UNIVERSITY OF CALGARY

Perceptions, Beliefs and Expectations of

Japanese EFL Self Access Learners towards Internet-based Learning

by

Mayumi Hoshi

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR
THE DEGREE OF MASTER OF ARTS

GRADUATE DIVISION OF EDUCATIONAL RESEARCH

CALGARY, ALBERTA

AUGUST, 2000

© Mayumi Hoshi 2000



National Library of Canada

Acquisitions and Bibliographic Services

395 Wellington Street Ottawa ON K1A 0N4 Canada Bibliothèque nationale du Canada

Acquisitions et services bibliographiques

395, rue Wellington Ottawa ON K1A 0N4 Canada

Your file Votre reference

Our file Notre reférence

The author has granted a nonexclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of this thesis in microform, paper or electronic formats.

The author retains ownership of the copyright in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

L'auteur a accordé une licence non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de cette thèse sous la forme de microfiche/film, de reproduction sur papier ou sur format électronique.

L'auteur conserve la propriété du droit d'auteur qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

0-612-55150-4



Abstract

The research was carried out in order to describe the perceptions, beliefs, practices, and expectations of Japanese self-access EFL independent learners toward the use of the internet for their English study. Data from thirty subjects was collected through openended e-mail surveys, telephone interviews, face-to-face interviews, subject observations, and document auditing in May and June, 2000.

Japanese self-access EFL independent learners were found to make use of a great variety of tools found on the internet for their study but different beliefs were identified behind their practices. Their perceptions were analyzed with an emphasis on motivating factors and their expectations were examined through technical factors as well as on the emotional aspects of the subjects.

New emerging roles for teachers and the determination of optimum content vs. linguistic levels for EFL classes involving autonomous learners were discussed based on the research findings.

Table of Contents

Chapter 1 Introduction1	
1.1. General background	1
1.2. Identifying the research problem	1
1.3. The significance of the research	3
1.4. The research question	4
Chapter 2 Literature Review	5
2.1. Self-access independent learners	5
2.1.1. What is an independent learner?	5
2.1.2. The degree of autonomy	6
2.1.3. Justification for self-instruction	7
2.1.4. Motivation	8
2.1.5. Learning style and learning strategies	9
2.1.6. Learners' support	10
2.1.7. Self-access	10
2.2. CALL overview	12
2.2.1. Structural perspective of CALL	12
2.2.2. Cognitive perspective of CALL	13
2.2.3. Sociocognitive perspective of CALL	15
2.3. Internet-based language learning	17
2.3.1. World Wide Web (WWW)	17
2.3.1.1. References	18
2.3.1.2. Cultural data	19
2.3.1.3. EFL web sites	
2.3.1.4. On-line language course	20
2.3.1.5. Individual web sites	21
2.3.2. Communication	21

2.3.2.1. E-mail	21
2.3.2.2. Mailing lists	22
2.3.2.3. Newsgroups	23
2.3.2.4. Message boards	24
2.3.2.5. Chat	26
2.3.2.6. Internet telephony and video conference	26
2.4. Integrative CALL Research	27
2.4.1. The teacher-learner relationship	27
2.4.2. Equality	28
2.4.3. New ways of learning	28
2.4.4. Individualization and autonomy	29
2.5. Japanese Context	31
2.5.1. English education in Japan	31
2.5.1.2.EFL vs. ESL	31
2.5.1.2. The Japanese public school system	31
2.5.1.3. Grammar and reading for entrance examinations	32
2.5.2. The internet in Japan	33
2.5.2.1. Popularity of the internet	33
2.5.2.2. The internet in education	34
2.5.3. Autonomous learners in Japan	35
Chapter 3 Research	36
3.1. Research task	36
3.1.1.Research questions	36
3.1.2. Why interpretive research?	36
3.1.3. Researchers' position	38
3.2. Research method	39
3.2.1. Subjects	39
3.2.2. Data collection	39
3 2 2 Le-mail survey	40

