. With the advent of technology in the classroom in general and particularly in the language classroom it refers to Blended Learning combines two components: face-to-face and classroom and appropriate use of technology. Sharma and Barrett [7], Neumeier [6], Stracke [7], Grgurovic [8], Marsh [9], and Whittaker [3], among others agree on the view that CALL improves the quality of learning. However, one needs to be enlightened on the way Blended Learning is designed.

Grgurovic explains that

...all the studies combined two modes: face-to-face and CALL. The location of the face-to-face mode was the classroom and the CALL mode the computer lab or student home. The technology used in the CALL mode included CALL programs, learning management systems (LMSs), and the web. Most of the studies used LMSs (WebCT or Moodle) to deliver instruction, sometimes in conjunction with computer-mediated communication tools. (102).

This quotation draws from the framework for the design of Blended Learning proposed by Neumeier [6], which includes six parameters : (a) The mode, (b) the integration model, (c) the distribution of the learning content and the objectives, (d) the language teaching methods, (e) the implications of the actors of learning (learners, supervisors, and teachers), and (f) location. The main two modes are face-to-face and CALL. The integration model concerns the way the different elements integrate or alternate during learning activities. There are two alternatives for the

implementation of the distribution of learning content and objectives. Parallel distribution allows the incorporation and the practice of a given language skill according to the two modes. Language teaching methods are influenced by content and online supervisor, and the teacher who is face-to-face with the learners. The implication of learning actors integrates the interaction types deriving from Blended Learning environment. In addition, there are human-human interactions and human-computer interactions. Location refers to the physical space in which learning occurs (101).

The practice of CALL through Blended Learning gives an idea of the way computer is integrated to learning activities and the types of interactions this practice involves. However, in order to best explain the relevance of CALL one needs to examine its advantages and its limitations in terms of improvement of the quality of learning.

CALL : UNDENIABLE ADVANTAGES AND JUSTIFIED APPREHENSIONS

The Advantages Of Call

For Singhal [14], Warschauer and Healey [1], and Lee [12], cited by Tafazoli and Golshan [13], the advantages of CALL stand in the following points : individualization of learning, diversity of resources and in classroom activities, manifestation of different learning styles, use of real world data, more attention on the part of learners through the use of sounds and images whose content they can best visualize, access to the works of others, natural communication, and interaction between learners worldwide, rapidly and at low cost.

The positive impact of CALL on the realization of second/foreign language teaching and learning goals and ends is unquestionable. The aforementioned points are a declination of the main advantage of this approach: Improving the quality of learning for a better social integration of learners. CALL therefore seems to best fit all the second/foreign language teaching/learning contexts. However, it does not escape the apprehensions generally related to its implementation in classroom situation.

Call : Some Apprehensions

Singhal [13] evokes three main worries related to the implementation of CALL: access to information requires a lot of time; the absence of appropriate training of teachers and learners is harmful to a successful implementation of CALL; the Internet allows access to all sorts of issues and topics some of which have some effects opposed to the expected ones. Other complaints also concern lack of infrastructures which makes illusory all idea of the use of technology in class, excessive individualization of learning which causes the ignorance of interactions between the teacher and the

learner and between learners, and the isolation of learning process from its psychosocial context. Some worries are also mentioned which concern the deterioration of the teacher's role in learning process and the undermining of the learner's creative skills in a context where the teacher has to follow every step of his mental activity.

These apprehensions clearly indicate that the implementation of CALL is not always obvious. However, that apart from the worries relating to lack of infrastructures, the others do not impede the implementation of CALL. Moreover, with regard to what precedes, all seems to favor the advantages. Therefore, there is no need to focus on the issue of the relevance of CALL. One should rather reflect on the didactic measures which can allow its successful implementation regardless of the difficulties revealed. This explains my current interest in the examination of the didactic implications of CALL for the didactic triangle which results in the design of a didactic framework for an improved implementation of this approach.

