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Helping foreign language learners get the most from self-paced language learning software

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Abstract
Software products designed to teach foreign languages are becoming increasingly available both commercially as well as for free on the internet. The integration of media and interactivity provides independent language learners with a more engaging set of tools for studying a second language by themselves than ever before. However, as is the case with any technology, there are limitations as to what these products can accomplish instructionally on their own. As language educators it is important for us to recognize both their utility and potential shortcomings. This paper suggests some ways in which we can determine and define the pedagogical limitations of language learning software in terms of the competencies they are actually training. The author also suggests tools and strategies that can be used in conjunction with these programs to enhance the learning experience and push the limits of what can be learned with the help of these software products. The goal is to provide language instructors and language program managers with guidance for effectively taking advantage of the available technology.
Keywords technology, software, adult learners, computer-assisted language learning, second language teaching

1. Introduction

Students and teachers of foreign languages are likely to have encountered advertisements for software which make lofty claims about how quickly and effortlessly its users can master a foreign language of their choice. While it is certainly true that these products offer a level of interactivity, and perhaps even entertainment, which may not be available to language learners who undertake this effort using an old-fashioned grammar-focused textbook and pencil alone, consumers are right to be skeptical with respect to such claims made in advertising. After all, given the cost comparison between software and well-trained, professional language teachers, it would be surprising to find that language teachers are still being employed worldwide if these products are truly capable of all they claim.

Language instructors and language program managers are often faced with decisions regarding which software products, if any, they should integrate into their foreign language classes or programs. Individuals who find themselves in these roles need to be concerned about the risks involved in making investments in unproven technology, and some researchers argue that it is still unclear if modern technology has been able to offer all the benefits of traditional second language pedagogy (Chinnery 2006, p. 9). Without having statistical data to report the rates of success, or access to multiple first-hand accounts of users who have followed through from start

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to finish with these products, it can be difficult to evaluate the value of such products beyond the claims made in advertising, or the initial appeal of the overall package to the casual user.

In her 2010 publication aimed at examining the state of Computer-Aided Pronunciation (CAP) Pedagogy and technology, Pennington states that, "very little of the CAP available today even has the basic pedagogical design feature of building from easier to more challenging tasks in stages, and virtually none conceives of pronunciation training as consisting of pre-production, in-production and post-production phases (p. 434)." She also concludes that more could be done to make use of the considerable expertise of computer technicians by pairing them with experts in language curriculum design and language teaching (p. 439). Perhaps the same might be said of all language teaching software products, as some clearly draw more influence from the fields of applied linguistics and language pedagogy than others.

The present author affirms that there is much to be gained from using language-learning software, but also advocates caution in matching software products to particular language-learning goals, and suggests employing strategies and tools beyond those offered by any particular product in order to maximize what can be achieved through the use of language instructional software. This paper presents a series of questions which, although by no means exhaustive, can be used by consumers as a starting point to evaluate the capabilities of language learning products and frames them in concepts from second language acquisition (SLA) theory. The author then suggests some steps learners and teachers can take to expand the type and amount of language proficiency one can achieve through the intelligent use of software and other supplementary materials. For this reason, no specific product will be analyzed in detail here. Furthermore, the more general references to software features are intentionally non-specific in the hopes that the ideas expressed in this paper may still be applied to future generations of software products whose exact specifications cannot be known at present. This paper is not intended to endorse, nor discourage the use of any particular software product. Rather the intent is to present some considerations as a starting point for the reader to use as a basis for objectively forming an opinion based on the needs of the learner and/or language program in question.

2. Questions which guide our discussion

2.1. *Does the program claim that the user will learn the language in the same way a child does?*

There are a few facts one may want to keep in mind when evaluating this claim. First of all, we should bear in mind that children who are fully immersed in their parents' native language from birth generally take more than a year to utter their first words in that language, and generally take more than four years to achieve an adult-like command of the language (Stewart & Vaillette 2001, pp. 2769-280). Viewed from this perspective, the child language acquisition model might not be ideal for meeting the time restrictions put upon many adult language learners to meet their goals, even if we were to be able to replicate it successfully. Furthermore, it has been well documented that there are in fact significant cognitive differences

between how young children and adults are able to learn languages, and between first language and second language acquisition (Mackey & Sachs 2012, p. 705).

