Reforms Needed to Move Vocabulary Education from Agony to Ecstasy: Using CALL to Maximize Vocabulary and Language Learning

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Abstract

This research report gives an update of recommendations from America for various reforms in education in general. It then focuses more specifically on reforms that would be useful to make in language education, especially with the help of CALL (Computer Assisted Language Learning) resources. Finally, examples of some innovative online programs to use to help move vocabulary and grammar education from “drill and kill” agony to the ecstasy of using more enjoyable media-rich applications and multi-level language programs that can help teachers and learners improve English vocabulary and language acquisition online are given. The author’s poster session at the first JALT Vocabulary SIG is summarized, both printed and online electronic poster sessions to help users discover excellent CALL programs to help foster more effective language education in various languages. Since better grasp of vocabulary enables better thinking and clearer communications, finding ways to make learning more enjoyable and effective are crucial for improving education in general and especially for enhancing bilingual goals of foreign language education.

Keywords: educational reforms, CALL and E-Learning innovations, maximizing vocabulary and language learning, first JALT Vocabulary SIG Poster Presentation

Introduction:

Countries vary in how they define and implement educational reforms. Those having stronger state controls often struggle even in recognizing the need for reforms, as pressures to conform to views seen as being “politically correct according to the prevailing Party-line” typically block their vision or ability to allow for any changes that may be perceived, rightly or wrongly, as threatening the status quo or positions of party power-brokers now in control. Kim (2004) examines South Korean and Japanese cases of earlier unsuccessful educational reform, when blocked by vested interests, which can happen anywhere, either at national or institutional levels. America, on the other hand, as a more open society has often had national panels and commissions to analyze educational failures and recommend means of reform across party lines. Two examples are found in Bennett’s summary of What Works in Education (1990), based on research conducted during the Reagan years, and the 1999 National Education Goals Panel, summarized by Patton and Thompson, which monitored progress toward common national educational goals and provided a forum for ideas about reaching them during the Bush years. His most recent critique of the U.S. education system is called “20 Troubling Facts about American Education,” Bennett (2012). In this article he presents 20
statistics showing that, despite 30 years of almost continuous reform, public education in the United States is still not doing an adequate job.

George Leonard (1987) foresaw that many technological innovations could help to combine *Education and Ecstasy*—meaning a natural high of delight, or a sense of engaging motivation that comes when we realize that we really can improve, are learning things of value to us, and have a voice and choice as to both what and how we learn. In the innovative age of education which he envisioned, students could learn more enjoyably at their own pace. These new forms of learning would ideally

. . .provide a new apprenticeship for living, appropriate to a technological age of constant change. . . Almost every day will be a teachable day, so that almost every educator can share with his students the inspired moment of learning now enjoyed by only the most rare and remarkable [of teachers]. Education in a new and greatly broadened sense can become a lifelong pursuit for everyone. To go on learning, to go on sharing that learning with others. . . Education, at best, is ecstatic. (pp. ix-x).

The most crucial channel of communication to help enable these kinds of educational change and innovative reforms is what he calls the “co-teaching edge,” that collaborative area where teachers, experts and parents cooperate as co-educators to help improve the lives and learning of our young people. To enable such educational reforms, however, most educators would agree that we need to declare a cease-fire over some issues that need to be brought together in better synthesis.

Rather than continuing in circles rehashing redundant test results showing how academic performance has been falling in America, (as well as in Japan and elsewhere), Chen rightly urges us to move beyond endless debates between opposing points of view that “continue to generate more heat than light, resulting in a waste of precious time, resources, and policies . . . [with] little impact on student learning. . . into a smarter synthesis, acknowledging that both sides [have some validity] and integrating them into a bigger picture of learning.” (p. 23) Instead of insisting or fighting from an ‘either/or’ mentality, all of these co-educators would do well to embrace ‘both/and’ thinking in the following crucial academic areas, that we will both paraphrase and quote from here.

While there may be many more either/ors that become turf battles, political debates over social issues, or educational wars, Chen has chosen ten major educational areas which can wisely be turned from “either/or debates” into “both-and syntheses.”

Stating these succinctly in comparative terms can aid both readers and educational reform-minded people, we can see what he called his “Table of Ten” contrasts. These will be paraphrased in summary and responded to briefly.

