

Perceptions of Technology and Manifestations of Language Learner Autonomy

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Abstract

This grounded theory study looks at the perceptions that advanced language learners have about the use of technology for learning English as a second language. Its purpose was to discover what those perceptions are, where they came from, and how they affected the participants' use of technology. Both positive and negative perceptions were found. Positive perceptions included convenience, accessibility, comfort, and safety. Negative perceptions included inauthenticity, lack of interactivity, isolation, and the view of the computer as a supplement, not a replacement for learning English from other people. Causal conditions such as learning context, opportunity, and resources used gave rise to the participants' perceptions. These perceptions, in turn, guided the use of conscious learning strategies when participants made decisions involving habit and routine, affective concerns, and accuracy and fluency goals. Two findings from the study are that advanced English language learners do not extensively use computer tools designed explicitly for pedagogical purposes, and that language learner autonomy is not often manifested in the successful self-directed learning of advanced English language learners.

Introduction

Purpose of the Research

This study looks at how advanced English language learners perceive and incorporate technology into their second language learning views and experiences in a self-directed manner. “English language learners” will generally be defined here as adult learners of English as a second language who engage in the ongoing learning of English at a high level of proficiency (for example, as graduate students). A “self-directed manner” will refer to learning that either extends what has been taught in a formal classroom setting or to learning that takes place outside the classroom in a manner of the student's choosing. “Technology” will refer to the use of computers to assist learners in their pursuit of second language learning, and as such can include the use of specific software packages such as Microsoft Word, the use of the Internet for e-mail, and the use of the Web.

Research Question

How do advanced English language learners make sense of technology in their second language learning in ways not restricted to classroom learning? “Making sense” as used here will refer to both their perceptions of technology and their uses of technology. “Perceptions” as used here will refer to how people view the computer as a medium for

language learning through their awareness of its value in such a role. “Perception” may therefore be distinguished from “belief”, the latter taken here to mean a deeply held value about the intrinsic worth of the computer.

Review of Literature

A number of empirical studies done in CALL study how computers are used within particular classroom settings (Kamhi-Stein, 2001; Laufer & Hill, 2000; Meskill & Krassimira, 2000; Grace, 1998; Chun & Plass, 1996; Sullivan & Pratt, 1996; Warschauer, 1996; Warschauer, 1998; Kern, 1995; Hulstijn, 1993; Dunkel, 1991). A growing body of research also looks at how CALL is informed by theories of second language acquisition (SLA) (Hegelheimer & Chapelle, 2000; Hulstijn, 2000; Chapelle, 1998, Doughty, 1987). Historical accounts of how technology has been used in second language learning and teaching offer further insights into the role that computers have played in the language learning classroom (Salaberry, 2001, Chaudron, 2001).

Salaberry (2001) argues that the most important factor for researchers to study is the pedagogy, not the technology itself:

The effects of the novelty of the medium represent an intervening factor that should be distinguished from the effects of the independent variable of the communication environment (related to the use of the new teaching tool) in which a pedagogical activity is implemented. (Salaberry, 2001, p. 50)

What CALL research sometimes does not consider is that other variables besides the introduction of computers into the classroom setting might account for differences in learning. Egbert, Chao, and Hanson-Smith state this well when they say that putting computers into classrooms can potentially change a number of factors that influence students' learning:

One common type of research study compares a classroom with computers to one without and measures productivity gains to language achievement on standardized tests to show whether computers are effective....such questions imply that if technology performs better than traditional methods, everyone should use it—a neat picture, but one that poses three problems. First, the concept of traditional methods [emphasis in original] is unclearly defined at best, and research does not support the idea that one single set of methods is typical across classrooms. In addition, in most cases, an invalid assumption underlies this type of research: that nothing else changes when computers are introduced into the classroom...Finally, a third problem in comparing CALL to non-CALL environments is that such comparisons ask whether the teacher or the computer is better for a specific task when, in fact, each may be better at performing very different kinds of tasks. (Egbert & Hanson-Smith, 1999, pp. 8-9).