To highlight this, the author refers the reader to the Fundamental Difference Hypothesis (Bley-Vroman 1988). Through his work, Bley-Vroman demonstrates that two readily observable characteristics of child first language (L1) acquisition hold it in stark contrast to second language (L2) acquisition; reliability and convergence. Pullum and Scholz informally defined these characteristics of L1 acquisition in their 2002 paper (p. 10). Reliability means that children always succeed at language learning. Convergence means that children end up with systems that are so similar to those of others in the same speech community (Bley-Vroman 2009, p. 177). Those of us involved in the business of teaching and learning foreign languages are well aware that these properties do not necessarily hold true for adult L2 acquisition. We need only observe the speech of long-time immigrants (or residents abroad), immersed in a non-native target language and culture, who speak with a noticeable foreign accent after years of practice and immersion, to illustrate this. The L2 speech of these learners is markedly different from that of their speech community and is often characterized by, in addition to non-native pronunciation, "fossilized" grammar errors which persist in spite of all the counter examples they receive, in the form of authentic native speech in the communities where they live, as input to their language learning mechanisms (White 2003, p.129).

Unlike children, who become fully proficient speakers of their L1 without necessarily ever receiving explicit instruction in the rules which govern its structure, "adults have largely lost the ability to learn a language without reflecting on its structure and have to use alternative mechanisms, drawing especially on their problem-solving capacities, to learn a second language (DeKeyser 2000, pp. 500-1)." Therefore, given the different needs of adult L2 learners, and the highly limited input which can be provided by a software package (in comparison to the truly immersive learning environment of the child L1 learner), it stands to reason that no software program will be able to successfully replicate the child language acquisition process for the adult learner of a foreign language. Nonetheless, it is possible for some aspects of implicit L1 acquisition to be simulated for the purpose of teaching an L2, but as the author will attempt to demonstrate below, some product features achieve this more successfully than others.

2.2.   Does the program treat words and phrases in the same way?

Some language learning software products are designed around the presentation of vocabulary and phrases that are to be memorized by the user.   Often the vocabulary and phrases will be grouped together into thematic categories such as travel, food, greetings or other such scenarios in which learners may find the need to communicate in their L2. Grouping vocabulary together in this way can aid in the memorization process by helping to reinforce the link between the word or phrase and the context in which it is used. Software products often incorporate a variety of interactive

games or exercises in which the user matches the L2 vocabulary to the English (or other L1) equivalent or provides the L2 vocabulary when provided with the English equivalent (or vice versa), aiding declarative memory through repetition.

A learner who succeeds in memorizing a large amount of words and phrases in this way, in a variety of semantic categories, can be expected to be able to satisfy some immediate communication needs using these rehearsed words and phrases. This "memorized proficiency" is categorized as level 0+ out of 5 on the Interagency Language Roundtable (ILR) Skill Level Descriptions for reading, listening and speaking. Some of the limitations of level 0+ proficiency as described by the ILR Skill Level Descriptions include; "Misunderstandings arise due to ignoring or inaccurately hearing sounds or word endings (both inflectional and non-inflectional), distorting the original meaning", "Unable to read connected prose", "Shows little real autonomy of expression, flexibility or spontaneity", "Attempts at creating speech are usually unsuccessful", and "Even with repetition, communication is severely limited even with people used to dealing with foreigners"(ILR).

Memorized proficiency, the type of language proficiency trained by software such as that described above, is very limited for a number of reasons. Although the learner may have memorized a variety of vocabulary words and even short phrases relevant to a particular communicative context, he cannot be expected to use them in a creative way to meet his individual communication needs because he lacks knowledge of the language structure. For example, let us imagine that the learner has memorized the L2 equivalent of the phrase, "What is your name?" He may reasonably assume that this memorized utterance will serve to elicit the name of his interlocutor. However, depending on the particular structure of the L2, this phrase may need to be altered significantly if he is speaking to a woman, two or more people, someone he has met before, or any number of other abstract categories which are represented in the grammatical structure of the L2. Similarly, if he has memorized the L2 phrase for, "I would like to order room service," expressing an idea such as, "I would like to order a ham sandwich and a bottle of soda from room service" can be a daunting task even if he has also memorized the words for ham sandwich and soda. Without an understanding of how this memorized phrase is constructed, the learner has no knowledge of how to deconstruct it and insert additional information as needed, since he can only guess as to where the words can be inserted and what changes to syntax or inflectional morphology would be required. If there are significant structural differences between the L1 and the L2, an attempt to do so may result in an unintelligible utterance.