1. Rather than emphasizing either “Phonics Skills” or “Whole Language,” a smarter synthesis seems to be to acknowledge that both areas are critical to early reading development. Just as Chen
asks “What kinds of rich linguistic environments support both?” we need to ask “What kinds of media rich apps can best support e-learning, or computer-assisted language learning (CALL) for specific language learning areas?” [The author’s research areas have mainly been focused on how to enhance both reading and vocabulary learning using online and other mobile tools.] (p. 23)

2. Rather than stressing that children need to learn “computational skills” versus “mathematical thinking,” we must recognize that both are critical in mathematics. Here Chen asks “What types of problems and experiences engage students to want to calculate and think mathematically?” (p. 23)

3. Rather than emphasizing either “[proficiency level] tests” or “authentic assessments,” it’s time to admit both are needed to better evaluate and improve students’ learning. But we need to keep on asking along with Chen, “What kinds of tests are [most] useful [and for what purpose/How will they be used]? And what larger assessment programs can improve learning?” (p. 23)

4. Instead of contrasting either “Teacher-centered instruction” versus “Student-centered learning,” those using e-learning need to recognize that teachers are still vital to help guide learning, in student-centered learning environments or classes as well. However, much more study is needed on how a teacher’s role changes and may be made maximally effective when technology becomes the platform and channel for the exchange of most content and collaboration. (p. 23)

5. Instead of stressing either “academic learning” or “social-emotional learning,” we need to take steps to ensure that materials we use address both their heads and their hearts. Often the development of character and heart values does not keep pace with that of the intellect in many academic programs. Chen rightly insists that “Both need to be engaged for productive student learning.” (p. 23)

6. Rather than setting up a false dichotomy between learning in nature versus learning with technology, we need to help students learn to better understand the natural world around them. To do so, they also need to learn how using technology can help them to better collect, record, analyze and handle data, when we learn how to use a computer’s systematic programs.

7. Instead of continuing to contrast the use of ‘print media for reading,’ versus using ‘media and technology,’ we need to better research how particular media and technologies can be most effectively used to support better online reading and e-learning. Both online and print reading can be enhanced in new ways, as Chen suggests: “through enlivening text with images and music and aiding students in analyzing their own reading [better].” (p. 24)

8. Often we hear ‘face-to-face instruction’ contrasted with ‘online learning.’ But in reality by now most recognize that a smarter synthesis is to use ‘blended or hybrid learning,’ i.e. a mixture of both face-to-face and online learning, where through video-conferencing one can meet communication partners, either in synchronous, real-time exchanges, or asynchronously in recordings of
audio, video or both.

9. We hear often debates between the competing needs for ‘21st Century multi-literacy skills-based learning’ versus a ‘content-based core curriculum.’

Rather we need to admit that students do need to develop both traditional literacy skills, but also new ‘online literacy skills,’ including those of “creativity, collaboration and global thinking within a redesigned core curriculum integrating the humanities and sciences [STEM].” (p. 24)

10. Finally, instead of stressing only how learning is ‘hard work,’ or the ‘ecstasy of enjoying learning,’ both realities need to be recognized. We need to admit with students the reality that learning also takes hard work, while making every effort to make learning fun, by combining the most effective and enjoyable methods, media and print materials. While stimulating maximum enjoyment of learning, we should know by now that when students have both a choice and a voice in what and how they learn, they’ll be motivated to work harder at it. Chen’s advice at this point is also simple and practical: “Find what they enjoy doing, such as art or sports, and connect learning to it.” (Chen, pp. 23-24)

Language teachers and those trying to use more CALL/CMC/E-Learning would be wise to fully acknowledge these principles, and try to strike a balance in their teaching. Chen uses the appropriate analogy of hybrid gasoline-electric vehicles to show that new approaches to education can help fuel better motivation and performance. Among the “break-the-mold hybrid innovations” that have helped to change the face of media, technology and education are those used by Sesame Street, Facebook and Skype.

This review of recent research on educational reforms needed and being attempted in some places in America will suggest some ways we could use existing online technology to scaffold and improve online reading and literacy skills, for both natives and non-natives in particular. In doing so this writer simply aims to follow Chen’s challenge to turn this “Table of Ten” contrasts into a faculty game or research project, to create a new educational hybrid that builds on the strengths of seemingly opposite points of view and compensate[s] for their weaknesses (p. 24). Its aim is to create a new HEV, or hybrid educational vehicle for improving online reading, by designing a new, more contemporary and comprehensive language learning model that integrates important principles from SLA research into a smarter synthesis with a more balanced perspective.