THEORETICAL FRAMEWORK

My reflection rests on three learning theories: cognitive/constructivism, socio-constructivism and interaction theory. Cognitive/constructivist theory calls for a preoccupation with the implications of CALL for the construction of knowledge. The socio-constructivist dimension concerns on the one hand, the examination of the impact of this practice on the level of engagement of the learner to act on the content to which he is exposed in order to construct knowledge and on the other the analysis of the mediating role of the technological tool on the realization of learning. The stress is on the explanation of the way technological tool intervenes in the different interrelations, Teacher-Learner, Teacher-Content, and Learner-Content. Interaction theory entails a focalization on the different interactions which occur during the implementation of CALL and their impacts on the realization of learning. It then integrates the socio-constructivist perspective.

On the ground of this three-dimensional theoretical framework, I now feel comfortable to discuss the relational implications of CALL for the didactic triangle in order to inform my suggestions for the improvement of the situation.

CALL : RELATIONAL IMPLICATIONS FOR THE DIDACTIC TRIANGLE

The Didactic Triangle

The three poles of the didactic triangle correspond to the main elements involved in learning process: Teacher, Learner, and Content. Didactics is concerned with the interrelations between these three poles: Teacher-Learner (Pedagogical Relation), Teacher-Content (Curricular Relation), and Learner-

Content (Didactic Relation). The management of these interrelations determines the realization of learning objectives.

The introduction of CALL in the second/foreign language classroom calls for new relations: Interrelations CALL-Pedagogical relation, CALL-Curricular relation, and CALL-Didactic relation. One then talks about relations to other relations. They need to be addressed with special care in order to highlight their relevance for the didactic triangle. The question which is now raised is as follows: What are the implications of the interrelations relating to the use of CALL for the ones which already exist in the didactic triangle? Put differently, what is the influence of CALL on the interrelations, taken individually, in the didactic triangle?

Call : Implications For The Pedagogical Relation

According to Germain [11]¹,

By pedagogical relation, one refers to the relation teacher-learners in the school context. Therefore, the pedagogical relation calls for effective interactions in the classroom between a teacher and a group of learners. Classroom management or the problems relating to classroom management independently of teaching/learning content can also be considered as part of pedagogical relation.

If pedagogical relation "refers generally to effective interactions in the classroom between a teacher and a group of learners", CALL imposes more complex interactions. It is clear, in this case, that the integration of the principles of this approach conditions the effectiveness of the interactions with the other interrelations. In terms of second/foreign language teaching/learning, interaction plays an outstanding role for language in its context of use implies verbal interactions between individuals. In addition to the verbal interactions between teacher and learner that we meet in ordinary classrooms, the implementation of CALL entails another type of verbal interactions between technological tool and learner. During these interactions, technological tool helps the learner to acquire new knowledge in second/foreign language

¹ Par relation pédagogique, on réfèrera à la relation enseignant-apprenants en contexte scolaire. Ainsi, la relation pédagogique renvoie aux interactions effectives, en salle de classe, entre un enseignant et un groupe d'apprenants. La conduite de la classe ou les problématiques de la gestion de la classe, indépendamment des contenus d'enseignement/apprentissage, peuvent aussi être considérées comme faisant partie de la relation pédagogique.

through practical exercises in a mediating role between the teacher and the learner. These interactions Technological tool-Learner also occur outside the classroom. This corresponds to a context of autonomous learning.

The implementation of CALL raises the issue of appropriate classroom management, with a focus on the roles of the teacher and those of the learner. As far as the teacher is concerned, these roles include those of knowledge provider, resource person, facilitator of learning process, guide, or assistant. As for the learner, his roles include those of taught or active participant to learning process. These roles vary according to the teaching method adopted. Even though the use of technological tool does not generally exclude these classical roles, it puts the indispensable nature of those of the teacher in the background; the learner no longer necessarily depends on his intervention in order to progress in learning process.