Many language learning products are probably designed in this way because it allows the developers to use the exact same coding to develop products for a wide variety of target languages (TLs). A single collection of words and phrases in English can be translated into any number of TLs and simply inserted into the program to modify it for use by a learner of a particular language. No real knowledge of the TL is required of the software developers, as the translation of the word and phrase list can be outsourced to a contract translator. This model can keep down the cost of producing a product for multiple languages, especially if those include less-commonly

studied languages that are otherwise unlikely to generate profits. Certainly this kind of product is highly attractive for those seeking to learn a language for which few other resources may be readily available, but consumers should be cautioned that users are unlikely to progress beyond memorized proficiency through the use of these tools alone.

One may assume that with sufficient exposure to a variety of L2 phrases, the learner will develop a sense of how the phrases are structured. Research in SLA demonstrates that this is not necessarily so. In order for the learner to begin to develop a sense of how the TL is structured, it is generally necessary to undergo significant practice in negotiating meaning in context through interaction with a TL speaker. As Irujo (1986, pp. 236-7) elegantly stated, "input without interaction is not sufficient for language acquisition." Such an approach could be compared to exposing children daily to foreign language radio broadcasts. Without sufficient context and navigation of meaning, such as that which children receive in their L1 through interaction with their caretakers, these children will be unsuccessful in learning the language of the broadcasts through passive exposure to plentiful amounts of TL input, even though their minds still possess the language learning plasticity lost to us by the time we reach adulthood (Stewart & Vaillette 2001, p. 286).

For adults given limited exposure to TL input when working with instructional software, their best attempts to analyze the structure of formulaic utterances may be only partially successful. "The difficulty for the learner is differentiating the regular from the irregular without already knowing the grammatical patterns of the language (Wray 2000, p. 470)." Given that irregular forms tend to survive in any language due to their high frequency of use, it is highly likely that learners will be exposed to irregular inflectional morphology in the earliest stages of their endeavors long before they have been exposed to sufficient input to figure out the more general, regular patterns of the language.

2.3. Does the program provide specific feedback for learner errors, or does it simply provide feedback in the form of a binary right or wrong?

Some language instruction software applications will allow the user to enter language input and receive feedback from the program. This may be done by prompting the user to fill in the blank, choose from two or more alternatives, type in a response or correctly arrange the provided elements of a phrase. The computer program will instantly alert the user as to whether or not the input was correct. The idea of this kind of feedback is appealing because it does not require the learner to flip to the answer key at the back of the book or wait until the following class session to get the exercise back from a potentially judgmental instructor with red ink all over it. It is both instant and oftentimes anonymous. Nonetheless, there are some considerable differences between the type and quality of feedback which most software can provide, and that which can be provided by a qualified teacher.

Software users will probably be able to recognize if the computer is essentially programmed to check the answer key. If the user inputs language which does not match the specified answer (or answers) in the program's

answer key, the program will provide feedback indicating that the response is incorrect. One problem with this type of feedback is that language is not math, and there is rarely only one possible correct answer to a question, especially when the question is open-ended. We can imagine a simple example of this in which the software presents the memorized phrase, "What time is check-in?" The program's answer key may have an answer such as "Check-in is at eleven o'clock." However, as speakers of English we can recognize that there are many possible answers which are perfectly acceptable and natural-sounding such as, "Eleven o'clock", "At eleven", "Eleven", "Check-in's at eleven", etc. Unless the software is programmed to accept any of these alternatives, the learner who enters one of them will be informed that his answer was incorrect. Furthermore, the learner who enters an answer such as "*Check-in eleven" which is syntactically mal-formed, will also be informed that his answer is incorrect. If the program shows this student the answer from the answer key as feedback, he can ascertain that a better response would be "Check-in is at eleven o'clock," but the input that could assist him in generalizing his error is very limited. The student who responded simply with "Eleven", is completely deprived of the knowledge that his response was completely felicitous in this context.

A language teacher would be able to provide better quality feedback in a case such as this one because he or she has knowledge of the language, as opposed to the software which contains pre-formed language data, but in most cases lacks any sort of model of language structure. While significant advances are being made in intelligent computer-assisted language learning (ICALL) technology, such an approach to developing language learning software is impractical to developers who want to produce equivalent products for a wide range of languages, since the programmers would need to have advanced knowledge of the morphology, syntax, semantics and pragmatics of each individual language, or work very closely with linguists who do. The cookie-cutter model for creating language learning software seems highly unfeasible for ICALL, given that each language is structured differently from all others, and the development of ICALL technology involves developing a model of language structure which is specific to the language in question. For a detailed description of the challenges involved in developing true ICALL tools that incorporate Natural Language Processing (NLP), see Amaral and Meurers (2011).

