

Creating a Web-based Communicative Learning Environment through Interactive Blogs: English Language Acquisition

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Abstract

This study aims to assess the viability of blogging in the context of Teaching English to Speakers of Other Languages (TESOL) as a productive web-based learning environment (WBLE). The blog sections of three English as a second language (ESL) websites were evaluated and Computer Mediated Communication (CMC) which appears in the comments sections of blog posts was examined through reference to excerpts of various comments. The analysis indicates that as a supplementary means of language education, both the blog content and the debate that hosts in its comments section are useful to language learners all over the world who have access to the internet. It may not facilitate certain areas of cognition that are maximized by Communicative Language Teaching (CLT), however it does expose readers to necessary information in an educational context and provide them with an outlet for spontaneous CMC (SCMC), allowing autonomous parsing of the target language (English).

Keywords: Autonomous learning, communication, interactive blogs, second language acquisition, target language

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Introduction

For those who are not privy to a quality educational system that employs trained, intelligent teachers, the internet becomes a place of enlightenment, giving the browser an opportunity to search for the resources he or she needs in order to achieve the same learning goals as those which are given to students in the very best educational institutions. Take for example the schools and universities in Latin America, where education is not disparate, but teachers are, according to The Economist in surmising a report from The World Bank, "...recruited from less bright school leavers...so they teach badly" (The Economist, 2014). Figures from the World Bank regarding the international test known as Programme for International Student Assessment (PISA) also show that at the age of 15, children in Latin America are more than two years behind their peers in developed countries in Math and reading comprehension (Bruns & Luque, 2014). In summary, the investigation found that teachers are not adequately trained to take control of their classroom and because of this, they don't spend enough time actually teaching. On average, teachers in Latin America teach for less than 65% of the class time which, when compared to the 85% of the class that teachers in the USA spend teaching, reveals a lot of time wasted on other more trivial pursuits such as 'classroom management' and 'off task activities' including marking and time spent outside of the classroom, according to the data from the World Bank (2014, p.2). The observers, Bruns and Luque also find that teachers were relying overwhelmingly on the blackboard rather than using resources that they had access to such as the internet, laptops and other advanced teaching aids. Using the 'Stallings Classroom Snapshot', a standardized protocol to generate internationally comparable data, Bruns and Luque (2014) gathered results on the topic of "Teachers' use of materials, including computers and other ICT [Information and Communication Technology]" (p. 12). They conclude that students were unengaged with the learning content, due in part to there being less than 2% of class time dedicated to television, digital white boards, LCD projectors and laptops, all of which add to an 'enriched learning environment' (pp.12-15). Whilst the claim could be made that keeping television to a minimum in class is not a bad thing, the change in the modality that it offers the lesson is key to holding the attention of restless students, and the interactivity that can be fostered through teaching aids such as digital white boards, the internet and blogs makes the learning process much more productive in a stress free-free learning environment. Though blogs are not created intentionally for pedagogical purposes, they do provide opportunities for language teachers and students to get familiarized with language acquisition through online strategies and techniques and thus these blogs create a non-threatening learning environment for students of English to experiment using digital skills (Ward 2004).

ESL Blogs

Whilst there have been few, if any pedagogical studies pertaining specifically to blogging and learning, we can evaluate results of similar studies in the field of English Language teaching through blogging by compiling research on Computer-Mediated Communication (CMC) in language teaching and other various examples of Computer Assisted Language Learning (CALL). Bryam (2001) introduces the concept of the 'intercultural communicant' and stressed its relevance in the language learning process by claiming that exposure to the culture of which the language is part of is necessary for complete second language acquisition. Culture which, to some extent at least can be observed and interacted with through blogs which have a comments section allowing students to ask questions and give opinions on cultural content. Another related paper, based on the communicative competence of learners who chose the CMC route, disputes that notion by

stating the importance of face to face, ‘psychological’ interaction in second language acquisition (Avdeeva, 2006). Avdeeva (2006) proposes a lingua-didactic model that involves sociability, empathy and improvisation, all of which are purportedly needed for proficient acquisition of a foreign tongue. It could be helpful for ESL blogs to accommodate all of these factors that Avdeeva (2006) mentions to allow students to better interact with the cultural element which students can use as a focus for learning a language. It may not be impossible either with the introduction of video chat to ESL blogs, but it may not even be necessary due to the existence of language learning chat software such as Tandem or Nice Talk which provide this mode of CALL. ESL blogs serve best as single modality, textual platforms which are preferred by some and for others, it can provide a welcome change to auditive learning.