Areas 1, 4, 7 & 8 are most related to our current research.

Much of e-learning research has found that students and teachers employing it often become enamored with the media, that most frequently engenders a collective ‘WOW!’ from the users of CALL or TELL (Technology-Enhanced Language Learning). But as was stressed at the recent 15th CALL World Congress in Taichung, Taiwan, ROC, it is not just the medium that matters, but how media are used educationally, and with what relative degrees of effectiveness. Thus we need to maintain a proper balance between presenting learning as “hard work,” which indeed it is, while always encouraging the “ecstasy of enjoying learning.” Both realities need to be recognized, so that these exciting new and expanding digital media may be used not just for gaming fun, but also used more effectively and educationally. In short, digital tools certainly combine both worlds well, thus are now often characterized as “edutainment.” The continual challenge for its practitioners will be to show how such digital and web tools can be used to help produce more effective results that are not merely more enjoyable and

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entreating, but also more educational.

**Updating Past Approaches to Vocabulary Teaching**

Since vocabulary learning requires careful attention to so many factors, depending on which of the 18 aspects of vocabulary knowledge one wants to work on in either receptive or productive modes (as outlined by Nation, 2000), teaching vocabulary in either L1 or L2 should incorporate a wide range of approaches, using effective methods and engaging materials. Some of these are outlined by Nation and Newton (1997), including how to deal with target vocabulary selection, sequencing, presentation, and then developing engaging communicative activities that help improve learners’ access to partially learned vocabulary.

To encourage vocabulary learning, communication activities should be adapted to suit the level of the learners, so that they can be involved in meaningful negotiations within meaningful contexts and scenarios that provide illustrated settings or memorable role plays wherein new vocabulary is met. Repetition or re-encounters with key vocabulary in a variety of meaningful contexts will help to make learning durable.

Nation and Newton (1997) also note that productive use will result in much better learning than mere receptive use, and that group-based interactive learning activities foster greater learning as well. Instructions should be clear and any new terms placed where contextually meaningful and guessable if at all possible. In short, features such as choice and location of vocabulary items and strategies used to arrive at their meaning must be kept in mind during any communication or performance activity in order to be effective.

Nation and Newton recommend focusing on communicative intent rather than language form, grammar or linguistics, and pre-teaching of key terms so learners can deepen “recall and productive skill during task performance using vocabulary that has been previously introduced in a controlled setting” (p. 42). Focus on helping learners to understand and communicate new meanings is most essential, even if glosses are added to save learning time or help reduce cognitive load.

More recently, Webb (2012) asked, “What experience do the researchers bring to conducting the research?” on vocabulary learning. While considering the effects of pre-learning vocabulary on both reading comprehension and writing, Webb recommends reflecting about what experiences one brings to reading research. Sub-questions he urges include: 1) Do I consider what I want students to do with new vocabulary —understand or use it in writing for example? 2) How do I prepare my students to understand a reading passage? And, 3) How do I support my students to use varied vocabulary in their writing? Teachers’ instruction should differ according to the purpose of each vocabulary or reading activity, as Webb and Chang (2012) also note.

Webb’s two main conclusions based on teaching and research in China and Japan and under Nation in New Zealand include these two principles: 1) Pre-teaching vocabulary using word pairs may be an effective way of improving comprehension and the use of taught words in writing. And, 2) it is important to consider the direction of learning when we teach vocabulary. By this he means we must ask ourselves if the main instructional goal is receptive understanding or productive use of taught words. Students need maximum support in learning how to use effective strategies more independently and consistently.
Reforming Vocabulary Education:
Teaching and Learning:
Vocabulary as Inquiry instead of Drudgery

While vocabulary learning is basic or elementary to learning any subject, how many people know that the origin of the word *elementum* is the first three letters of the Canaanite alphabet? As the Thoughtful Learning Blog informs us, “When we talk about elements, we are reciting our Canaanite ABCs. A word doesn’t have just one meaning. It is freighted with meaning. In its prefixes, roots, and suffixes, each word stores the DNA of human experience. Vocabulary therefore shouldn’t be rote memorization. It should be inquiry.” (p. 1, Thoughtful Learning Blog)

Encouraging and modeling the learning of new vocabulary and field-specific technical vocabulary by using an interactive, inquiry approach together with students will help to make learning them much more fun and engaging. By contrast, giving them bilingual lists of new words to memorize does not promote much critical or creative thinking at all. If the teacher provides all the terms and definitions, vocabulary often never gets past rote memorization, arguably the most superficial level of thinking.