2.4. Does the program prompt the user to create original sentences from scratch or choose the well-formed answer from among several possibilities?

Programs that require the user to fill in a blank with the correct inflectional form of a word, the correct preposition, or otherwise choose among alternatives that are typically problematic for learners have an advantage over those that treat words and phrases as whole units. Studies in SLA have demonstrated that learners attain greater confidence in and mastery of L2 structures when pedagogical exercises are designed to focus their attention on specific structures in addition to meaning in context (Kim 2012, Bigelow et al 2006, Magnusson and Graham 2011, etc). In this type of exercise, right-or-wrong feedback is more useful because it is focused on one

particular element of the phrase, eliminating some of the guess-work on the part of the learner who is trying to fit this input into some larger generalization about how the language works.

Another type of automated exercise in which the words of a sentence are scrambled, and the user is prompted to put them back in order to create a well-formed sentence, can also help focus the learner's attention on the syntactic structure of the language. This type of feedback can help the learner develop generalizations about the relative placement of the subject, object and verb in addition to the correct placement of prepositions, pronouns or other grammatical particles.

One should keep in mind, however, that the best test of a learner's knowledge for both exercise types described above is their ability to successfully perform the task with novel stimuli. If the learner has arrived at the correct generalization through exposure to adequate language input, he should be able to apply it correctly to phrases he has never seen before. If input has been adequate, the learner should be able to recognize the relevant parts of speech in the novel stimulus and make the correct choices. If the learner is asked to perform this task with phrases that were previously memorized as a whole, the utility of the exercise is minimal. When performed with a phrase that has already been memorized as a chunk, putting the scrambled words back in order is akin to completing a jigsaw puzzle featuring an image of a muscle car. No knowledge is required of how the car is assembled or how it works. One only needs to remember what the car looks like.

2.5. Does the program prompt the user to understand novel phrases or utterances on the basis of vocabulary and grammar content which have already been presented?

Just as the fill-in-the blank and scrambled sentence exercises described above are a better test of the learner's generalized structural knowledge of the language when the learner is prompted to complete them with novel stimuli, so too is the learner's comprehension best trained when he must draw meaning from novel stimuli. Two of the limitations of level 0+ (memorized proficiency) as described in the ILR skill level descriptions are, "Shows little real autonomy of expression, flexibility or spontaneity", and "Attempts at creating speech are usually unsuccessful" (ILR). The reason for this limitation is that learners at this proficiency level have memorized vocabulary and phrases as chunks of language and lack the knowledge necessary to parse language input which varies in any significant way from what they have memorized. Compare this to the ILR skill level description for reading proficiency level 1 which includes the following; "Able to read and understand known language elements that have been recombined in new ways to achieve different meanings at a similar level of simplicity." For reading: "Once learned, these sentences can be varied for similar level vocabulary and grammar and still be understood"(ILR). It is clear that progressing beyond a 0+ level of proficiency requires the learner to grasp general structural knowledge of his L2 and apply it to draw meaning from combinations of words not previously memorized as a whole. Therefore, it

stands to reason that the most effective language learning tools will include exercises that train this ability, unless they are designed to meet the goal of memorized proficiency only.

In classroom teaching, this is one of the advantages of incorporating authentic materials into language learning exercises and tasks. The lack of control on the part of the instructor over how language is structured in authentic materials forces the learners to navigate meaning through the widest variety of input possible, exposing them to the full range of variation present in authentic, spontaneous language usage. With proper guidance from the teacher, this allows the learner to better formulate his generalizations (and better define exceptions or irregularities) about language structure, and trains his ability to interpret novel stimuli.

Such practice is difficult to replicate with software because the program would have to adapt to the learner's potential misinterpretations, account for gaps in knowledge, diagnose the source of the error and provide appropriate corrective feedback. However, it is possible for software to train the learner's ability to deal with novel stimuli on a limited scale. This can be done by prompting the learner to match a novel sentence with the corresponding image, or by prompting him to choose the best English equivalent from a set of choices.