There remains a need in the field of CALL to look beyond studies that examine measures confined to particular classroom settings. Studying learning environments outside the classroom may offer us additional insights into how computers are used by language students, not under the direct control of a teacher.

The phenomenon of language learner autonomy will serve to illuminate the perceptions of technology in this study. The use of the term “autonomy” as used here is based on the definition offered by Holec as “the ability to take charge of one's learning” (Holec, 1981, p.3). “Self-direction” will refer here to the situational context of the

participants in the study (learning English outside of a classroom) and “autonomy” will refer to their ability to take responsibility for their learning (are they learning how to learn?). A “self-directed language learner” is therefore not synonymous with an “autonomous language learner”. Language learner autonomy as used in this study relies on elements of both language learner behaviors and language learner contexts. Figure 1 represents an overview of how these various elements are connected (Oh, 2002).

While CALL sometimes looks too narrowly at how computers are used in classrooms, learner autonomy, in contrast, has looked very broadly on how autonomous language learning can be viewed as a theoretical construct. In terms of studying technology questions within the scope of learner autonomy, Benson states that much remains to be learned:

In the case of CALL...there is also an assumption that technology can provide learners with the kinds of support they need to develop skills associated with autonomy. This cannot be regarded as more than a potential, however, and a great deal depends on how technologies are made available to learners and the kinds of interaction that take place around them....The key research questions regarding technology-based approaches to autonomy are concerned less with the characteristics of new technologies than they are with the learning activities in which they play a role. (Benson, 2001, pp. 140-141).

Some recent work has begun on tying student perceptions and learner autonomy together. Although not all of these studies use technology as a platform from which to discuss issues of autonomy, they do offer intriguing insights into how technology and learner autonomy may be studied in conjunction. Toyoda (2001) found that “...learners' perceptions vary largely according to the level of their computer literacy although the students' beliefs may be modified through positive or negative relationships with other students” (Toyoda, 2001, p. 9). Although Toyoda invokes the term “perceptions” in this study, it is not differentiated from “beliefs”. Chan (2001) studied readiness for learner autonomy from perceptions of both the teacher's role and the student's role and learners' perceptions of autonomous learning, but does not clearly distinguish between “perceptions” and “attitudes”. Although Chan did not focus specifically on technology and learner autonomy, this study did find that a positive attitude could be found towards learner autonomy in student attitudes: “It was surprising to find that this particular group of students who had come from traditional, authoritative backgrounds, demonstrated positive attitudes towards the autonomous approach” (Chan, 2001, p. 514). Hoshi (2002) also offers some interesting insights into both “beliefs” and “perceptions” of Japanese EFL learners towards Internet learning, although the two terms are not defined independently. Hoshi found that learners used two different approaches when using the Internet: content-focus and language-focus, with the former using the Internet primarily to access information and the latter using the Internet primarily to improve their English language skills. Stepp-Greany (2002) looks at student perceptions of language learning in TELL (technology-enhanced language learning). Although she also does not explicitly define “perceptions”, her study contributes to the literature by offering student views on the continued importance of the teacher in this environment. Jones (2001) cautions against the idea that CALL and autonomy can be viewed synonymously and also argues for the necessary presence of the teacher.

This research study differs from other studies in that it ties perceptions, technology, and language learner autonomy together in one study. It considers how individual learners, not students in a classroom, view and use computers in ways that either extend or operate

independently of the learning that occurs within a classroom. It flows from Benson's perspective that it is the type of learning that ought to be studied, not the mechanics of how the technology is used. I will, therefore, situate this study in the context of CALL, but will examine the findings in light of learner autonomy perspectives. This study will not look at the promotion of language learner autonomy but instead will look at its possible manifestation through the lens of advanced language learners' uses and perceptions of technology.