69.	vitinimmos to agnas to appetituding adT. & C. Z.
79.	5.2.2. Teacher as a tutor
19.	5.2.1. Teacher as an expert
19.	5.2. New teacher's rolessicher's roles
09.	5.1. Autonomous learners
09.	Chapter 5 Discussion
82.	4.3.2. What does "I can communicate in English" mean?
LS.	4.3.1. Contribution of the internet to motivation
rs.	4.3. Perception
9ς.	4.2.3. Internet as a tutor
ζζ.	4.2.2. Mentality
۲S .	4.2.1. Technology
75.	4.2. Expectations
۲۶.	4. 1.8. On-line course
٤٤.	+.1.7. СЪяг
75.	4.1.6. Newsgroups
. 50	4.1.5. Mail magazine
6t '	4.1.4. Mailing lists
Lt.	4.1.3. E-mail
9†	4.1.2. Japanese web site
<u>c</u> †	
£†	4.1.1.1. Content focus
£†	4.1.1. English web site
£†	4.1. Practice and belief
£†	Thapter 4 Resultsalte
7t	3.2.3. Reliability and validity
I#	3.2.2.3. Observation, face-to-face interview, and document audit
Ιħ	3.2.2.2. Telephone and e-mail interview

5.2.4. How do learners actually learn?	64
Chapter 6 Conclusion	67
Bibliography	70
Appendixes	77
Appendix A	77
Appendix B	81
Appendix C	83
Appendix D	85
Appendix E	86

List of Figures

Figure 1. Levels of implementation in the learning process domain	7
Figure 2. Internet connectedness of Japanese households	35
Figure 3. The relationship of language and content for ESL learners.	68
Figure 4. The relationship of language and content for self-access EF	L learners69

Chapter 1 Introduction

1.1. General background

The first phase of Computer Assisted Language Learning (CALL) appeared in the 1950's and began to be implemented in the 1960's and 70's (Warschauer, 1996). In the beginning, computer use was very limited. This has changed dramatically today because of the increased capabilities of computers. The early use of the computer for language instruction was influenced by the second language acquisition theories and teaching methodologies of English as a Foreign Language (EFL) and the dominant pedagogical theory, which was behaviorist theory. The computer was mainly used for drill and practice work and was limited to local use - network connections were not popular and students studied whatever could be provided on the computer's hard drive. With the advent of Local Area Networks (LAN's) and the internet in the late 1980's Computer Assisted Language Learning began to change. The Internet has been a wonderful tool for EFL learners because it can provide authentic resources and also provide an opportunity to use English without having to physically travel to the English-speaking country.

1.2. Identifying the research problem

In 1997 I carried out an internet-based EFL teaching project in which I taught English to Japanese self-access learners over the internet. The results pointed to a significant need to study internet-based language learning from the learners' point of view. Learners' perceptions, beliefs, and expectations about internet-based language learning are markedly different from that of educators, such as teachers who implement CALL in their teaching or web designers who create EFL related web sites.

I have found two areas which have been overlooked in CALL related research and are in need of study: the neglect of the learners' perspective and a lack of emphasis on self-access independent learners who access the internet of their own will (with no prompting).

CALL related research is not solely responsible for the lack of focus on learners' viewpoints. A mismatch between the pedagogical agenda of the teacher and that of the learner has been discussed in the area of ESL research in the past. The argument is that while the teacher is focusing on one area, the learner is very often focusing on another. (Allwright & Bailey 1991). Nunan argues that "it is the learner who must remain at the centre of the process, for no matter how much energy and effort we expend, it is the learner who has to do the learning" (Nunan, 1995: p155). Research that places the learners' perspective as its central focus is rare, especially in the area of CALL research. Until now CALL related research has been focused mainly on the learners' outcome rather than on the learners' perception of using the computer or the internet for their English study.

Two major approaches, determinist and instrumental, have been identified in the CALL research area since the 1960's (Warschauer, 1998). The determinist approach asserts that a computer is an all-powerful machine that in and of itself brings about certain determined results. The instrumental approach sees technology merely as a tool in aiding humans in achieving their full potential. Warschauer argues that both of these approaches are valid to some degree, but what has been missing in both of these approaches is the belief that learners (humans) and their learning environments are also evolving along with the dynamic technological changes. The internet is not merely a new language learning tool, but rather a new social phenomenon. Because of this, Warschauer sees a need for qualitative research to explore how language, learning and the learners are evolving in this new context (Warschauer, 1998).

The number of internet-based EFL learners is increasing with the rapid growth and acceptance of the internet. However, most CALL-related research is limited to the study of CALL in the classroom. Those who are benefiting most from internet-based learning are the independent learners who access the internet from their homes, since this greatly

expands the learning experiences available. The limitations of time and space no longer exist as they do with the students using the computer in the classroom. Thus, although the independent learners are pushing the frontiers of CALL as never before, precious little research has been carried out to examine the results of this new form of EFL learning. The internet is said to be a remarkable tool for EFL teaching. It must also be seen to be this way for learning. Educators must focus as much, if not more, on the learner's needs as they do on the instructor's needs.