Web-Based Learning Environments and Computer Assisted Language Learning

The online autodidactic learning methods which this paper is based on come in many forms and they have many names, but in general, a good hypernym and acronym that can be used as an umbrella term for most of them is ‘WBLE’ (Web-Based Learning Environments) (Baya’a et.al, 2009). The term encompasses various subsidies of educational web resources including WISE (Web Based Inquiry Science Environment) and CALL, the latter of the two being directly relevant to this study. There have been many studies that give in-depth accounts of these two learning frameworks spanning back to when computers first became accessible to the public. Diachronic technological advancements have led to much more research being done recently, catalyzing autonomous learning software and helping to make lesson content more engaging for young learners with interactive technology. One of the earliest studies in CALL was presented by Nina Garrett in 1991, when technology was just starting to become used in the classroom. Then it was still however, as Garrett submits in an update 18 years later, ‘Pedagogy over technology’, only later amalgamating into a complex infrastructure in which one aspect could influence the other leading to new and novel pedagogical practices using technology (Garrett, 2009, p.2). One of the most influential changes to pedagogues’ opinions of technology in the classroom, and indeed out of it, is the evolving attitude towards social media (Payne & Whitney, 2002). Whilst at the end of the last century student conversations using instant messaging and other types of textual computational communication software have been considered ‘inauthentic’, recent discoveries showing the similarities in mental processing between speech and writing have given weight to techno-pedagogical blended learning infrastructures such as CALL (2002).

Even now though, despite the additions of SMART boards, computers and projectors to many classrooms worldwide, many pedagogues who are intent on seeing hardware better integrated into the CALL infrastructure claim that the current technology is not suitable for language learning (Neville, 2009). There are a number of institutions that deal with the requests posed by advocators of CALL, most renowned of which are the Computer Assisted Language Instruction Consortium (CALICO) and the International Association for Language Learning Technology (IALLT). These institutions find ways in which they can help adapt technology to suit the purpose of language learning, rather than the other way around. According to many CALL theorists, interactive white boards and projectors are universal educational tools which are most useful for subjects that necessitate graphs or other more complex diagrams (Garrett, 2009). They are not particularly useful for language learning as a large element of the learning process is speech and the speakers on projectors are generally of poor quality, or non-existent on SMART boards

sometimes. As Math and reading skills are more often than not valued higher than modern languages in schools, most classroom technology is centered around these subjects (Garrett, 2009). Critics call for a more specific hardware alternative to SMART boards that will allow language teachers to better interact with the technology.