Methodology

Research Design

The research design used for this study is that of the grounded theory tradition of qualitative research (Creswell, 1998). This type of research looks at the uniqueness of individuals in explaining how people make sense of the world.

Participants

The nine participants in this study came from a purposive sample of graduate students from a university in the Northeast of the United States who were studying or had studied foreign or second language education. Two were men, and seven were women. One was African, and eight were Asian. They ranged in age from their late twenties to their early forties. All nine participants in this study have their identity protected through the use of pseudonyms. Figure 2 contains summary descriptive information concerning the individual participants: their pseudonyms, their ethnic origin, their level of education in English, and their level of computer use. An "advanced level of computer use" is defined here as five or more years of computer use either within or outside a formal classroom. All of the participants in the study were non-native speakers of English who are engaged in self-directed ongoing learning of English as a second language learner. None of the participants was taking a formal class in English as a second language at the time of the interviews. Instead, they were all engaged in the learning and use of English at a very high academic level at an American university, where the course of the programs was conducted entirely in English. Six of the participants were working on master's degrees. Four of the master's degrees were in a TESOL (Teaching English to Speakers of Other Languages) program, one was in a Media Studies program, and one was an MBA program. The participant who was working on a master's degree in business had a bachelor's degree in Spanish. The other three participants were all doctoral students in a Foreign and Second Language Education program. This presupposes that their proficiency level in English was quite high since they met admission requirements for these programs for international students. The admission requirements included a stated proficiency level in speaking, listening, reading, and writing as measured through the TOEFL (Test of English as a Foreign Language) test and the SPEAK (Speaking Proficiency Assessment Kit) test.

Data Collection

Each of the nine participants was interviewed for approximately one forty-five minute session during the Spring 2002 semester. The sessions were audiotaped. The sessions consisted of a series of open-ended questions designed to probe their perceptions of technology in autonomous second language learning contexts. Figure 3 presents the questions that served as a basis for the interviews.

Data Analysis

The transcriptions of the audiotapes and the field notes from the observations were analyzed for emerging categories according to the constant comparative method of data analysis as outlined by Creswell (1998) and as articulated by Strauss and Corbin (1998). Open coding categories were identified, connected, and examined in terms of how they interrelated with each other. Figure 4 presents an overview of the positive and negative perceptions that arose from the data. The grounded theory that emerged can be described in the following way: Perceptions of computer use for engaging in self-directed language learning arise from the conditions in which the learning takes place, from how learners consciously approach the need to learn, and from the conscious strategies that learners use to accomplish learning. The individual choices that learners make about how to engage in language learning are informed by their perceptions of the value of computer use in language learning. Perceptions are therefore an important component to be considered when looking at how and why advanced language learners use technology to further their learning.

What Are the Perceptions?

Positive Perceptions

Convenience

Olivia gives voice to the perception that the computer makes authentic reading opportunities more convenient because it can be done at any time:

Internet is very good source to learn English. You can print out, and then you can read and then you can sum up, and then you can rephrase...before reading novels, I search for review through the Internet first so I have a preconception...Where you see the summary, it helps me to understand. And I have a good method...I try to make a short sum up, a few sentences...I can go in to the thesaurus part, so I can use various kinds of similar words. It's very good to learn or promote English vocabulary...to summarize paragraph, I want to rephrase, I want to use different words which has same meaning form words in the book, and I always use that.

Comfort

Ellen explains how she finds comfort in writing an email to other non-native speakers of English:

In writing, I exchange email. Even though they are other Koreans, but I just wrote down in English... So maybe that includes a lot of grammatical errors, but maybe it makes me a little bit comfortable to write in English.

Safety

Ellen uses the computer classroom management system Blackboard as a safe place in which to practice English language expressions she hears from native speakers:

...sometimes even though I am talking with native speakers, I don't understand them quite well. But after that, if I'm checking some informations from the computer, then I can get the ideas about the expressions or passages... We cannot ask a lot of questions to native speakers, because I think it interrupts the flow of conversation. So sometimes even if I don't understand him or her, like to have courage to ask them, what does it mean, so maybe I'm just putting that in my brain. And after that, I'm making that expression in the Blackboard web site.