It is true that modern approaches (Communicative Language Teaching, Competency-Based Language Teaching, etc.) to second/foreign language teaching-learning encourage a focus on the learner who becomes the main actor of learning process. Given the opportunities these approaches offer him to use language in order to complete a certain number of tasks, one cannot but admit their relevance to his training. Too much focus on learner in the context of CALL causes a lonely evolution whose main consequence is to deprive the learner from a more structured supervision in order to progress in learning process. Another harmful influence of CALL on pedagogical relation concerns the fact that with the Internet, the learner is provided with a relatively varied and abundant language input; this causes some kind of dispersion which is harmful to a focused learning of language. Moreover, the fact that technological tool sometimes causes distraction, lack of concentration, or absence of focalization on the essential (language learning) is a worry. These considerations call for reflection on more adapted roles for second/foreign language teachers to the practice of CALL.

Call : Implications For Curricular Relation

According to Germain [11], "...curricular studies are concerned with the ends and goals of teaching-learning, and adaptation or transformational procedures of teaching contents."² [My translation] He goes on as to indicate that

Some general concepts have been proposed in a curricular perspective in order to reach the stated ends and goals. 'Didactic

² « ...les études curriculaires s'intéressent aux finalités et aux buts de l'enseignement/apprentissage, ainsi qu'aux procédés adaptatifs ou transformationnels des contenus à enseigner. »

transposition'. Here, didactic transposition is among these concepts is seen as integrating any adaptation and transformation process of content no matter the nature (subject or non-subject content) in a teaching object in order to allow its learning.³ [My translation] (29)

With These words, the importance of curricular relation in the didactic triangle clearly stands out. The teacher has to operate some curricular choices adapted to learning context. He then constructs training experiences which can help achieve the stated ends and goals. In terms of second/foreign language teaching-learning, these experiences generally include the appropriate language input, the learning tasks and the didactic aids which accompany them.

Curricular relation in the context of CALL is influenced by technological tool. More than a mere didactic aid it provides the teacher with the input and the learning tasks needed for the construction of training experiences. The impact of CALL on curricular relation is best perceived through the new constraints it imposes on the teacher. He has to make additional effort of professional skills and research for the adaptation and transformation of varied content whose exploitation requires a lot of time and availability. He is therefore expected to have a good command of technological tool and be able to make choices which are more profitable to his learners.

Call : Implications For Didactic Relation

For Meurieu [16], didactics aims at "...achieving the intelligence of materials conditions and the mental mechanisms which allow a given subject to construct some determined knowledge." [My translation]. Such a constructivist view of learning sets priority to didactic relation, which focuses on the learner, the main actor in learning process and on his relation to the content he is exposed to. In terms of second/foreign language teaching/learning, didactic relation corresponds to the way the learner demonstrates his linguistic competence while acting on the input in order to achieve performance, that is to say the completion of the tasks proposed. The success of learning depends on his performance during the completion of tasks. The relevance of didactic relation is therefore unquestionable to the extent that it determines the realization of the stated ends and goals.

³ Quelques concepts généraux ont été proposés dans une perspective curriculaire, afin d'atteindre les finalités et les buts fixés. Parmi ces concepts, on trouve celui de « transposition didactique ». La transposition didactique sera comprise ici comme englobant tout processus d'adaptation et de transformation d'un contenu, quelle qu'en soit la nature (contenu disciplinaire ou non disciplinaire), en un objet d'enseignement en vue de son apprentissage.

In the context of CALL technological tool reinforces didactic relation in that it increases learner motivation and allows him to work in a less stressed environment. More opportunity is offered to him to use language abundantly in order to carry out a variety of language operations during training experiences. However, there might be a deterioration of didactic relation resulting from technological tool which, as mentioned earlier, causes distraction and lack of concentration. Moreover, some limitations in terms of adaptation of CALL to classroom realities (environmental, linguistic, experiential, representational, intellectual, etc.) might inhibit the learner's creative and language potentialities; the immediate consequence of these limitations is the learner's inability to use language in order to achieve the expected performances.