Aside from the hardware that is developed in order to aid learning, the software focusing on tutoring, communicating and engaging is lacking any breakthrough innovation. This is thought by many to be because of the perceived specificity, limited functionality and difficulty tailoring the software, putting off developers and educators working on them (Hubbard and Siskin, 2004). A good example of the options for tutoring software currently in practice is corrective feedback technology such as Grammarly. This extension to word processing software has a huge marketing campaign aimed at an audience who struggle with grammar, or who feel the need to perfect a piece of writing, yet the constraints and fuzzy parameters that are given to the program often either result in too little or too much done in the way of error correction. Whilst corrective feedback can be helpful for some short sentences, the sheer magnitude of possible sentence structures makes it difficult for a machine to correctly assess the best option for a particular sentence given the context. It requires a lot of bug fixes to be considered a worthy replacement for human error correction, and even with that, more bugs are often created in the process. But with the field of linguistics expanding into areas of machine learning, and with such programming language as Ruby on Rails involving lists of lists of commands being used more by software developers, there have been some interesting applications and software made for the field of modern languages and other second tier subjects. Rosetta Stone is currently the leading software in SL (second language) acquisition according to language learning review teams of The Wall Street Journal, CNN, Consumer Advocate and many other publications. The advanced software incorporates voice recognition and is able to accurately grade the pronunciation of the speaker, leading to successful phonetic error correction. It too however suffers from the same shortcomings as Grammarly in that the code implemented for the written element is not adequate enough to accurately grasp the tone of a piece of writing. In much the same way that Massachusetts Institute of Technology (MIT) have created an algorithm that has passed the Turing test in the area of phonetics, Rosetta Stone has incorporated successful phonetic recognition software that is able to aid in language learning by correcting erroneous speech (Osborne, 2016). However, considering that no algorithm has been able to consistently pass the textual element of the Turing test - fooling a human being into believing that he is speaking with another human and not a machine - it is clear that the standard of artificial intelligence is not yet such that it can accurately correct or provide spontaneous textual discourse (Harnad, 1992; Hardesty, 2015). For this reason, interactive communicative software is found on blogs and other online educational resources as it is much more accurate and reliable, allowing students to converse between each other or with a teacher.

Whilst web-based language learning environments may be able to integrate spoken error correction to some degree with their advanced voice recognition software, many studies have aimed to prove the supremacy of textual annotations in correction and memorization of spoken language over verbal annotations, rendering the auditory corrective procedure less effective. One such study tested participants' propensity to remember items of vocabulary with the aid of verbal and textual annotations separately and together (Jones, 2003). The study finds that through multimodal - both textual and verbal annotative cues - participants remembered the most

vocabulary items; with the aid of unimodal - textual or verbal cues - participants remembered less; and with no annotations of any kind they remembered the least items of vocabulary (Jones, 2003). The study also made another important discovery that determined which modality participants preferred and which one facilitated better cognition. The results show that subjects preferred the verbal annotative cues to the textual ones as listening generally requires less mental processing (Jones, 2003). The better results however, were performed by those who chose the more taxing textual cues given to help them make visual associations to the auditory stimulus. Not only do the results of this report give reason for the implementation of a multimodal delivery of language learning content, they suggest that through writing and reading one can retain more information than listening and speaking (Jones, 2003). Blogs and other websites that have the capacity to receive comments and post informative readable content, allow their readers to create visual associations to language as well as communicating constructively in an authentic manner, two factors that are hailed in Jones' study (Jones, 2003).

CALL Research Methods

In an ever changing environment where technology is evolving rapidly and students are increasingly relying on the internet to provide them with the information, help and guidance that a teacher may once have given, it is important to gauge and monitor the quality of the support that students are receiving. This is best achieved through qualitative analysis as detailed rather than quantitative data is required to accurately assess the usefulness and potential of an autonomous program from the perspective of the student. The focus of this type of qualitative analysis is on the students themselves and their experience with the content rather than a teacher and their ability, the latter of which is usually quantified by the results of their students, not on the quality of their teaching or even the content in some cases (Heigham & Croker, 2009). The top-down approach to education, starting with the student at the top, can be implemented in classrooms by teachers as it is in the flipped classroom model, but it is perhaps most necessary in allowing students to get the best out of themselves without the aid of a teacher. It is therefore helpful for students to practice and research autodidactic techniques in their own time and mandatory for a successful autonomous learning platforms to research ways in which they can help students get the most out of the content they provide. The method of going directly to the student for research purposes is relatively uncommon in pedagogical research which is based on the more typical teacher-student dichotomy. This is because most classroom research focuses on perfecting the lesson content and teaching methods as it is generally speaking of more interest to teachers than students. By going directly to the student to get his or her perspective of the quality of the learning experience one can get a much better sense of the direction in which autonomous online education technology is going. There is thought to be a certain discord between the route that CALL research is taking and the preferred route that students take in order to learn languages by themselves, which could lead online language education into disarray (Steel and Levy, 2013). It is therefore paramount for the success of CALL that research into the intricacies of online language learning correctly assimilates the most productive autodidactic experience for the user, be it in augmentation or diminution of what is already presupposed. It is also necessary that users give feedback on how they feel about the content so that it can be gathered as qualitative evidence.