Negative Perceptions

Inauthenticity/Lack of Interaction

Anna expresses a marked preference for speaking with native speakers overusing computers:

Computers help, but I'm not sure about the result. Result is depending on student's desires or deeds or how much he practiced or something like that. But, as I said, I think interactions with the native speakers is the best. Much better... I prefer person, people, for interaction. Or TV voice for native speakers. Much clearer, live voice.

Computer as Supplement not Replacement

Brian feels that the computer cannot replace human interaction:

[Learning English] from computers, it's less natural. But if my contact with natives is limited... The best way to learn a language is with native speakers. But if that's not possible, the next best is computers. If you want to learn a language, it's good to have speakers of a language. But that's not always accessible...

Isolation

Kay says that she is "addicted" to playing games like chess and once stayed on for 12 hours, tying up the phone line so her husband could not call her:

I don't know [if it helps my English] but I edit in the chess. In Korea, chess is more popular. They use the site to meet person. When my husband is in Korea, he couldn't call. I'm like addict. But it's kind of my hobby... I can learn vocabulary like "block a move" or something like that. I couldn't know that before.

Where Did the Perceptions Come From?

Learning Conditions

Learning conditions that appear to be connected to participants' perceptions of technology include the learning context, motivation, opportunity, and resources used. In terms of learning context, Hannah wants to speak with native speakers here because she can use computers back in Korea, Christopher meets with an undergraduate tutor once a week, Kay goes to the “chat room” to have conversations with tutors, and Beth takes her papers to be reviewed by a native speaking graduate student. In terms of motivation, Christopher is learning English to get a better business position in Korea, Beth thinks that it will help her get a college teaching job, and Jane believes that publishing academic research at home in Korea will give her prestige, but Anna wants to fit in with the American students in her graduate classes. In terms of opportunity, Hannah use email as a conduit to arrange recreational meetings with her classmates so she uses it as a social opportunity to learn informal spoken English, Christopher uses it to keep up with daily current events to improve his reading skills, and Brian uses word processing as an opportunity to not only learn how to type but also to learn the language of computer commands in English. In terms of resources used, Jane uses email as the main vehicle for communicating with a co-instructor about the progress of their students' teaching development, Christopher uses the corrective feedback features in Word extensively to self-correct his writing, and Olivia uses web sites to extend her vocabulary.

Perceptions and Learning Strategies

What perceptions the participants have of technology in language learning seem to be related to the use of their learning strategies. Many participants used computers for English language learner purposes habitually (Christopher perceives that computers are good for improving reading skill and he reads the news in English every day, Ellen thinks that computers can help her with her spoken English and she visits a favorite web site every day to learn and then practice new phrases that appear in posted dialogues, and Olivia perceives of the computer as a very useful way for learning new vocabulary and she reads the Korean news in English every day to learn specialized English vocabulary). Some participants used learning strategies to make themselves feel comfortable (Hannah uses instant chat to force herself to think quickly in English so that she can feel more comfortable speaking, Christopher uses word processing feedback to feel more comfortable about writing, Ellen uses web searching to find information about many topics so that she can be comfortable discussing them in class). Other participants used learning strategies to improve their accuracy and fluency (Olivia reads newspaper articles found through the computer out loud with her husband to practice speaking more naturally and in a more flowing way, Anna practices her English by sending email in English to her husband but doesn't want him to correct it, and Kay deliberately does not look up every word that doesn't know in an online dictionary because her purpose in reading is to “get the flow of the story”).

Discussion

Two major findings emerged from this study of advanced English language learners' perceptions of technology:

1. Advanced English language learners do not extensively use computer tools designed explicitly for pedagogical purposes.
2. Language learner autonomy is not often manifested in the successful self-directed learning of advanced English language learners.

