НОВІТНІ ТЕХНОЛОГІЇ НАВЧАННЯ У ВИЩІЙ ШКОЛІ

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THROUGH THE LOOKING GLASS: A SECOND LOOK AT UNDERSTANDING IDIOMATICITY IN CALL

This article takes a critical second look at understanding idiomaticity in CALL (Computer Assisted Language Learning). The conditions markedly affecting second language teaching and learning are highlighted amidst pedagogical constructs supporting the reconstructive nature of idiomatic understanding and production in English. The ensuing discussion underscores the promise digital technologies hold for further research work on idiomaticity including, but not limited to,idiom, metaphor, simile, metonymy, hyperbole, proverb, slang, cliché, lexical bundle, phrasal expression, multiword construction, collocation,colloquialism, andtropes of figurative language. It is argued that for the purposes of diagnosis and achievementidiomaticity must be thoughtfully anchored in pedagogical paradigms requiring further examination and care. These exemplars,as the need arises across contexts and audiences, are seen as particularly useful to the development and refinement of idiomatic knowledge, especially when such knowledgereflects the judicious and purposeful use of CALL technologies, electronic tools, and digital resources. Pedagogical implications addressing idiom-learning activities and task-based digital projectsare also discussed.

Key words: idiomaticity, pragmatics, second language teaching, digital learning, learner empowerment, natural language use.

Introduction.One of the principled goals of learning another language is the ability to use the language competently and appropriately to communicate thoughts, ideas, and interests, as the need arises across contexts and audiences. Doing so effectively and efficiently is many a time a life-long quest often pursued but rarely fulfilled. As elusive as this may sound to the ears of the untrained, professedly, there are certain conditions of learning which, if addressed with due attention, are likely to bring us one step closer to achieving greater facility with the language studied. Computer Assisted Language Learning (CALL) technologies, applications, and tools,many of which have already been reviewed elsewhere [1], can hasten and support this noble endeavor if care is taken to investigate closely the digital footprint by which understanding idiomaticityin CALL including, but not limited to, idiom, metaphor, simile, metonymy, hyperbole, proverb, slang, cliché, lexical bundle, phrasal expression, multiword construction, collocation, colloquialism, andtropes of figurative language can ultimately be achieved.

Due to space constraints, this *second look at understanding idiomaticity in CALL* will notinvestigate the effectiveness of a/synchronous m-learning (mobile learning), e-learning (electronic learning), or Web 2.0 technologies (internet-based applications and social networking services) across idiomatic learning pursuits for doing so would only underscore arguments already published. Nor will this article explore further the multifaceted CALL training practices known to affect the attainment ofidiomaticity in English as a second or foreign languagewithin digital environments reflecting authentic language use. Instead, this article will focus exclusively on the five conditions believed to be instrumental to second language teaching and learning. Particular attention will be paid to how such conditions can be best utilized by language learners to foster

a new kind of CALL knowledge concerning the reconstructive nature of idiomatic understanding and production in English as such focus, so it will be argued throughout, is deemed particularly useful for the purposes of diagnosis and achievement. Where needed, representative research studies will be referenced to underscore the promise digital technologies hold for further research work on idiomaticity. Pedagogical implications will also be discussed.

Through the Looking Glass: A First Look

The Spanish-born American philosopher, essayist, poet, and novelist of the late nineteenth and early twentieth centuries, Jorge AgustínNicolás Ruiz de Santayana y Borrás (1863–1952), observed that "Those who cannot remember the past are condemned to repeat it." Whether history 'repeats' itself or just 'rhymes,' as Mark Twain is often reputed to have uttered the nifty humorous aphorism, "History doesn't repeat itself but it often rhymes," regardless, it behooves CALL practitioners, technology educators, applied linguists, and language teachers in particularto first take stock of past CALL efforts prior to attempting to define, expand, and reevaluate the multipathintegration of digital multimedia technology in second and foreign language(henceforth SL) learning. Instead of simply claiming to have invented the future, an honest but critical retrospective account of significant CALL events and developments, including an explanation of their causes and (affirmative/adverse) influences affecting SL learning and practice to this day and beyond, is certain to shield astute observers from being swept along a nostalgic walk down memory lane by the majority who cannot. The popularity of the proverbial lore aside, a chronological record of past achievements and failures is fully warranted here to avoid repeating past mistakes.