In reference to a compilation of CALL focused studies, Mike Levy, a professor at the University of Queensland aimed to find out how and to what extent 'e-learning' contributes to the

entire learning experience as well as ‘the role and contribution of qualitative research’ in CALL studies (Levy, 2015, p. 556). Levy explores the benefits of CMC mediums such as SCMC (synchronous computer-mediated communication) which, incidentally encompasses blogs, shedding some light on the differences between face-to-face communication and SCMC (Levy, 2015). Levy also, through citing studies conducted by O’Rourke (2008), Smith (2008) and Jones (2003), provides examples of how one can get as close as possible to the student experience, allowing in-depth analysis of students’ attitude towards autonomous and SCMC learning styles which he claims could lead to the development of better CALL standards (Levy, 2015, pp. 561-562). O’Rourke (2008) provides insights into the ways in which research can be conducted in order to best put oneself in the position of the learner. The methods that O’Rourke proposes are difficult to conduct as they require advanced technology to analyze the subtleties of learning a language that are impossible to observe merely with interviews and textual analysis. O’Rourke (2008) implements software that tracks movement, leading to gaze data and body posture as well as programs that can extract meaning from sounds including ‘audible self-speech’ when rehearsing language (p. 233). O’Rourke (2008) states that whilst eye movement and other micro-expressions can reveal certain intricacies of how learners process, practice and remember a new language autonomously such as self-editing one’s written language, they do not give a much fuller picture into the mind of the student due to the limitations of current hardware - namely the pixel count and reflexology of recording equipment. Smith and Levy second this notion with statements eluding to the fact that technology is ‘inconsequential’ and as such can only be manipulated to a certain extent by the user in order to convey accurately what the user is expressing (Smith 2008; Levy & Stockwell, 2006). Smith conducted a test on language students studying German using a camera and chat logs to monitor students whilst they were using CMC to practice the target language. He found that students would often self-edit their written text, implying that a much more precise, refined and unauthentic version of their language ability appears in text than it would do spoken. As with many studies such as Smith’s which aim to assess the effectiveness of CMC and autonomous learning in CALL, Jones’ study on effect that multimodal learning has on the memorability of lexical items is qualitative rather than quantitative in nature (Jones, 2003). Whilst there were telling quantitative data that proved the main hypothesis to be true, there was more to be found in the qualitative data. The discoveries he made, revealing the preference of audio cues over visual ones and the better outcomes that visual cues facilitated in spite of the preferred audio cues, were deduced from interviewing the participants throughout the procedure. They were not achieved through quantifying statistical data, using advanced technology to track and quantify micro-expressions or by carefully observing SCMC in motion (Jones, 2003). It should be noted however that although qualitative data is usually based on widely accepted theories which are quantified, qualified and built on previous research, there are limitations to qualitative data in autonomous online learning research due to the obvious inaccuracies that must be expected in the comments of the participants, or as Levy (2015) puts it, “What 587 students say they do... does not necessarily reflect what students actually do, nor how the associated processes may or may not contribute to language learning (in a measurable way)” (p. 564).

Methodology

This following study focuses on a compilation of comments, replies and threads on various ESL blog posts. It implements a certain amount of linguistic and pedagogical analysis in order to reveal trends, be they positive or negative, in ESL blogs from the excerpts.

The directors of three of the most popular ESL blogs were asked for access to the comments that they receive on their blog posts. The overall number of comments compiled was 158, some of which were replies to the start of a thread and some of which were single comments. The factors that are considered in the analysis are a) The quality of the user comment; b) Whether there was a response to a user comment; c) The quality of the response; d) The time elapsed between comments and responses.