Rather than deadening interest by such dull and dry drill methods, the author overviews some online and blended ways to make this crucial area of vocabulary instruction more engaging, enjoyable, and effective for language learners in particular, as shared at the JALT Vocabulary SIG’s first conference during its Poster Session, at which he shared both print and online posters, summarized briefly here.

**Description of Print and Online Poster Sessions:**
[This is a research report summarizing research shared at “Vocabulary teaching and learning in practice.” JALT Vocabulary 1st SIG Symposium’s Poster Session, held on Saturday, March the 3rd, 2012 at Kyushu Sangyo University in Fukuoka.]

Online vocabulary acquisition research aims:
Discovering excellent CALL programs for examining and enhancing second language vocabulary acquisition has been an ongoing aim of this writer for the past decade. Thus this poster session had both print and online slideshare posters open for discussion. The latter is still available online at: [http://www.wiziq.com/tutorial/30502-Successful-Vocabulary-Learning-Online](http://www.wiziq.com/tutorial/30502-Successful-Vocabulary-Learning-Online)

1. **PowerPoint posters made available for participants.**
Both reviewed many cutting edge online vocabulary learning programs, proposing a systematic approach for using them to help learners of various languages to maximize their online vocabulary learning. Using these systematically as presented can also help teachers to gain a wider palette of skills, strategies and media to help them achieve more streamlined integration of many language-learning functions essential for effective and enjoyable online vocabulary and language development.

2. **Poster Summary: Background**
Online vocabulary learning and glossing programs were shown in this poster session, as well as a systematic way of integrating and using several of them together for regular ongoing learning from any website users may be reading in any major language. These include various hypertext functions, how to help readers guess and learn from any online context while reading target language text online, and several learner management systems (LMSs) with automatic glossing, word save and practice capabilities.

3. **Samples and Aims of Research**
Our research goal for the past decade and ongoing has been to find, research and create more innovative online programs with various multimedia and socially
interactive and communicative functions helpful to building up learners’ target language (TL) vocabulary in particular and language skills in general. An overview of how thousands of Japanese college students’ approximate reading grade levels were assessed was summarized, and access was given to the presenter’s dissertation in this field of SLVA, CALL, and L2 Reading (Loucky, 1994). Only when clearly understanding the goals for teaching these aspects of language and what research has shown about how it is learned can we wisely contemplate how to best use technology to help us achieve these goals. Chun (2010) reviews many of these principles and important issues from L2 reading research, including a summary of some of them from Grabe (2004, p. 46) in a table.

Our instructional goal was to improve L2 vocabulary learning retention rates by devising and using online programs like WordChamp.com and its WebReader to encourage deeper lexical processing, that is now widely acknowledged to be needed along with repeated encounters to learn to be able to use new words. For example, to be able to help ensure word fluency, learners should ideally be trained to assess their own word learning by using a simple and practical VKS, such as that designed by the author and available at his site (on the V-Vocabulary page of www.CALL4ALL.us, downloadable from a page offering his vocabulary assessment tools at http://call4all.us/home/_all.php?fl=./misc/forms).

For each of Grabe’s (2004) ten suggested principles for enhancing L2 reading, the presenter’s online Slideshow Poster Presentation suggests online programs and ways of using them to support that principle. Firstly, to ensure learners know that they are increasing their fluency of L2 word recognition, for example, teachers need to be taught HOW to put these essential instructional principles into practice when working with them online. Then learners will feel more empowered to learn from any website on their own, once given such tools for regularly assessing their own level of word knowledge. Secondly, research shows how important it is for teachers to emphasize the learning of new vocabulary, for both receptive understanding as well as productive use, since L2 vocabulary knowledge is so central to developing all four language skills.

Thirdly, many ways were suggested for doing so online, as well as ways to promote both extensive/enjoyable free-reading and intensive/informational reading skills, using sample well-designed online reading labs. Fourthly, programs were shown that help to ensure acquisition of linguistic knowledge and general comprehension skills. Fifthly, clip-art and multimedia-rich, interactive programs were shown that can help promote the development of strategic readers, rather than mechanical readers. Sixthly, we must teach recognition of rhetorical schema or text structures as well as discourse organization, enhanced by the author’s use of a Semantic Field Keyword Approach, shown in the online presentation. It links to 27 quizzes to help learn essential intermediate EAP vocabulary for nine academic fields.