Look Back, Look Forward and Learn

Software applications once capable of running solely on mainframe computers are now present in nearly every electronic and computing device imaginable. The advent of the personal desktop computer in the late 1970s brought about technological advancements that were hard to conceive not even a few years earlier [2–4]. Some of the most popular themes during the 1980s included Computer-Assisted Instruction; CALL (in particular Student Input and the Integration of Materials Into the Curriculum); Computer Assisted ESL Research (on Student Errors); Interactive Videotapes and Videodisk Approaches to Teaching; Interactive Television; Microcomputers (specifically Developing Materials for Microcomputers); Computers for Testing (Computer Assisted Testing and Computer Use for Making Tests); Using Computers for Translation; Courseware Authoring Systems; Parsing; Artificial Intelligence and Computer Assisted Instruction; and Hypertext.

The 1990s saw a continuation of some of those themes from the 1980s (e.g., Computer Assisted Error Analysis, Parsing Applications, Hypertext, Interactive Video), but also a fervent discussion of new advancements in "Electronic Mail"; Computerized Phonetics; Computerized Grammar Checkers; CALL (in particular Writing Instruction, Teacher Training, Grammar Frameworks); Authoring Programs; Machine Translation; Student Attitudes Toward Computers; the "World Wide Web"; Computer Software; Interactive Multimedia Applications; and Pronunciation Training through Computers.

The arrival of the new millennium witnessed a substantial expansion of themes and foci from the previous two decades combined as well as the emergence of new digital technologiesand research practices including, but not limited to, Using Literature Electronically; Multiliteracies and Digital Technologies; DVDs for Interactive Video; Tutoring through Computers and the Internet; Testing Oral Skills through the Computer; the Internet and Language Learning; Student Computer Literacy; Synchronous vs. Asynchronous Communication; Distance Language Learning and Teaching; Email; Online Courses; Attitudes and Motivation; Error Detection, Recognition, Diagnosis and Correction Using CALL; Computerized Dictionaries; Corpus Analyses; Instant Messaging/Online Chats; PowerPoint/Prezi Presentations; Website Development for ESL Learners; Web 2.0; Artificial Intelligence; Virtual Games; and Virtual/Augmented Reality.

Throughout these decades, CALL widened its scope to include a variety of language-learning approaches and technologies. From Traditional CALL and Explorative CALL to Multimedia CALL and Web-based CALL, many CALL practitioners set out to evaluate the integration of technology in SLlearning [5] or preservice foreign language (FL) teacher education programs [6], others sought to investigate the expanding role of technology in FL teacher education programs [7],

and still others put forth the argument that instructional technology really works, especially in multimedia environments [8; 9]. Relatedly, some practitioners reflected critically on the processes and products involved in connecting CALL theory and practice inpreservice teacher education and beyond [10; 11], others took issue with CALL implementation and its implications on teacher training, the current uses of computers in ESOL instruction, or the role computers play in the language classroom [12–14], and still others contemplated a return to interactivity, the integration of new technologies into the modern languages curriculum, and the most recent developments in technology and language learning [15–19]. Table 1 presents a comprehensive summary of the most common typology employed in scores of articles, monographs, books, and conferences addressing education in general and SL teaching and learning in particular. Each one of those abbreviated terms (and their conceptual extensions) evokes, connotes, and denotes important paradigm shifts in the underlying pedagogies witnessed along the way–*Structural CALL* (1970s to 1980s), *Communicative CALL* (1980s to 1990s), and *Integrative CALL* (2000 onwards). Collectively, they embody the pedagogical bedrocksupon which many a CALL applications and components were epistemologically based [20–23].