Using the Computer for Learning English (Pedagogical Software)

To be a computer user in the context of learning another language seems to be defined by most of the participants as using special software designed explicitly for teaching people foreign languages. "I am not a computer user," meant in this study "I do not use specialized pedagogical software to learn English." For example, Hannah mentioned that she used pronunciation software in Korea but not here in the United States, and here she did not consider herself to be a computer user although she uses email and word processing extensively (but not explicitly to learn English). Likewise, Brian does not think of himself as a computer user for learning English, but he says that he would use the computer to learn English if he had pronunciation software.

Using the Computer for Learning English (Authentic Language Material)

As for the participants who said, "I am a computer user", some meant that they use specialized pedagogical software, while others meant that they used both specialized software and authentic tools such as word processing and electronic bulletin boards for learning English. Anna, for example, considers herself to be a computer user not only because she did use specialized language software in Korea, but also because she is quite a savvy web surfer in locating such sites. Ellen also thinks of herself both as a computer user in general and as a user of computers for learning English. She says that she can find a lot of pedagogical information through web sites. She then consciously uses this technique to improve her English by applying it to learning new phrases in English that she can then use in online classroom discussions.

Using Computers for Reasons Other than Learning English

This is not to say, however, that people who said, "I am not a computer user" for learning English meant that they did not use computers at all for any other purpose. Every single participant used computers one way or another, generally for sending and receiving email, composing and correcting papers in word processing programs, and searching web sites for information. Whether they also thought of these activities as being ways of learning English depended on whether or not they consciously approached them as such. Beth, for example, does not consciously separate the use of the computer as a means for learning English from the use of the computer to get her papers done or stay in touch with her friends:

...I have a lot of work to do. I cannot concentrate on "I have to improve my English" or not, you know. English is just, how can I say, my tool. So, it's just like language, I don't feel it's a foreign language...I feel that I need to improve English, but not, but I'm not conscious about that, "I have to improve my English through computers."

Beth is a highly proficient speaker and writer of English and she feels equally comfortable expressing herself in either English or Korean. Just as she does not differentiate between languages, neither does she differentiate between using the

computer for a particular learning purpose or to use it for general communicative and instrumental needs like any other computer user:

To improve my English, I don't use computers. Just for getting information. Well actually, computers is just my life. I don't differentiate whether I use that for my assignments or for my special purpose. I just use, I always need my computer.

The Manifestation of Autonomy

This second finding of the study concerns the manifestation of language learner autonomy in a CALL environment. What constituted the successful use of computers for these participants depended upon their purpose for using them. Was it to learn English better? Or was it to learn how to be a better learner?

Most Did Not Exhibit Autonomy

Participants in this study appeared to define successful language learning as increased control over English, whether that control comes from increased vocabulary, greater fluency in reading, or increased comprehension of spoken English. They did not define success as becoming a better learner. None of them, in fact, explicitly stated that they used computers to become better learners. Their perspectives seem to be content-centered, with increased proficiency in English as the focus of their efforts, rather than process-centered, wherein the focus of their efforts is on becoming a better language learner. Christopher, for example, improves his reading comprehension through reading online newspapers, but as he is not consciously reflecting on how this makes him a better language learner, his vocabulary could improve while his language learner autonomy may not.

Some Did Exhibit Autonomy

Although this study suggested many ways in which participants are using computers to improve their English, it did not suggest many ways in which those same participants reflect on their language learner status. Glimmerings of autonomy may be seen, however, in some of how the participants voiced their choices. Olivia, for example, has consciously thought about a method for making herself a better learner. She uses the computer to look for online book reviews, paraphrases them, uses a thesaurus to extend her learning, and then reads her assignment. She consciously reflects on this method as making her a better learner. Olivia, however, does not always exhibit autonomy. Language learner autonomy seems to be manifested in some situations in different ways even by the same person.