Discussion Of The Relevance Of Call With Regard To Its Relational Implications For The Didactic Triangle

As has been said earlier in this paper, the introduction of technological tool into language classroom implies new interrelations with the ones which already exist between the different poles of the didactic triangle. Given the aforementioned relevance of these interrelations, their successful manifestation conditions the realization of ends and goals and thereby success of learning in the context of CALL. Therefore, the need to discuss the relevance of this approach as regard its relational implications for the didactic triangle clearly stands out. In this vein attention is given respectively to pedagogical, curricular, and didactic relations in the context of CALL. The first, Teacher-Learner, suggest that the teacher has a clear-cut idea of the interrelations that this approach imposes on him with his learners. In fact, a poor or an approximate management of these interrelations caused by their ignorance or approximate knowledge would impact negatively the global management of the classroom in terms of authority, personality, and motivation of his learners to participate in classroom activities, and course management; this would impede the realization of the stated ends and goals. The relational implications of CALL for the didactic triangle are particularly demanding for the teacher who has to find the strategies adapted to the new realities. His main concern is to answer the following question: How does the teacher efficiently manage the relational implications of CALL so that it will be more profitable to learners while preserving his roles? This relevant question entails the need to integrate the principles and realities of CALL to the training (initial and in-service) of teachers. As for the learner, CALL environment imposes on him dynamic participation to his training. Nevertheless, this participation might require his good command of technological tool and his awareness of the relational constraints relating to his new roles. In addition, the

teacher's past experiences in terms of pedagogical practices and those of learners in terms of teaching-learning might cause their reluctance to effectively involve in the practice of CALL. These considerations suppose adequate training of the different actors prior to the implementation of this approach. The realization of such an ambitious project is still a dream for sub-Saharan African countries for they cannot afford the mobilization of the infrastructures and financial and human resources required. Therefore, the issue of the training of teachers needs to be addressed with special care in order to avoid confirming the irrelevant nature of this practice in our context.

The second relation, Teacher-Content, is particularly challenging for the teacher in that he has to do research for the selection of the content needed for the construction of training experiences. Given the fact that technological tool makes available a plethora of diverse data that he has to go through before making judicious choices, one understands the constraints he has to face. The type of effort that this requires might reduce his motivation. In addition, his limitations in terms of language knowledge regarding some contents which might be useful to learners is a source of frustration. Worse, the teacher's poor perception of CALL would make its implementation irrelevant not only from his point of view but also from the point of educational authorities.

The third and last relation, Learner-Content, the cornerstone of the didactic triangle, corresponds to the stage where the learner acts on content in order to construct knowledge and appropriate it. This stage requires on his part more concentration, engagement, and a motivation to make the effort and provide the energy needed during classroom activities. Unfortunately, his lack of experience in terms of the use of computer added to the harmful effects of the presence of technological tool might impact negatively his engagement and concentration. Moreover, there might be a weakening of the didactic relation resulting from his dependence on the other two classical relations of the didactic triangle.

Didactic Perspectives Of Call For More Rational Management Of The Relational Implications Of Call For The Didactic Triangle

As has been said earlier in this paper, the management of the relational implications of CALL for the didactic triangle includes three dimensions: Pedagogical, curricular, and didactic. Pedagogical relation could be improved through a redefinition of the roles of the teacher and the learner regarding the use of CALL and training the different actors to play their roles. They would then be more likely to best apprehend and assume them during classroom activities. Teacher training should include modules of identification of these roles relating to the use of CALL. They include

the ones of facilitator of interactions between the learner and the teacher, management of interactions between the learner and technological tool, interaction between the teacher and technological tool, and interrelations between the three. Conditions should be created for learners to be aware of their roles relating to the implementation of CALL by involving them in some activities for their initial training before exposing them to effective training experiences. These roles include the ones of users of technological tool, taking personal initiatives, observation of the instructions of technological tool, respect of teacher's instructions, interaction with technological tool, and interaction with teacher. The list is not exhaustive; specific training experiences would involve a variety of roles.