Table 1

Technology Terms and Concepts Use in Language/General Education

Abbreviations	EduTech or EdTech Concepts
CAI (computer-assisted instruction)	– augmented reality
CALI (computer-assisted language instruction)	– blended learning
CALL (computer-assisted language learning)	– cyberlearning
CBI (computer-based instruction)	– digital education(al) collaboration
CBLT (computer-based language testing)	– distributed learning
CBT (computer-based training)	– eLearning
CELL (computer-enhanced language learning)	– flexible learning
CMC (computer-mediated communication)	– learning platforms
CMI (computer managed instruction)	– learning technology
CRI (computer-supported reading instruction)	– mLearning
IBT (internet-based training)	– multi-modal instruction
ICT (information and communication technology)	– multimedia learning
IT (instructional/information technology)	– networked learning
MALL (mobile-assisted language learning)	– online education
TEL (technology-enhanced learning)	– personal learning environments
TELL (technology-enhanced language learning)	– ubiquitous learning
VLE (virtual learning environments)	– virtual education
WBT (web-based training)	– virtual reality

In the interim, the field of idiomaticity continued to expand its own epistemological knowledge base. Much of that research focused on investigating theoretical and pedagogical constructs of idiom identification, recall, and use [24–28]; the comprehension and production of idioms with and without contextual support [29; 30]; the viability of corpora to researching and teaching idioms, collocations, lexical chunks, and multiword expressions [31–34];the integration of conceptual metaphors and metonymies [35; 36]; avoidance of literal/figurative phrasal verbs and idioms [37–39]; the effect of L1-L2 degree of idiom similarity [40]; the teaching of formulaic language sequences through all four language skills in the SL classroom [41]; and the pedagogic value of multiword expressions [42].

Through the Looking Glass: A Second Look at Understanding Idiomaticity

The five conditions of SLteaching and learning presented next not only comprise optimal conditions for understanding idiomaticity, they also serve as major signposts for future research on language*input, practice, awareness, play,* and *empowerment* through the sagacious and purposeful use of digital communication technologies including, but not limited to, electronic tools, systems, devices, and resources that generate, process, or store digitized information in binary bits code. Collectively, they present sound organizing principles and time-tested practices around which directed efforts at developing idiomatic competence throughproductivity applications, multimedia, cloud computing, interoperable systems,online games, social media,

and mobile devices, to name but a few,could be methodologically based to ensure optimal digital learning in both face-to-face and blended/virtual learning environments.Because of space constraints, they are presented in Table 2 as thirty-sixterse statements only.

Table 2

Principles and Practices of Understanding Idiomaticity

Language input is critical
Authentic samples typifying idiomatic language use are a prime source of meaningful input with built-in relevance and credibility.   Accessing copious digital samples of interactive input taken from authentic conversations with native speakers of various ages, proficiency levels, and regional dialects is key to developing knowledge of idiomaticity.   Audio and video texts of various lengths and genres, from distinct facets of human interaction exhibiting (multi)cultural communicative exchanges, need to be made available for analysis and evaluation.   Reading and writing samples should be interesting and meaningful for the learner and should include informational, non-fictional, and fictional texts displaying ascending levels of difficulty in readability and cognitive complexity.   Samples chosen need to cover diverse topics and interests with an ever-increasing level of sophistication in language style, syntactic structure, semantic variation, and discourse features that typify distinct graphophonological, morphological, and grammatical qualities worth noticing in the input.   Selected samples of text, speech, and audio must equally exemplify a range of vocabulary and language functions from which to discover and extract the (meta)linguistic knowledge and patterns needed for effective communication in different contexts.
Language practice is paramount
Learning*how* to listen, speak, read, and write in another language, while adhering to the cultural norms and practices of the people who use the language for distinct communicative events, requires large amounts of language practice and reciprocal interaction.   Language practice involves both receptive and productive practice with a range of authentic samples displaying natural idiomatic language use.   Developing knowledge of idiomaticityrequires learners to practice idiomatic language *with a purpose* and *for a purpose* within awareness raising and attention direction activities and tasks that helps them create with the language even when linguistic or pragmatic success is not always assured.   Purposeful practice involving idiomatic language is best expressed in learner-centered activities, tasks, and projects in which learners are given the freedom to exercise full control over the rate, length, and quality of such practice.   Language practice needs to be couched in simple, easy-to-understand curricular and language program expectations that address learners' figurative language needs and wants.   Receptive and productive language practice supports affective, cognitive, and behavioral processes that learners can employ profitably during communicative events requiring them to derive figurative meaning from literal expressions with maximum accuracy.
Language awareness is fundamental
Language awareness dictates a move away from past habits or preferences in learning style entrenched in conventional comfort and familiarity and a renewed openness to taking risks and experimenting with the target language in (a)synchronous communicative settings employing idiomatic language use.   Awareness raising and attention direction activities designed to achieve competence in content, form (morphology, syntax, phonology), and use (pragmatics) accelerate learner attempts at restructuring and reformulating idiomatic output for maximum rhetorical effect.   Idiomatic efficiency is possible via a balanced activities approach that combines language awareness with structured idiomatic input and structured idiomatic input with purposeful communicative output while also allowing for natural error correction and increased accuracy of idiomatic appropriateness.   Communicative and explorative tasks involving idiomatic-driven discussions, role plays, and information gap exercises embolden learners to stretch themselves idiomatically beyond accepted norms of modified output for the sake of the output.   Stretching the boundaries of the psychology of language learning leads to higher levels of language awareness and attention, both critical tools in the arsenal of tools designed to link cross-cultural language exploration with naturally occurring idiomatic output.   Production of accurate and culturally appropriate idiomatic language use is best achieved when learners are afforded carefully planned opportunities to rehearse language with native speakers (writers, readers, listeners) in real-life situations.   Learner-centered work helps learners understand the *hows* and *whys* of language learning.   Leaners need to be 'pushed' to go beyond simple-minded tasks and exercises that fail to offer an appropriate level of linguistic difficulty or intellectual challenge.   Learners need to experience multiple forms of input/outputand interaction within wide-ranging (un)structured opportunities to express themselves in the new language and culture regardless of language modality or multisensory outlet targeted.