Greater success in CALL will occur when educators understand more fully what autonomous learners actually do and how they learn on the internet as they study. This will require the educators to see internet-based EFL learning from the learners' perspective. This can be achieved with interpretive qualitative research focusing on self-access independent EFL learners.

1.3. The significance of the research

The outcome of this research will provide a better understanding of how Japanese self-access EFL learners are adapting to the new technologies available to them. Since the subject is limited to Japanese learners, one may not be able to generalize the results. However, the findings will benefit those who are providing English aids to Japanese learners via the internet, such as web designers, teachers, and on-line education administrators. More importantly, I believe this qualitative research will provide a better understanding of self-access independent learners and lead the research in CALL into a more productive direction.

1.4. The research question

The intention of this research is to describe the internet-based language learning experience of Japanese self-access EFL independent learners. The perceptions, beliefs, practices, and expectations of Japanese self-access EFL independent learners toward the use of the internet, including e-mail, for their English study will be described. This research intends to answer the following questions:

- How do Japanese self-access EFL independent learners use the internet for their English study?
- Why do they use the internet for this purpose?
- How do they perceive internet-based learning?
- What do they expect of the internet?

A major goal of this research is to provide readers with an understanding of learners' needs, goals, perspectives and perceptions. It is important to understand the viewpoint of Japanese self-access independent learners as opposed to other classroom EFL students as well as the viewpoint of educators who integrate the internet into their teaching, as I believe the differences among them are significant.

Chapter 2 Literature Review

The literature review has three main objectives: to define the research subjects (Japanese self-access independent EFL learners), to explain internet-based language learning and important issues associated with it, and to explain the relation between technology and EFL education from a Japanese cultural perspective.

2.1. Self-access independent learners

2.1.1. What is an independent learner?

Autonomy and independence are used more or less synonymously in language teaching (Benson, 2000). However, in this study independence will be used to describe the subjects, who are located all across Japan and who study independently, without any prompting. The subjects of this study are learners who access the internet from their home and study English independently in this way. For this reason the term "independent learners" will be used to describe these self-access learners, although the majority of the literature prefers using the term autonomous over independent. In the literature review, therefore, autonomous is used more often than independent in describing the subjects.

The definition of an independent learner involves two concepts: the learners' autonomy and the concept of self-instruction. According to Dickson, learners' autonomy is an attitude toward the learning process while self-instruction is a mode of learning (Dickson, 1987). Holec defines these two aspects as capacity (defining their own goals) and practice (creating their own learning opportunities) (Holec, 1988). Autonomous learners take responsibility and control over what, how and when to learn. Dickson refers to this attitude as self-direction and defines it as "a particular attitude toward the learning task, where the learner accepts responsibility for all the decisions concerned with his learning but does not necessarily undertake the implementation of those

decisions" (Dickson, 1987: p11). Thus, fully independent learners are those who make their own decisions although they may not act on them in every case.

Littlewood furthers this argument, suggesting that an autonomous person is one with the capacity to make and carry out the choices that govern her/his actions. For Littlewood, an autonomous person is one who has the ability (knowledge and skills) and willingness (motivation and confidence) to act independently and decisively. He suggests three domains in which students aim to develop autonomy in foreign language learning - communications, learning and personal life. Autonomy as a communicator depends upon the communication strategies and linguistic creativity developed. Autonomy as a learner depends upon the development of learning strategies and independent work habits. Autonomy as a person, which is not specific to language learning but is necessary for all kinds of learning, depends upon the creation of personal learning contexts and the expression of personal meanings (Littlewood, 1996).

To summarize the recent research about learner's autonomy, independent learners take responsibility over the decision making concerning their learning and they have the ability to implement those decisions. Independence requires the willingness to act independently combined with the ability to implement one's decision. This ability depends upon the development of communication strategies, learning strategies, linguistic creativity, independent work, creation of personal learning contexts, and the expression of personal meanings.

2.1.2. The degree of autonomy

Independence is relative, as can be seen in Nunan's concept of learner centeredness. He sees five levels of learner centeredness in the learning process domain (Figure 1). The five levels are:

1. Awareness	Learners identify strategy implications of pedagogical tasks and
	identify their own preferred learning styles/strategies.

2. Involvement	Learners make choices among a range of options.
3. Intervention	Learners modify / adapt tasks.
4. Creation	Learners create their own tasks.
5. Transcendence	Learners become teachers and researchers.