Collaboration between the members of language teaching units in the same academic institution (internal relations), and from different academic institutions (transversal relations) would allow on the one hand teachers in the same institution to share experience in terms of curricular choices and on the other hand teachers from different institutions to draw from situations experienced elsewhere. In addition, in order to avoid worries relating to the plethora of varied contents, the contents of training syllabi should be clearly specified with a focus on the elements which could guide the teacher in his choices: General and operational objectives, didactic aids, teaching methods, types of activities with a

specification of Internet sites, and the roles expected from the teacher and the learner among others.

In order to improve didactic relation, the choice of content should take account of factors which allow more engagement on the part of the learner in learning process. These factors include the learner's background knowledge in terms of language, his interest and learning styles, clear and accessible instructions, and varied contents among others. Apparently, these factors do not differ fundamentally from the ones encountered in ordinary language classrooms. However, in the context of CALL, they are influenced by the mediating role of technological tool.

Suggestion Of A Training Experience For The Implementation Of Call

Given the conclusions of this reflection on the relational implications of CALL for the didactic triangle and considering the theoretical framework it is rooted in, I suggest a training experience which could help make the interrelations in the didactic triangle more profitable to learners. This experience, which concerns first year learners of English as a foreign language at university level, consists essentially of a learning situation including six stages which involve learners in using English to exchange orally (Oral Practice) on a current issue: Democratic Experiences in sub-Saharan Africa.

Model of learning situation in the context of CALL

	General objective	Operational objectives	Activities organized	Classroom organization	Teacher's Roles	Learner's Roles	Relational implications for the didactic triangle
STAGE 1 Guided research phase	Involve the learners in data collection	Visit the sites proposed by teacher; collect data needed; read and understand the content of data	Data collection	Individual work (Homework)	Propose some sites to be visited by the learners	Visit sites proposed and collect data needed	Interrelations Teacher-Technological Tool, Teacher-Learners, Learners-Technological Tool
STAGE 2 Exploitation phase	Draw from content of data collected in order to express oneself orally	Analyze and discuss content ; Give one's view on issues raised	Exploitation of data collected	Group work and work in plenary	Allow learners to work on activities relating to data collected and assist them	Use target language to complete learning tasks	Interrelations Teacher-Learners, Learners-Learners
STAGE 3 Non-guided research	Train learners to do non-	Visit their chosen sites; Collect data	Collect data	Individual work (Homework)	Instruct learners to collect	Visit their chosen sites	Learners-Technological Tool

phase	guided research	needed; Read and understand contents of data			data		
STAGE 4 Exploitation phase	Draw from content of data collected in order to express oneself orally	Analyze and discuss content ; Give one's view on issues raised	Exploitation of data collected	Group work and work in plenary	Allow learners to work on activities relating to data collected and assist them	Use target language to complete learning tasks	Interrelations Teacher-Learners, Learners-Technological Tool
STAGE 5 Evaluation and synthesis phase	Evaluate and synthesize prerequisites of previous stages	Online information exchange; Evaluate content of information received	Mutual evaluation	Individual work (Homework)	Instruct learners to synthesize previous stages and do mutual evaluation within the same group	Synthesize previous stages and do mutual evaluation online	Learners-Technological Tool
STAGE 6 Exploitation phase	Draw from content of information received and evaluations made in order to express oneself orally	Provide feedback about evaluations made; Exchange on evaluations made; Synthesize evaluations	Evaluation of syntheses	Group work and work in plenary	Allow learners to work on activities relating to data collected and assist them	Evaluate the syntheses made	Interrelations Teacher-Learners

Stage 1

Teacher proposes some sites to learners for data collection on the principles of democracy. Individually learners visit the sites proposed and collect data needed (Homework). They read the available passages and take notes. They use online dictionaries in order to find the meanings of unfamiliar words.