Autonomy is not Necessary for Successful Self Directed Language Learning

If successful self-directed learning is defined as the participant's increased ability to improve his or her English, then to be a successful English language learner does not necessarily imply that language learner autonomy is either present or desirable. Successful self-directed language learners may improve their English through the use of computers, but not necessarily in ways that are self-reflective of their learner status.

Language learner autonomy appears not to be a necessary ingredient in successful self-directed CALL.

Implications

Two major implications arise from this study. The first is that not all users perceive the value of tools produced by an industry that has sprung up solely to accommodate the English language learning needs of users worldwide. And the second implication is that perhaps the acclaimed place of autonomy in self-directed efforts at language learning ought to be examined more carefully for its assumed necessity of inclusion.

Concerning the findings on pedagogical software, the best way to learn English as evidenced by the participants in this study is to interact with native speakers. There could then be pedagogical reasons to turn to authentic American web sites and American pen pal exchanges rather than buying expensive language learning software that may not be perceived to be as useful for learning American English. Further research into this area might also consider more strongly the sense of place and it might also look for explanations from other factors such as language proficiency levels and computer proficiency levels of the language learners. Benson's comments on what he calls "self-instruction" materials underscore the lack of research done on how language learners use explicitly designed pedagogical tools to study languages independently:

As a mode of learning, self-instruction describes the situation in which learners study languages on their own, primarily with the aid of 'teach-yourself' materials. Although the self-instructional materials industry is a significant sector within the foreign language-teaching industry as a whole, little research on the effectiveness of self-instruction has been carried out. (Benson, pp. 131-132).

The area seems ripe for further investigation.

As for the second implication, it would appear wise not to equate the use of computers in language learning with the idea that language learner autonomy is always present in these situations. From this study, it is not. It is well attested in the literature that autonomy is not an all-or-nothing state of being:

Nor is autonomy seen as being a steady-state: as many have pointed out, an autonomous learner may well choose teacher-direction at certain stages in his or her learning, and is likely to be autonomous in one situation, but not in another. (Pemberton, Li, Or & Pierson, 1996, pp. 3-4)

Even in a particular situation such as a self-directed environment, where students are working completely on their own outside the confines of a classroom and without the guidance of a teacher, autonomy is still not necessarily present. This point appears to also be well known:

There are degrees of autonomy, and the extent to which it is feasible or desirable for learners to embrace autonomy will depend on a range of factors to do with the personality of the learner, their goals in undertaking the study of another language, the philosophy of the institution (if any) providing the instruction, and the cultural context within which the learning takes place. (Nunan, 1996, p. 13)

Where this assumption about the presence and desirability of autonomy sometimes appears to fall down is with the use of computers. Hoshi (2002), for example, states that, "Internet technology now makes it increasingly feasible to individualize and personalize

the learning process, resulting in self-empowerment and autonomy in learning” (Hoshi, 2002, p. 1). Her statement may be meant to claim that autonomy could result from Internet use, but it is stated in a declarative enough fashion that the reader is left to wonder about the implied cause and effect relationship of technology use and resulting autonomy. Benson (2000) clarifies the assumption of autonomy resulting from computer use in this way:

The claim that technology-based approaches to language learning are supportive of autonomy rests in part on an assumption, shared with resource-based approaches, that they provide learners with opportunities to self-direct their learning. (Benson, 2000, p. 140)

The participants in this study, however, had many opportunities to self-direct their learning, but autonomy did not emerge as a result of these opportunities. Therefore, caution should be exercised when describing autonomy development strictly in terms of opportunity for self-direction. The key to autonomy in any situation seems to lie in the nature of self-reflection upon the idea of learning itself. From this study, it appears that successful language learning through the use of computers can take place without the presence of autonomy. The findings from this study also extend one of the findings from Toyoda (2001)'s study which is stated as “...it [technology] can have a positive impact on autonomy only when learners perceive technology as a useful tool” (Toyoda, 2001, p. 9). Participants in this study did perceive technology to be a useful tool for learning English, but that was still not enough for autonomy to occur, or if it was present, for it to be positively reinforced. Whether language learning autonomy ought to be promoted is a question for another study, although perhaps more care might be taken in the future to qualify such statements as Benson's (2001)'s claim that, “Autonomous learning is more effective than non-autonomous learning. In other words, the development of autonomy implies better language learning” (Benson, 2001, p. 2). Perhaps “better language learning” needs to be defined differently in different situations.