Figure 1. Levels of Implementation in the Learning Process Domain (Nunan, 1995).

In Nunan's Transcendence stage the fully independent learners become teachers and researchers themselves. This concept is very similar to Dickson's description of autonomous learning in which he states, "in full autonomy there is no involvement of a 'teacher' or institution [and] the learner is also independent of specially prepared materials" (Dickson, 1987; p11).

2.1.3. Justification for self-instruction

Dickson views independent language learning as being based on an assumption that all learners are different in their language learning aptitude, cognitive styles and strategies (1987). When one sees learning based on this assumption the advantages of self-instruction and autonomous learning become obvious.

Feelings of being a linguistic infant in the early stages of learning often result in a lack of empathy towards the target language speaker. Self-instruction may reduce any feelings of inferiority which in turn helps to increase feelings of empathy for the target language speakers. In addition, involvement in decision making may increase the learner's motivation to achieve. Dickson claims there is evidence that when subordinates are able to exercise control (or participate in decision making), productivity improves.

Negative aspects of affective factors on language learning include language shock, language stress, and anxiety (Schuman, 1975). Self-instructional learning mode is thought to control these and other affective factors by achieving feelings of empathy and

by reducing feelings of inhibition. Empathy may be developed within a group of learners by reducing the centrality of the teacher, so that his/her role becomes more of a consultant. This is likely to increase the empathy between the teacher and learners with the effect of strengthening the bond among learners, which in turn reduces competition and increases cooperation within the group. Rogers argues that where the teacher is empathic, liking and affection are more evenly diffused within the group, and "every student tends to feel liked by all the others - to have a more positive attitude towards himself and toward school" (1969: p118).

The major source of inhibition for most language learning groups is other learners within the class and, sometimes, the teacher. Inhibition increases as the feeling of competitiveness increases and decreases with the development of cooperation within the group. It is likely to be influenced by several factors related to the learning environment such as extrinsic and intrinsic motivation.

Some forms of assessment are also seen to be a major cause of inhibition because they simply count correct answers. Stivick warns against the evaluation paradigm, which consists of the teacher saying to the students "Now try to do this so I can tell you how you did" (Rogers, 980: p23). The student generally comes away feeling that s/he has been evaluated negatively or positively - along with her/his product. For this reason Dickson suggests learners learn self-assessment as a part of the self-instructional mode of study. In summary, two advantages given to independent learners who study in self-instructional mode are an increase in empathy and a reduction in feelings of inhibition.

2.1.4. Motivation

One might suspect it is more difficult for the learner to maintain his/her motivation in a self-instructional setting. However, contrary to common perceptions it has been found that many characteristics of self-instruction have a positive effect on motivation (Dickson, 1987). Before discussing the details of Dickson's findings an explanation of two types of motivation will be clarified.

Motivation consists of two distinct types: extrinsic and intrinsic, and these two types are the key to understanding independent learners' motivation levels. Deci defines intrinsically motivated activities as, "ones for which there is no apparent reward except the activity itself. People seem to engage in the activities for their own sake and not because they lead to an extrinsic reward... Intrinsically motivated behaviors are aimed at bringing about certain internally rewarding consequences, namely, feelings of competence and self-determination" (Deci, 1975: p23). Conversely, extrinsically motivated behaviors are carried out in anticipation of a reward received from outside and beyond the self such as money, prizes or even certain types of positive feedback (Brown, 1993). For independent learners, intrinsic motivation is essential for insuring long term success, although extrinsic motivators can also contribute to learning. Students in independent learning mode make use of teachers as helpers or consultants rather than instructors. In this situation students feel less threatened by their teachers. Independent learners also see their peers as partners rather than competitors, reducing stress in this way as well. Extrinsic motivators often increase stress for students working this way. Allowing a learner to be involved in decision making may help to build and maintain the learner's self-esteem, which in turn helps to increase the learner's

2.1.5. Learning style and learning strategies

increased motivational levels.