Table 2

Language play is key
There is no substitute for actual language use with speakers of the target language and culture: interacting in the target language with a real audience is the truest form of effective teaching and learning in general and idiomaticity in particular.
Effective and efficient communicative output resembling, to the extent possible, native-like idiomatic production necessitates using the target language competently and appropriately.
Willingness to venture out of one's comfort zone to experience language play in earnest, in real life, with real texts, and with native speakers eager to engage in discoursal exchanges and negotiations of meaning is a sure sign that one is equally open to failure under unrehearsed conditions of language usage in actual idiomatic use.
Language play is at play at each and every communicative turn demanding appropriate (meta)linguistic behavior from its participants.
Learners must be afforded carefully planned opportunities to play authentic roles that support active learning and meaningful language use.
Multisensory,multimodalinteractions with native speakers involving natural language use are a powerful way to experience language play up close.
Authentic 'language plays' make no apologies for interactive opportunities missed, for errors made, for mistakes corrected, for misunderstandings in communication resolved.
Language play experiences, from an interactional perspective, transform learners from mere passive consumers of language input to active producers of communicative output.

Language empowerment is a must
Learners must be empowered to exercise control over their own learning just as teachers must provide for different language levels, interests, and learning styles.
Learners must be afforded carefully planned opportunities to define and refine their own learning goals both inside and outside the class where the focus of interaction is active language use rather than passive language study.
Giving learners the power to make their own decisions about idiomatic learning fundamentally changes their perception of literal and figurative language usage as such independent inquiry makes for more conscious, insightful choices about how language evolves ideas and beliefs into concrete realities passed on from one generation to the next.
Learner involvement designed to create safe environments for idiomatic learning helpslearners develop a strong sense of community and even motivates them to test their language-acquiring efforts outside the safe confines of the classroom.
Carefully planned social events provide the scaffold needed for learners to perform idiomatic tasks and functions they are likely to use outside of class. Theyserve as powerful springboards to *constructing* and *deconstructingidiomatic languagewith and for a purpose.*
Deconstructing idiomatic language helps learners construct idiomatic language from the ground up in that they become aware of the singular functions and purposes idioms serve in natural communication.
Idiom Deconstruction in Action, or IDA in short, serves to expedite understandings of idiomatic knowledge and, more importantly, highlights notions of idiom appropriateness in the very communicative settings learners are expected to participate

Individually and collectively, the five conditions of SLteaching and learning laconically appraised above employ time-tested notions of theory-to-practice as a model for organizing research and pedagogy supports befitting natural language use. Using language competently and appropriately, as the need arises across contexts and audiences, to communicate thoughts, ideas, and interests necessitates clear-cut opportunities for emulating natural communicative behavior. Some of those opportunities may need to take advantage of certain CALL technologies, hardware, and peripherals, while others may need to be organized more systematically across social and academic settings and according to students' interests, needs, and abilities. Multifarious inputs displayingmanifold encounters with target idiomatic expressions, combined with authentic feedback, will no doubt greatly influence the conditions of SLteaching and learningand, ultimately, the level of success achieved as each condition is certain to interact with the next, thereby creating a cascade effect with many enduring benefits.Some of these benefits, already realized in the research literature to date, are examined next.