Stage 2

In groups, they present and discuss the contents of the data collected under the supervision of the teacher, and agree on the most relevant principles of democracy. In plenary, each group exposes the principles retained and justifies its choices. These presentations are followed by exchanges between the members of the class.

Stage 3

After the second stage, each learner has to carry out research online on democratic experiences in sub-Saharan Africa. He produces a summary of the content of data collected (Homework)

Stage 4

each learner presents his summary to the other members of his group. After in-group exchanges, they produce a common summary that they present to the whole class. Other sites are then proposed to them by the teacher so that they will collect additional data in order to reinforce their knowledge. Learners visit these sites and take notes in order to participate in exchanges on additional information.

Stage 5

After the fourth stage, each learner has to synthesize the prerequisites of the previous stages. The members of the same group exchange their syntheses online and evaluate the productions received. (Homework)

Stage 6

Within the same group, learners exchange on the syntheses evaluated. They synthesize the different syntheses that they present to the whole class. At this last stage, the teacher gives them some sites where they can exchange with other persons on the same issue.

COMMENTS

Through this training experience I do not have the pretention to have solved all the problems relating to the implementation of CALL. Nevertheless, I feel that my suggestion would help improve the interrelations relating to the implementation of this approach. The illustration provided shows the extent to which a more rational management of these interrelations could allow the teacher and the learner to fully play their different roles with the mediation of technological tool. These roles clearly stand out in all the stages of my suggested training experience except in stages 3 and 5 as indicated in the table above.

At the end of this didactic reflection, my optimistic view of CALL rests on a realistic approach to its implementation with a focus on its experiential dimension to the detriment of mere theoretical developments which might nourish apprehensions related to the effectiveness of this approach in classrooms. With the outcomes of this reflection, I now feel comfortable to encourage the use of technological tools in general and particularly computer to maximize the manifestation of the learner's language learning potentialities. Dewey's well-known philosophy of education, "Learning by doing", is echoed by CALL which allows the use of language to do a certain number of things with the mediation of computer.

CONCLUSION

This paper aimed to examine the relational implications of CALL for the didactic triangle and draw from these implications in order to suggest some didactic strategies for a more effective implementation of this approach. In this perspective, the different relations in the didactic triangle were first identified and explained. They include pedagogical relation (Teacher-Learner), Curricular relation (Teacher-Content), and Didactic relation (Learner-Content). Second, the influence of CALL on each relation was examined. My findings are as follows: Technological tool undermines the indispensable roles of the teacher, for the learner does not necessarily expect his intervention in learning process; CALL imposes new constraints on the teacher who has to make extra effort of professional skills and research in view of adapting and transforming the content offered by technological tool to classroom realities; a deterioration of didactic relation resulting from the negative impact of technological tool on learner concentration, from some problems of adaptation of CALL to classroom realities (environmental, linguistic, experiential, representational, intellectual, etc.), and from an inhibition of the learner's creative and language potentialities. Third, a suggestion was made consisting of a more structured didactic framework which would be a major asset for enhancing the learner's chances of dynamic engagement to his own training in the context of CALL. Further studies might draw from my

conclusions in order to design a didactic framework which is more adapted to the realities of CALL for training second/foreign language teachers.