While it is feasible for language learning software to incorporate exercises that require students to manipulate language structure and derive meaning from novel stimuli, doing so in a way that targets potential problem areas or highlights significant linguistic contrasts between the L1 and the TL requires the software developers to have conscious structural knowledge of both the L1 and each TL for which software is being developed. This is likely to increase the cost of development as well as the timeframe for development because TL linguists will have to work with the software developers in an advisory capacity as consultants, not just as translators of a pre-fabricated word and phrase list. It is also likely to decrease the number of languages a commercial developer may create software for, given the slim profit margin for less commonly studied languages.

3. Helping learners go beyond the capabilities of language learning software

As the author has attempted to demonstrate above, there can be limitations as to how much foreign language proficiency can be gained through the use of self-paced language learning software alone. The questions presented in this article provide the guidance necessary for consumers to begin to identify what those limitations are for a given product when choosing software, but are also intended to aid in the development and management of language programs in which instructional software is made available as a resource. Understanding the limitations, or potential limitations, of a learning tool allows us to find creative ways of overcoming them. Interactive software can be a very effective tool to assist in developing declarative memory through repetitive practice. In addition, the incorporation of audio can potentially assist learners in becoming familiar with a variety of voices and accents in situations where learners may have only limited access to speakers of the language during early stages of the learning process. Interactive software can

also be useful for visual learners who may have an easier time associating new vocabulary with a representative image or animation.

For students undergoing classroom instruction, or preparing to do so, the use of instructional software provides an engaging tool for initial learning and practice during times when a live instructor is not available to provide language input and feedback. This may be especially useful for students attempting to learn quickly through an intensive program of instruction, or by contrast, to those learning at a slower pace for whom class time may be very limited.

As language educators, what can we do to maximize the benefit of these products to the language learner? As the author argues above, a major shortfall in the capabilities of many of these products is their cookie-cutter nature, which allows developers to create equivalent products for a wide variety of languages with relative ease, but which also results in a program whose functionality is blind to the structure of or differences between the languages in question. Providing language learners with the keys to understanding the structure of the TL, so that they can parse and understand novel stimuli, and express original thoughts in a creative (albeit perhaps elementary) fashion, will help them to push past the limitations of memorized proficiency in their efforts to achieve working proficiency and beyond.

In the following paragraphs, the author presents some ideas for how educators can supplement the instruction provided by software to assist students in overcoming the inherent pedagogical limitations of these products. This is, of course, by no means an exhaustive list of the possibilities, but it is the author's hope that it will inspire educators to come up with the creative solutions which will best suit the particular needs of their own students.

Since many of the software products operate in a fairly mechanical way, indifferent to the structural or contextual nuances of the TL, one way we can help students overcome the limitations of the program is to make them better informed language learners. Many students are probably overwhelmed when presented with phrase after phrase to memorize in a language they do not yet understand, when they do not have the ability to break them down and analyze them. This type of rote memorization of phrases presents a heavy information processing burden on the students (DeKeyser 2000, p. 506). Discovering grammatical structures from language data which has not been systematically collected or presented with this purpose in mind can be a daunting task even for language learners who have been formally trained in descriptive linguistics.

We can lessen this burden somewhat by orienting language learners to what they should be looking for as they try to develop a sense of how the language works. For many learners, especially those who are not experienced L2 learners, it may be useful to provide a review of English parts of speech. Some practice with identifying the verbs, nouns, adjectives, adverbs, prepositions etc. in their L1 will familiarize them with the type of rationale they will need to begin making sense of TL patterns. Furthermore, it can be instructive to inform students of unfamiliar language structures they may

encounter as they learn. For example, if they are learning a language with case marking, complex verbal morphology, SOV word order, grammatical gender, tones or any other grammatical feature which is foreign to them from the perspective of their L1, a familiarity with these language features can help students recognize them early in the language learning process. Recognizing these structures as they begin appearing in the language input, can aid the learners in hypothesizing about general structural rules as well as in identifying apparent exceptions to those rules. In fact, a linguistic orientation to SLA for language learners may include some examples from English that demonstrate the generative power of general syntactic or morphological rules and contrast them with exceptions such as irregular plurals or irregular verb paradigms like those of 'be' and 'go'.