Further studies might also examine curriculum influence on the presence, absence, or development of language learner autonomy among language educators themselves. The majority of participants in this study were graduate students at either the master's degree or the doctoral degree level of second language education. If language learner autonomy is so absent from among ourselves, how are we to study its manifestations in our own students, let alone promote its value if it is indeed worth promoting? These questions deserve further consideration.

Healey (1999), in commenting on how computers might promote language learning autonomy, states that “Although technology is often touted as the great salvation of education – an easy way to customize learning to individual needs – it rarely lives up to this broad expectation” (Healey, 1999, p. 398). Perhaps in exploring other contexts in which language learners make decisions about their learning, we can add to our base of knowledge about how computers are used by language learners. These findings would enrich both the fields of CALL and learner autonomy.

Limitations

This study was limited to nine participants, all of whom were advanced computer users and advanced learners of English as a second language. Perhaps different findings would have resulted had less proficient language learners or less computer literate participants

been interviewed. A further limitation of the study is that the majority of the participants were Asian, and the transferability of these findings could be restricted to contexts where the second language learners come from this cultural and linguistic background. Finally, the majority of the participants were language educators, and that could further restrict the transferability of findings. Perhaps a study involving students from different academic disciplines would have yielded different results. At its very best, then, this study may only offer a very small glimpse of how a particular set of students deals with technology in language learning contexts outside the formal classroom. At the very least, though, this allows us to see how some people use and view the use of computers in learning English as a second language in a manner of their choosing.

Conclusion

This study investigated the perceptions of technology held by advanced English language learners. Both positive and negative perceptions were found. Perceptions were described in terms of categories, looked at in terms of what conditions and learning strategies are connected to them, and were explained in terms of two findings: that advanced English language learners do not make extensive use of explicit pedagogical tools for learning a language, and that language learner autonomy is not necessarily present in all successful self-directed efforts at learning English as a second language.

These findings add to our understanding of how autonomy may inform computer-assisted language learning. This study shows that the perceptions of technology that language learners hold are connected to their uses of computers for language learning. That successful self-directed language learning may take place without the formal manifestation of autonomy shows that autonomy is not necessarily present in all successful computer-assisted language learning situations. Learning takes many forms, as attested to by the participants in this study. Yet if we are to unravel its complexities, looking at one piece, such as how advanced English language learners use and perceive technology in an environment outside the formal classroom, may aid us in understanding a portion of the complex whole.

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Appendix

Figure 1: Model of Language Learner Autonomy

Language Learner Autonomy

- the capacity for taking conscious responsibility for the language learning process, as well as for the improvement of language skills



Elements of Autonomy:

Language Behaviors	Learner	Language Learning Context
Behaviors associated with autonomy:		Situation where learning takes place:
- using conscious strategies to plan learning		- inside/outside the classroom
- self-reflection/monitoring		- in U.S./in native country
- initiating exchanges in the target language		
- exhibiting characteristics of persistence, motivation, flexibility, and resourcefulness		

Row 1 = Pseudonym
 Row 2 = Ethnic Origin
 Row 3 = Level of English Language Proficiency determined by highest degree program
 Row 4 = Level of Computer Ability (advanced = 5+ years of using computers)

Hannah	Christopher	Brian	Ellen	Anna	Olivia	Jane	Kay	Beth
Korean	Korean	Ethiopian	Korean	Korean	Korean	Korean	Korean	Korean
MA in TESOL	MBA	PhD Second Language Education	MA in TESOL	MA in TESOL	MA in TESOL	PhD Second Language Education	MA in Media Studies	PhD Second Language Education
advanced	advanced	advanced	advanced	advanced	advanced	advanced	advanced	advanced

Figure 2: Participants

Figure 3: Interview Questions

1. Do you use computers outside the classroom to help you learn English (not just for homework assignments)? Do you keep track of your own progress in English, and if so, how?