Four other reading principles were shown with suggested online programs for implementing them, including these: a) Activate background knowledge, b) Build reading fluency/accuracy and rate/speed; c) Develop intrinsic motivation for reading, and finally d) Contribute to coherent curricula for student learning. A suggested CMS (Course or Content Management System) was also shown, as well as an author-designed webpage showing how to use the Semantic Field Keyword Approach to rapidly expand EAP/ESP/ETP vocabulary online. Large printed posters basically reflected similar themes, also summarized from the same online instructional design and Slideshare poster session (link below).
Methods Proposed for Investigating Successful Vocabulary Learning Online

The overall purpose of this poster session was not only to show but also to dialogue with participants about how to better implement most useful online vocabulary learning programs with students of various computer and English literacy levels, to help them optimize their online learning and SLVA. A secondary aim was to help attendees to discover many excellent free computer-assisted language learning (CALL) programs online and invite collaboration. These programs were recently tested by the writer with a co-researcher in Tokyo to help learners improve their online reading and vocabulary learning skills (See Loucky & Tuzi, 2010), overviewed in an online Slideshow at: http://www.wiziq.com/tutorial/30502-Successful-Vocabulary-Learning-Online.

Integrating Grabe’s Ten Instructional Implications for L2 Reading into CALL-Enhanced Online Learning (Description of Online Slideshow Poster Session)

The author’s online Slideshare Presentation provides a systematic roadmap to successful online second language vocabulary acquisition [highly beneficial if you are a non-native speaker of English or someone looking to learn English]. It covers aspects such as how to learn new words in any language more effectively, and how to more effectively use the Internet to help enhance online L2 vocabulary and reading development. The online portion of this poster presentation session is a 21-slide show made using Author Stream embedded within WizIQ.com’s online tutorial software program. Each slide shows some aspect of how to better focus learners’ attention on developing both their L2 lexical and syntactical skills. These suggestions are integrated around Grabe’s (2004) ten instructional principles derived from a meta-analysis of L2 reading research.

This presentation showed how to integrate various CALL websites with major learning phases to systematically teach and track vocabulary development online, encouraging deeper cognitive processing and language elaboration known to be beneficial in acquisition of new vocabulary by using the author’s (2006) ‘Depth of Lexical Processing Scale.’ It also demonstrated how teachers can aim to integrate his ten instructional implications for L2 reading with online programs following a clear taxonomy of vocabulary development. What was presented orally in the presentation includes a table showing all 18 aspects of vocabulary knowledge involved in fully knowing a word, which need to be developed, based on Nation’s (2001) detailed elaboration of SLVA theory and practice.

Results to Date

This Poster Session provided an overall menu of language-learning and teaching websites, to help both students and teachers select more useful Computer-Assisted Language Learning (CALL) sites and programs, showing how to combine them into an effective online reading and vocabulary learning program for either classroom- or self-access. This systematic approach can help both kinds of users to better filter through the rivers of online data to find and focus on what we refer to as the ‘CALL or ESL/EFL gold,’ meaning websites most content- and media-rich for English as a Second/Foreign Language teaching or learning. This Poster Session and its related research articles suggest how to construct such an integrated CALL program, including many well-designed sites that combine the advantages of using authentic materials with online tools to help simplify them and provide various kinds of vocabulary assessment tools (e.g. original ones at http://call4all.us/home/_all.php?fi=./misc/forms) and language learning support that can aid both students and teachers. Grabe’s (1994) ten

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established research-based goals for L2 reading were integrated into a proposed framework for using online reading programs in a way that follows a clear ‘Taxonomy of Vocabulary Development (Deeper Lexical Processing)’.

**Preliminary Conclusions**

Many online programs can be used collaboratively to improve learning the vocabulary and grammar systems of any major language online. This poster collection showed how to integrate various CALL websites with major learning phases to systematically teach and track vocabulary development online, by using a ‘Depth of Lexical Processing Scale’ (described in Loucky, 2006). Following recommendations from Grabe’s (2004) meta-analysis of research on reading, we also demonstrated how teachers can aim to integrate his ten instructional implications for L2 reading with online programs following a clear taxonomy of vocabulary development, to help their learners achieve deeper lexical processing and better retention as a result. These may still be seen online at: http://www.wiziq.com/tutorial/30502-Successful-Vocabulary-Learning-Online. This slideshare provides a systematic roadmap to successful online second language vocabulary acquisition. This laptop portion of the presentation covered aspects like how to learn new words in any language more effectively, using the Internet and online world to help enhance L2 vocaburaly and reading development.