According to Nunan's five levels of learner centredness, in order to be an independent learner one has to be aware of her/his learning style and identify learning strategies. Although in SLA (Second Language Acquisition) theory, "style" and "strategies" are often similarly interchanged (Brown, 1993), these two concepts are different. Learning style is "an individual's natural, habitual, and preferred way(s) of absorbing, processing and retaining new information and skills" (Soo, 1999). For example, one might be more visually oriented, more tolerant of ambiguity, or more reflective than others (Brown,

level of intrinsic motivation. Also, since the independent learner has more freedom they

are likely to choose the learning techniques that hold their attention, resulting in

1993). Ngeow claims that learners who are more conscious of their learning styles make better use of learning opportunities (Ngeow, 1999). Learning strategy, sometimes called learning skill (Wenden, 1985) is the learner's knowledge of how s/he can learn. This is the knowledge about how one can solve a specific problem correctly or how one can carry out a specific task in an efficient way. This knowledge is thought to be a desirable prerequisite of independent learning (Dickson, 1987).

2.1.6. Learners' support

Independent learning does not refer to studying in isolation. Most independent learning involves teachers, although their role is different from that of the teacher-centered instructional mode - here their role is more of an aide, facilitator or counselor. This change in the instructor's role also alters the affective aspect of the relation between the teacher and the learner, resulting in increased support for independent learning. The less the teacher controls, commands, manipulates and persuades, the closer the tie between the learner and teacher becomes, making it easier for learners to ask for help. Peer support is also very important for independent learners. For most learners, being a member of a group of peers who are all striving towards similar ends and struggling with similar difficulties is tremendously helpful in maintaining morale. (Dickson, 1987)

2.1.7. Self-access

Self-access learning refers to direct access to learning resources without the supervision of the teacher. This research focuses on learners' direct access to the internet as a learning resource. When independent learners have access to the internet at times that are convenient to them, these learners are said to be self-accessing the internet.

Within a school system self-access centers are usually set up to enable free and direct access to learning resources such as ESL software, audio material, etc. as well as internet access. Learners may use these resources to work towards individual objectives. Dickson (1987) defines self-access as meaning the learner may:

- Decide on what to do. This may include decisions on what objectives, skill area,
 etc. to work on.
- Search for the appropriate material for the objectives decided upon.
- Make use of the materials provided. This includes finding out how particular
 activities are carried out, what to do first, as well as how to assess themselves on
 the achievement of the objectives.

Self-access learners in this particular research should have control over when, how often, and how long to access the internet for their English study.

In summary, the subjects of this study, self-access Japanese independent EFL learners, are those people who access the internet from their home by themselves in order to study English and who have control and responsibility over their studying. From the literature review we can get an understanding of the unique character of this type of learner. They may feel more empathy and less inhibition than those who study in a classroom setting. As well, they have an increased level of intrinsic motivation that allows them to study English on their own. They generally have a good understanding of what their optimal learning style and learning strategy is, and usually have access to some form of support system.

2.2. CALL overview

Internet-based language learning can be defined as learning a language through utilization of the internet. However, this new form of learning entails much more than this and must be examined further in order to more fully understand it. To do this one must first review the history of Computer Assisted Language Learning (CALL).

The computer has been recognized as a powerful and effective learning tool for many years, becoming increasingly popular with the advent of the personal computer in the 1980's. Internet-based language learning is a recent phenomenon of CALL that emerged with the widespread popularity of the internet. Throughout the history of CALL computer use has been influenced by two main areas: EFL pedagogy and technology. Warschauer & Kern view the 40 year history of CALL as having three main theoretical movements: the Structural perspective, the Cognitive/Constructive perspective and the Sociocognitive perspective (Kern & Warschauer, 2000). Each stage corresponds to a certain level of technological development.

This section will review each stage of CALL in relation to pedagogical theories and technology and the way the computer has been viewed and used. For each phase three questions will be addressed: what was the particular EFL pedagogy or SLA (Second Language Acquisition) theory, how was the technology altered in each phase, and how was the computer viewed by students and teachers?

2.2.1. Structural perspective of CALL

At this stage of CALL's development the Grammar translation method was the dominant process of teaching and learning a foreign language. Grammar translation, popular from the 1920's to the 1950's, teaches a new language through the translation of the students' first language, with emphasis on analysis of the sentence structure. Influenced by American structural linguists, the Audiolingual method began to emerge in the 1940's. Although emphasis was placed on spoken language rather than written

text in the Audiolingual approach, the primary focus was still placed on sentence structure. Both methods were based on the assumption that language teaching syllabi should be organized by linguistic categories and that the sentence was the primary unit of analysis and practice (Kern & Warschauer, 2000).

At this time developments in the field of psychology, especially Behaviorism, were influencing language teaching approaches. The behaviorists proposed that language is made up of a series of habits which are acquired by repetition in a linear structure, from easy to difficult. They also believed that learning was maintained by reinforcement, a positive verbal or non-verbal response given to the learner (Brown, 1993).