Results and Discussion

There are many limiting factors and conditions that make it difficult to unequivocally assess the usefulness of blogging in language learning. The study is constrained in the sense that there is no testing procedure at the end of it to assess the theory quantitatively. Further research into CALL procedures will need to employ a quantitative structure and provide a control group in order to conclude that blogging is a viable and useful platform for CALL. With this in mind, future studies can incorporate the qualitative data provided in this study as a firm basis with which to create a hypothesis aiming to explore the extent to which blogging and other CALL platforms can be of assistance to learners and how they can be applied in classrooms or in autodidactic circumstances.

Feedback is an important part of purpose led blogging as it helps the blogger to correct mistakes and to continue to provide useful, engaging and relevant content. An overwhelmingly large proportion of the feedback was positive, complimenting the blog content and structure. There are also some comments that reference a mistake in the blog post but very few that undermined the framework of the teaching platform and its style. There were many good examples of productive feedback on the ESL Blog page ‘ESL Hip-Hop’, founded by Stephen Mayeux in 2013. The latest generation of internet tools, Web 2.0 is used in most recent ESL blogs, allowing users to interface with the content by leaving and receiving comments. The earlier generations, before Facebook and other social media sites emerged, used Web 1.0 which only allowed for one-way information (Goertler, 2009). This phenomenon, an incident of social media development, allows users to create the website to some extent which is hugely important when learning a language as it requires users to access their creative faculties whilst simultaneously disengaging Wernicke’s or Broca’s area in the brain to help the parsing procedure and integrate lexical-semantic information (Friederici et. al, 1998). User 1 is using the newly ‘democratized’ communicative classroom model to exercise this parsing procedure in the example below (Goertler, 2009). Web 2.0 provides users with other cognitive benefits of learning language online too. As shown in the example below, the creative content serves a corrective and reciprocated function.

*“User 1: Harlem is not in the Bronx it is in Manhattan and is home of the Black Renaissance and Black Culture! There's certainly more to Harlem than poverty.
Stephen Mayeux: Great points, and an embarrassing mistake on my part! I will make the proper edits. Thanks for pointing that out, stay tuned :)”*

“Stephen Mayeux: You are absolutely right! Not in the Bronx, and known for a lot more than poverty. I'm going to let the author of this guest post know about your comment. Thank you!”

User 1: Awesome update!"
ESL Hip-Hop, 2016

User 1 accepts that there was a mistake by Mayeux and the exclamation mark is reciprocated throughout from both parties. This, from a psycholinguistic perspective, implicates a covert subscription to one other's ideals that is happening through mirroring and the firing of mirror neurones by both User 1 and Mayeux, leading to positive and constructive rhetoric (Ramachandran, 2016). From a generalist perspective, it is helpful for not only for User 1 to receive a response to his comment, but for other users to witness a conversational structure relevant to the topic which they are studying in the blog content, even if it is a slightly abridged version of what may have been in a spoken discourse.

Whilst this is very much conducive to successful cognition, not to mention other communicative benefits, learning and communicating in this fashion does have its limitations. One of these is accessibility; sites and functions like these usually require the user to have an account and the user has to be computer literate. This means that a large proletarian portion of the world will not be able to participate. It does however help connect people from other cultures around the world in a way that is impossible in classroom teaching (Goertler, 2009). This is exemplified in a thread from the blog 'My English Teacher', in which students from across the world, including the USA and the UK, communicate through the comments section of the blog articles (Koltai, 2014).

"Sergei Polovin ·
Преподаватель at Донецкий Нац. Технический Университет
It is clear that you have put in a lot of work in creating this list. Well done!
The problem with idiom lists is that some of them are not known to American Speakers,
and some to Brits.
Once I worked on a series of education-themed cartoons based on idioms.
A professor of linguistics from a university in Michigan was dead against the
expression 'a storm in a tea cup', claiming she had never heard it before.
Like · Reply · 👍5 · Feb 20, 2014 6:15am

Melinda Makkos ·
Technical Writer at SDI - Systems Documentation, Inc.
Hi Sergei,
Thanks for the feedback.
I was actually considering highlighting Br vs US differences... but then I thought whatthe
heck, it's supposed to be the same language after all...
I guess it was just about time that the professor had learnt about 'storm in a tea cup'
Like · Reply · 👍4 · Feb 20, 2014 12:11pm

Sergei Polovin ·
Преподаватель at Донецкий Нац. Технический Университет
Hello Melinda,
You are right-it is the same language.
Just keep up the good work!