Pedagogical Constructs Worth a Second Look

For learners to develop idiomatic competence in real-life pragmatic communication, they must be afforded opportunities to engage in age-appropriate activities that can easily be adapted to suit their specific needs, contexts, and comfort levels. Activities must promote active language

use couched in carefully-planned multimodal tasks requiring (un)structured input that is both rich and meaningful. Some tasks could be specifically designed for individuals, others for partners and small groups, and still others for whole-class interactions and dynamic discovery learning [43]. Students should not be left to their own devices to figure out what the goals of a particular idiom-learning activity might be or which learning objective is to be mastered under what modality condition. It is pedagogically prudent that teachers inform students prior to commencing an activity or task what the goals and objectives are and how their performance is to be assessed. Ensuring that learners have the linguistic and pragmatic skills necessary to perform the activity or task successfully is yet another important consideration here. At all times, performance expectations should be commensurate with learners' overall language proficiency and should be neither too high to reach nor too low to ignore. For best results, expectations should be placed at just the right level of linguistic challenge that is both realistic and manageable for students to achieve, especially if pragmatic enactment behaviors are to drive *idiomatic performance* (the actual use of linguistic and pragmatic knowledge in understanding and producing appropriate andaccurate idiomatic conduct in diverse social contexts).

Having access to the digital technology (hardware, software, network, etc.) needed to spearhead the language modality under study is as important as offering students a variety of carefully plannedopportunities to practice idiomatic language usage in specific domain areas of language use (listening, speaking, reading, writing), including vocabulary, grammar, pragmatics, and culture.At no point should learners be asked to engage in collaborative activities that do not support authentic (meta)communicative behaviors. Neither should they use a particular application tool or digital resource on the account that said tool or resource is readily available to them or because everyone else is using it. By extension, task-based (problem-solving) projects that lack specific guidelines or product expectations should equally be avoided. To benefit students at all levels of language proficiency regardless of age orcurricularconsiderations, any digital communication or application enablement platform should not be selected just because it is available or easily accessible but because it can promote and strengthen language development in content, form, and use like no other single advanced developmenttechnology, tool, or resource can. Instead, *purpose, suitability, authenticity,* and *communicative intent* should be the driving force behind all digital learning. Moreover, digital learning involving the innovative application of a wide spectrum of instructional practices should be reserved exclusively for pedagogical treatment, in-class language practice, or active language output.

For maximum results, idiom-learning activities and task-based digital projects, free of unwarranted stress or anxiety of task completion, will need to be dynamically structured and varied to reflect technology-based learning conditions best met within online or hybrid (blended) learning environments that are conducive to figurative language in general and idiom learning in particular. To this end, learners must be provided with opportunities to interact socially and negotiate meaning as needed. They must also be given the freedom to self-select the technology, hardware, software, network, or delivery mode likely to produce for them the most powerful idiom-based product reflecting varied and creative language use. Where required, support should be offered to those learners experiencing light technical difficulties with a particular communication technology choice as "technical glitches," many as they often are, are unavoidable and a by-product of today's transitional, fast-paced technical landscape.

While language empowerment is a must, at times it may become pedagogically necessary to "walk the walk", not just "talk the talk", with learners in need of a helping hand so that they may attend more thoughtfully to the idiomatic learning process at hand. Leading by example by serving students' communication needs is a pedagogical maxim with transformational implications worth following. It goes without saying that all learners–from the youngest attending elementary school to the oldest attending university classes–will need to have their autonomy supported and valued with enough time build into the lesson plan or unit for constructive feedback, practice, and peer review. Furthermore, idiom activities and task-based projects requiring use and manipulation of different media will need to be suitable to learners' age and intellectual capacity befitting their (meta)cognitive maturity. Above all, as sure as eggs is eggs, they will need to complement and support what learners are actually trying to learn: *language and culture through the digital lens of idiomaticity.*