2. How do you use computers outside the classroom? Do you use any of the ways listed below? Can you think of any other ways? How much time do you spend on these different ways in a typical week? How do you decide which ways to use?

- | | | | |
|--------------------------|-------------------|-------------------------|------------------------|
| Speaking: | Listening: | Reading: | Writing: |
| - pronunciation practice | -audio clips | -newspapers | -e-mail to individuals |
| - dialogues | -video clips | -web sites(what kind?) | -e-mail to lists |
| - videoconferencing | -radio news | -grammar/teaching texts | -instant chat |
| - recording yourself | -speeches | -gaming sites | -word processing |
| | - ESL sites | | -other software |
| | | | -diary, journal |

3. How do you think computers help you learn English?
4. What do you like best about using computers for learning English?
5. What do you like least about using computers for learning English?
6. Would you rather learn English from other people, computers, or both? Why?
7. If you could give someone advice on the best way to learn English outside the classroom, what would it be?
-

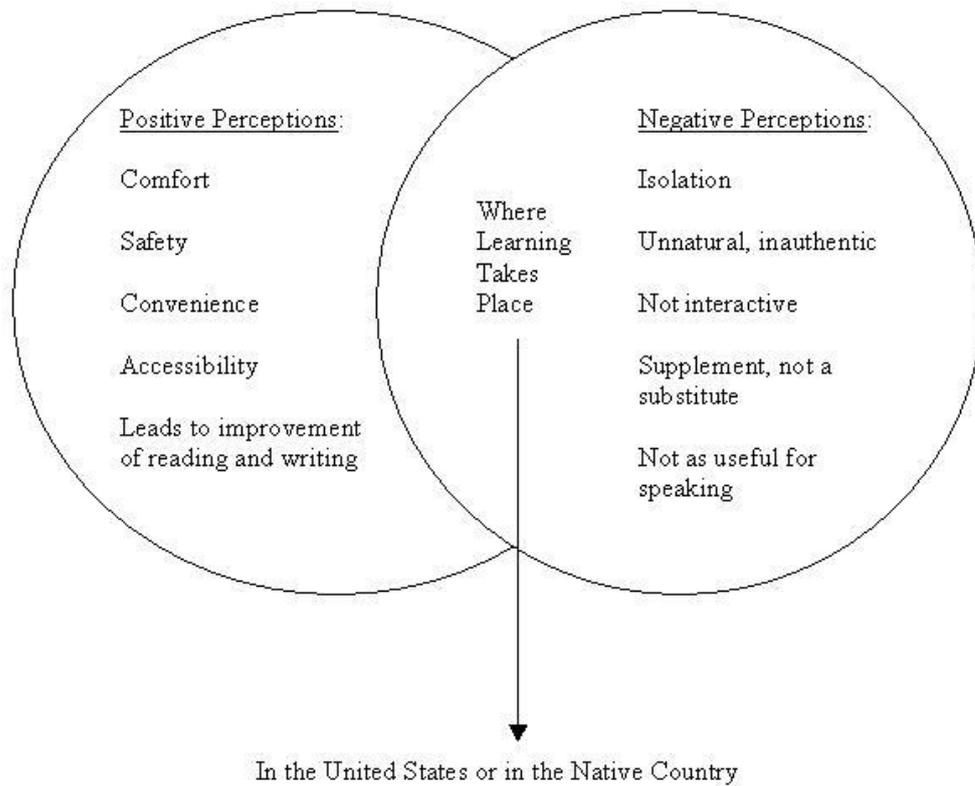


Figure 4: Perceptions of Technology Of Advanced English Language Learners