Like · Reply ·  2 · Feb 22, 2014 7:14am

Nora SueMia ·

Open University, England

Sergei Polovin You are wrong to express it like this. It is more complicated than that. British English is a standard just like American English is. They are both linked to two very different cultures, categorise life differently, express reality in different ways. For that reason, it is safe to say that idioms and expressions will be different for these two standard languages, therefore they need to be treated separately. It would have been appropriate for this list to indicate whether they belong to 'Am.Eng' or 'Br. En', as you would see in most dictionaries now.

Like · Reply  · Mar 1, 2016 4:10pm · Edited”

My English Teacher, 2016

The cosmopolitan mix of cultures in this exchange is not easily replicated under classroom conditions. The downside however, is that the style of communication is idealist. A user may subject his or her language to critical analysis, leading to an introspective recount in the form of a self-narrative. This is most obviously demonstrated in the last comment in the thread as underneath the comment at the end of the thread it states that the comment was edited. This form of communication lacks authenticity and the key components that constitute spontaneous communication; it cannot therefore benefit from some of the theoretical cognitive aids CLT provides such as constructivism, structuralism, various behaviorists' concepts and universal grammar (Thamarana, 2016). It may also obscure the view of the comments' author entirely as there is not the transparency that can be achieved from face to face communication.

This is however insignificant if the focus of the CMC is based on basic pedagogical epistemologies such as pre-procedural knowing and not on social pragmatics which could or could not aid learning. Objectivism and empiricism, two components that lead to pre-procedural knowing, are closely linked. Both theories suggest that one only needs a stimulus to create an association. Kuhn and Weinstock (2002) refer to this method of acquisition as the first way to approach learning new information. This is exemplified in a short thread on a blog post on the website 'English With a Twist', founded by Shanthi Streat in 2013.

Hello

I have a question about one of the above expression

Does the idiom "my mind goes blank" have the same meaning as "I draw a blank" "?
thanks in advance

Reply

Shanthi on March 28, 2016 at 8:27 pm

Hi Jaime,

Yes, it has a similar meaning.

To draw a blank also means unable to get information.

"I asked Tim for his medical records but drew a blank".

Thanks for the question.

Shanthi"

English with a Twist, 2016

This is one of many examples on ESL blogs that demonstrates the willingness of site owners and blog authors to answer questions as well as joining in discussions. This not only facilitates a communicative framework, it gives the reader a tailor made answer to a question, which is the most relevant and succinct form of correction. As words that have been read can be silently rearticulated in working memory until they can be stored in the long term memory, if a reader was to practice this metacognitive technique with a blog post, he would undoubtedly be able to store and retrieve a lexical or grammatical item of the target language without an excessive amount of conscious effort. Of course, unconscious or incidental learning is thought to be more effective, but conscious learning is more easily controlled. The simple fact that the information is there should be enough for a learner to create associations with the stimulus so that when it is triggered through conversation it is accessible and can be used effectively.

Conclusion

It depends on the individual learner whether ESL blogs can be considered useful to language learners or not. There is evidence to suggest that blogging sparks debate and provides students with the answers to issues they have with the content. There are however models such as CLT that declare a necessity for face to face interaction. If ESL blogs were considered the primary means of education, then they would most probably not allow the learner to reach his or her potential proficiency in the target language, but if they were considered ancillary mediums then they could expedite very important progress. Especially with systems such as grammar because grammatical systems are logic based studies and thus are not subject to the same benefits of CLT (Sokolova et. al, 2015). Incidentally, most of the content that makes up the blog posts incorporates a strong grammatical element, so it caters perfectly to its audience. To implement such a insular teaching method in schools could be detrimental to the established communicative practice, but it could also be a productive alternative to homework and provide a mixed modal approach to fill gaps in teacher talking time.

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