**Implications for Future Innovations in Education**

As Kay, the inventor of the Dynabook educational computer for children wisely stated, “The best way to predict the future is to invent it.” (Kay, 1968, as quoted by Chen, p. 241). While it is hard to predict the future in such a rapidly changing world as ours, future possible worlds and scenarios were predicted in 2009 by Britain’s FutureLab, which published its Beyond Current Horizons program to explore these possibilities after 2025. Among their educated guesses were these three possible worlds: 1) World 1: Trust Yourself, 2) World 2: Loyalty Points and 3) World 3: Only Connect. The first world emphasizes the importance of respecting such principles as self-access, informed choice in creating more individualized learning paths, chosen by learners as independent consumers. Loyalty Points aim to improve both Discovery and Diagnosis of learners’ full potential, mediating between individual needs, career choices and social institutions. The third world emphasizes connections between Integrated Experience, Service and Citizenship.

Recently a summary of 8,000 out of 55,000 student views and hopes for future educational improvements was released, called Visions 2020.2 (2005). Overall this report shows that most students want to learn in better digital learning environments. Their responses covered four major themes—“digital devices, access to computers and the Internet, intelligent tutor-helper, and ways to learn and complete school work” (Chen, p. 244).

After examining six common edges of educational innovation today, Chen also tries to predict what he calls “Tomorrow’s Edge,” to show ways we may help to create more responsive learning environments providing more innovative and interesting education. He recommends that schools brainstorm to create 21st Century student job descriptions, including such things as needed skills and qualifications. Those he sees as being most important to develop include: a. Information Literacy, b. Multimedia Production, c. Ability to work with others, and d. Learning Virtues, such as having important qualities like discipline, persistence, curiosity and willingness to come learn. Such basic qualities remain as most important factors for any learning environment to be successful, and surely CALL and TELL have great untapped potential to help improve learning motivation when digital media are properly understood and harnessed correctly in ways that foster learner independence, interest,
and innovation.

**Latest Research Aim**

The author’s latest research aim is to help language learners to be able to scan and more easily read ANY uploaded text with the help of various supportive online functions found here: http://scan2read.us. To further research in this developing field, collaborators are being sought to help research online Semantic Field Keyword Approach (http://call4all.us///misc/sfka.php), as well as other new Web Tools for various languages. Any interested language teachers employing CALL and wanting a means to study it using a CMS may use my co-researcher’s course content management system to do so. It’s a Moodle-based system that includes hundreds of materials for use in classes and research (http://www.ituzi.net). In addition, our virtual Language Education Encyclopedia at http://call4all.us may be used to share CALL-enhanced vocabulary and language learning sites, programs and collaboration proposals.

**References**


Recent Related Research:


辛い暗記学習から楽しく効果的に学べる語彙習得法

ジョン・ポール・ラオキ

＜要 旨＞
この研究報告は教育全般においていろいろな改善を推奨しているアメリカの最新情報である。特にCALLリソースを利用して言語教育を改善することに焦点を当てている。そして刷新的なオンラインプログラムの例を幾つか挙げている。このオンラインプログラムは語彙や文法学習の丸暗記（ドリル＆キル）の辛い学習法からとても楽しいマスメディアを適用したり、マルチレベルのランゲージプログラムを利用してより楽しく学習するために効果的である。教師と学習者の語彙上達及び言語習得を助けるためにこのようなCALLプログラムをオンラインで見ることができる。最初のJALT Vocabulary SIGの著者のポスターセッションでプリントやオンライン電子ポスターセッションの両方が利用者にすばらしいCALLプログラムを発見することで、言語教育をより効果的に促進することを助けていくと要約している。語彙をよく理解することはよく考えて、わかりやすいコミュニケーションを可能にします。どのようにして楽しく効果的に学ぶことができるかを見つけることは教育全体の向上にもとても重要である。そのことを実行することがバイリンガル外国語教育の目標を可能にするのである。

キーワード: 教育改正、コンピューターアシステドランゲージラーニング、CALLとE-ラーニング方式、語彙と言語学習の最大化、ファーストジャパンアソシエーションオブランゲージティーチャーズ（JALT）、ボキャブラリースペシャルインタレストグループ（SIG）ポスタープレゼンテーションレポート