REFERENCES

1. Warschauer, M. & D. Healey (1998). Computer-assisted language learning: An overview. *Language Teaching*, 31, 57-71. Cambridge: CUP. [Retrieved 18.06.2016; 14:20] <http://hstrik.ruhosting.nl/wordpress/wp-content/uploads/2013/03/Warschauer-Healey-1998.pdf>
2. Warschauer, M. (2000). CALL for the 21st century. LATEFL and ESADE Conference, 2 July 2000, Barcelona, Spain <http://www.gse.uci.edu/markw/cyberspace.html>
3. Warschauer, M. (2004). *Technological change and the future of CALL*. In S. Fotos & C. Brown (Eds.), *New Perspectives on CALL for Second and Foreign Language Classrooms*, 15-25. Mahwah, NJ: Lawrence Erlbaum Associates. Chapter 2. [Retrieved 18.06.2016; 13:17] http://www.education.uci.edu/person/warschauer_m/docs/future-of-CALL.pdf
4. Whittaker, C. (2013). Introduction. In D. Tomlinson & C. Whittaker (Eds.), *Blended Learning in English Language Teaching: Course design and implementation*, London: British Council, 9-25. ISBN: 978-86355-706-4. [Retrieved 18.06.2016; 14:13]. https://www.teachingenglish.org.uk/sites/teacheng/files/D057_Blended%20learning_FINAL_WEB%20ONLY_v2.pdf
5. Yang, Y. (2010). Computer-assisted foreign language teaching: Theory and practice. *Journal of Language Teaching and Research*, 1(6), 909-912, November. ISSN: 1798-4769. [Retrieved 18.06.2016; 15:40] <http://www.academypublication.com/issues/past/jlt/vol01/06/25.pdf>
6. Kern, R. & Warschauer, M. (2000). Theory and practice of network-based language teaching. In M. Warschauer and R. Kern (Eds.), *Network-Based Language Teaching: Concepts and practice*. New York: CUP.
7. Sharma, P. & Barrett, B. (2007). *Blended Learning*. OUP. Cited by C. Whittaker (2013). Introduction. In D. Tomlinson & C. Whittaker (Eds.), p.11.
8. Neumeier, P. (2005). A closer look at blended learning parameters for designing a blended learning environment for language teaching and learning. *ReCall*, 17(2), 1-3-178, Cambridge: CUP. DOI: 10.1017/50958344005000224. [Retrieved 18.06.2016] http://chamilo3.grenet.fr/stendhal/courses/IF/document/Dispo_hybrides/recall-neumeier.pdf
9. Stracke, E. (2007). Spotlight Blended language learning: A frontier beyond learner autonomy and computer-assisted language learning. *Proceedings*

- of the *Independent Learning Association*. Japan Conference. Exploring Theory, enhancing practice. Autonomy across the disciplines. Kanda University of International Studies. Chiba, Japan, 1-13, October. ISSN: 2073-7513. [Retrieved 07.06.2016; 19:01]. <http://www.independentlearning.org>
10. Grgurovic, M. (2011). Blended learning in an ESL class: A case study. *Calico Journal*, 29(1), 100-117. [Retrieved 07.06.2016; 18:55]. <http://www.u.arizona.edu/~mpolat/articles/article1.pdf>
11. Marsh, D. (2012). *Blended Learning: Creating learning opportunities for language learners*. Cambridge: CUP. ISBN: 978-1-107-91697-5. [Retrieved 07.06.2016; 18:55] www.cambridge.org
12. Singhal, M. (1997). The internet in foreign language education : Benefits and challenges. *The Internet TESL Journal*, 3(6), 1-7
13. Lee, K.W. (2000). English teachers' barriers to the use of computer-assisted language learning. *The International TESL Journal*, Vol.VI, N° 12, December, <http://iteslj.org>
14. Tafazoli, D. & N. Golshan (2014). Review of computer-assisted language learning: History, merits and barriers. *International Journal of Language and Linguistics*, 2(5-1), 32-38, September 4. ISSN: 2330-0221. [Retrieved 18.06.2016; 18:57]. <http://www.sciencepublishinggroup.com/j/ijll>
15. Germain, C. (2000). Didactique générale, didactique des langues et linguistique appliquée. *Revue Canadienne de Linguistique Appliquée*, 9(1-2), 23-33. [Retrieved 18.06.2016; 17:00] <http://www.aclacaal.org/wp-content/uploads/2013/08/4-vol-3-nos1-2-art-germain.pdf>
16. Meurieu, P. (1991). *Le choix d'éduquer: Ethique et pédagogie*. Paris: ESF éditeur, Issy-les-Moulineaux, cedex.