At all times, students should be encouraged to learn how to apply idiomaticity in CALL purposefully across a/synchronous digital contexts both inside and outside of the classroom. Indeed, they must be trained in the responsible and reasonable uses of multimedia communications on any device while also learning how best to employ peripherals and electronic resources in pursuit of higher achievements in language development and mastery of academic content and concepts. Doing so in socially and culturally appropriate, legal, and ethical wayshelps them learn how to gather information from a variety of media sources, how to collaborate with peers and others across time and space, and how to promote maximum conditions for language learning and idiomaticity respectively. By designing, developing, and publishing products of their own choosing, learners epitomize their understanding of idiomaticity in CALL. Beyond that, they engage in communicative behaviors that no doubt optimize the appropriate and responsible use of a new multi-platform approach to digital learning. Taking ownership of digital learning and the means by which such interactivelearning is to be demonstrated is, I would argue, the ultimate goal of applying idiomaticity in CALL *with a purpose* and *for a purpose.*

Conclusion

Understanding idiomaticity in CALL is a topic of immense research interest to those of us interested in pushing the digital envelope in ways yet to be fully conceived. From inception through conception to development, CALL–inall its digital communication channels and platforms (internet, social networks, cloud computing, cross-platform software/hardware, tablets,smartphones and other portable devices) to date and those still to come in the days ahead–remainsthe one frontier that, in eyes of this idiomatologistat least, can easily bring about an explosion of opportunities to learn another language in digital multimodal settings that are as natural as traveling the world in person. At a minimum, our learners would be afforded heretofore unprecedented opportunities to willfully exploit universalinteractionsamong systems, people, and places worldwide.

Beginning with a retrospective account of significant CALL events and developments affecting SLlearning and practice, including common nomenclature and concepts associated with CALL technologies, this article first appraisedtime-tested notions of theory-to-practice within pedagogy supports befitting natural language use. The five conditions affecting markedly SLteaching and learning–Input, Practice, Awareness, Play, Empowerment–werethen highlighted amidst pedagogical constructs supporting the reconstructive nature of idiomatic understanding and production in English. This was followed by a series of practical implications that take full advantage of the digital and communicationstechnologies to date. Based on students' interests, needs, and abilities, the systematic organization and execution of idiom-learning activities and task-based digital projects across diverse social and academic settings, if addressed with attention and care, was lauded as a viable methodological framework certain to impact the success or failure of understanding idiomaticity in CALL.

In closing, it bears repeating that the development and refinement of idiomatic knowledge is possible especially when such knowledge reflects the judicious and purposeful use of streamlined application building and enablement platforms and analytics.To be crystal clear, idiomatic competence is the result of language acquisition at work, not a by-product of transient technology use. Despite the promise digital technologies hold for further research work on idiomaticity, still much remains to be investigated and even more to be discovered in the days ahead. Time alone will tell if understanding idiomaticity in CALL through the looking glass was all "it's cracked up to be." And while the jury may still be out on CALL, the path forward is clear as day: digital learning, in all its electronic manifestations, will force many of us to rethink the ways we teach and the ways our students learn across all learning areas and domains both locally and globally. It is our choice how we choose to understand idiomaticity in CALL now or in the future yet to come. The choice is ours. Ours and ours alone!

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У статті розглянуто з критичних позицій існуюче розуміння ідіоматичності у вивченні мови за допомогою комп'ютера. Умови, що сильно впливають на навчання другої мови, аналізуються серед педагогічних конструктів, які підтримують реконструктивну природу ідіоматичного сприйняття та породження мовлення. Обговорюється використання комп'ютерних технологій для подальшої дослідної роботи в галузі ідіоматичності та для навчання ідіом у мовному курсі.

Ключові слова: ідіоматичність, прагматика, навчання другої мови, комп'ютерне навчання, природне використання мови.

В статье рассматривается с критических позиций существующее понимание идиоматичности в обучении языку с помощью компьютера. Условия, сильно влияющие на обучение второму языку, анализируются среди педагогических конструктов, которые поддерживают реконструктивную природу идиоматического восприятия и порождения речи. Обсуждается использование компьютерных технологий для дальнейшей исследовательской работы в области идиоматичности и обучения идиомам в языковом курсе.

Ключевые слова: идиоматичность, прагматика, обучение второму языку, компьютерное обучение, естественное использование языка.