Language learners who are studying by themselves with the help of instructional software may be tempted to use dictionaries or grammar references to help them make sense of the language input they are receiving from the computer program. As most teachers and students of foreign languages have experienced, the uninformed use of a bilingual dictionary is not necessarily the best friend of the L2 student, who may not be familiar with strategies for determining which of multiple definitions for a word is the most appropriate for a given context. A brief training in strategies for bilingual dictionary usage can assist students in avoiding common pitfalls. This type of reference tool training can also include familiarization with how to use a more complete grammar reference. It may also be advisable to provide students with a quick-reference guide to important closed categories of words in the TL, such as a list of prepositions or a table of personal pronouns as well as lists of some commonly used nouns, verbs, adjectives and adverbs. The intent here is to help the student learn to identify the functional role of new vocabulary words as he encounters them.

When possible to do so, it may be useful to provide students with printed workbooks in addition to the software. Although available workbooks are likely to present elements of the TL in a different order than the software, there will be some overlap between the focus of any workbook exercise and the material learners have seen in the context of the software. Practicing the hand-written form of the language can also reinforce the learning of orthography and vocabulary in a methodical, multisensory way that keyboarding can not necessarily provide. Many workbooks include an answer key in the back of the book, and some of these even include brief explanations or list multiple possible answers. Some students may find the slower pace of completing workbook exercises a refreshing change of pace after working with software, or find that it allows them to practice when they do not have access to a computer or other compatible electronic device. Combining old technology with new technology can help to satisfy multiple learning styles. Global learners may find the software more appealing, while analytical learners may be more attracted to cloze exercises or grammar-translation drills. Providing a mix of resources allows learners to tackle the L2 acquisition problem from different angles at the same time, taking greater ownership of the process.

When learners have limited access to TL speakers, they may find it useful to use online machine translation engines as a resource. It has been reported

that Chinese learners of English have benefitted from the use of translation software. They increased their recognition of word stems and improved their spelling (Chinnery 2006, p. 11). Although any translator will recognize that machine translation engines have their limitations too, and may have difficulty with language taken out of context, or place language in an inappropriate context, the discerning user can use them as a type of virtual language informant through the careful input of data and a careful analysis of the output. Because the input learners receive in the form of pre-formulated phrases may be highly deficient in terms of including multiple inflectional forms which the students will need if they wish to formulate original thoughts in the TL, a computerized translation tool can help fill in the gaps of the inflectional paradigm. For example, if the student memorizes the phrase, "My name is…", this kind of tool can help him understand how to manipulate the language to create phrases such as "His name is…" or "Our names are…" By inputting memorized phrases into the translator and systematically replacing one element at a time, paying close attention to how the translation changes, the learner can begin to perform a comparative analysis of the structural similarities and differences between his L1 and the TL.

Of course, where possible, it is also highly desirable to pair the use of language learning software with classroom instruction or tutoring sessions with a live instructor. Even in situations where learner-instructor contact hours are highly restricted due to scheduling conflicts or budgetary limitations, a trained instructor will be able to monitor the learner's progress and augment his self-guided learning with specific, individualized feedback and communicative tasks that push him to create with the language and focus his attention on problem areas in his acquisition of the L2. Even occasional classroom instruction or small group tutoring sessions have great potential to further enhance learning by permitting learners to interact with each other in the TL and learn from each other's mistakes in a structured setting while carrying out tasks that challenge their communicative proficiency. "Interaction in an L2 provides learners not only with exposure to meaningful language in a learner-centered context but also with opportunities to attend to specific linguistic forms while negotiating meaning in their attempts to communicate (Mackey and Sachs 2012, p. 710)."

4. Conclusion

While many students and instructors of foreign languages strongly hold the opinion that there is no real substitute for a qualified and experienced foreign language teacher, we must recognize that advances in information and media technology are changing the arsenal of tools available to language learners. The need and desire to learn foreign languages is unlikely to diminish in the foreseeable future, and we should view the increasing availability of low-cost, interactive tools for language as a great advance in making language learning accessible to the masses. Furthermore, we as language educators should take it upon ourselves to become familiar with the functionality and capabilities of these tools. It is in this way that we can

best evaluate how they can and should be used most effectively, and in what circumstances their effectiveness may fall short of the learner's goals.

In this article, the author has presented several questions which language educators can use to begin an evaluation of these products within the context of their own language programs. This above discussion has also provided several examples of how some of the pedagogical limitations of software products may be overcome through the use of supplementary resources and orientation. It is the author's hope that the information here will help the readers to become wiser consumers and more resourceful users of self-paced language learning software.

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