In the 1960s and 1970s the first use of the computer for language learning, the drill-and-practice method, emerged. It was based on the behaviorist learning model which viewed the computer as a machine for delivering instructional materials to the student without fatigue. PLATO, the best-known tutorial system, ran on its own special hardware. At this time the computer was used mainly for extensive drills, explicit grammar instruction, and translation tests (Ahmad et al., 1985).

2.2.2. Cognitive perspective of CALL

In the 1970's the behaviorist approach to language learning was widely rejected at both the theoretical and pedagogical levels. The theory that replaced it was Noam Chomsky's (1959) Transformational Generative Grammar approach. According to this theory, linguistic competence is innate and learners only have to acquire a limited set of transformations that can be used over and over again, instead of an endless list of rules. The Natural Approach, which is based on the theoretical principles of language learning proposed by Chomsky, was the most influential theoretical approach in the 1980's.

The originators of the Natural Approach, Tracy Terrell and Stephen Krashen, believe that the best way for adults to learn a foreign language is to learn in the same way that children learn their first language. Krashen reduced his theory of second language acquisition to five hypotheses about the nature of language development which govern the Natural Approach: Acquisition/Learning, Monitor, Natural Order, Input, and

Affective Filter. The Acquisition/Learning Hypothesis states that people can develop language ability either by "acquisition," which is the natural, unconscious way in which children develop language, or by "learning" through conscious, formal instruction in the rules of the language. According to Krashen and Terrell, learning does not assist acquisition; they are separate, unrelated processes. The Monitor Hypothesis states that the rules the learner develops through the learning process serve for self-correction of errors. The Natural Order Hypothesis states that people acquire grammatical structures of a new language in a predictable, natural sequence, no matter what their native language, and errors are natural and expected parts of this process. The Input Hypothesis claims that learners acquire language best when it is slightly beyond their current ability level. Finally, according to the Affective Filter Hypothesis, people acquire language better when they are motivated and have high self esteem combined with low anxiety (Krashen & Terrell, 1983).

At this time a shift from instilling accurate language habits to fostering the learner's mental construction of a second language system occurred. In CALL the focus became more on using forms rather than on the forms themselves. Grammar began to be taught implicitly and students were encouraged to generate original utterances instead of manipulating prefabricated forms. Intrinsic motivation and interactivity were fostered as well. Learning was beginning to be seen as a creative process of discovery, expression, and development, and error was seen as a natural by-product of the creative learning process (Warschauer, 1996).

In the 1980's the mainframe was being replaced by personal computers that allowed greater possibilities for individual work. At first non-drill format CALL software was used such as paced reading, text reconstruction and language games. In these programs the computer remained the "knower-of-the-right-answer" (Taylor & Perez, 1989: p3). However, with the appearance of multimedia technology which allowed for a variety of media to be accessed on a single machine (text, graphics, sound, animation, and video) the purpose of the CALL activity became not so much to have students discover the right answer, but rather to stimulate students' input, discovery or critical thinking. The software used for these purposes may not have been specifically designed for language

learners and included programs such as SimCity, Sleuth, and Where in the World is Carman San Diego (Healy & Johnson, 1995).

The cognitive approach viewed language learning not as a conditioned response but as an active process of generation and transforming knowledge. However, providing comprehensible input was still seen as more important than an explicit focus on structure.

In this sense, the computer was used not to foster authentic social interaction but to give individuals an opportunity to mentally construct the knowledge of the language from extensive natural data.

2.2.3. Sociocognitive perspective of CALL

The most recent development in computer-assisted language learning is known as the Sociocognitive approach. The Cognitive approach to CALL was criticized for using the computer in an ad hoc, disconnected fashion and it was said that the computer made "a greater contribution to marginal rather than central elements of language learning" (Kenning & Kenning, 1990: p90). However, the Sociocognitive approach sees language not just as a private, "in the head" affair, but rather as a socially constructed phenomenon (Kern & Warschauer, 2000).

Hymes's Communicative Competence (Hymes, 1967), an area within the Sociocognitive approach, speaks of the social appropriateness of language use. Communicative competence is learned or fostered by learning language in an appropriate context with genuine purposes that will be encountered in the target culture (Omaggio, 1984). Language teaching has become no longer just a matter of linguistic competence but also a matter of sociolinguistic competence, discourse competence and strategic competence. Language instruction was thought to not merely provide comprehensible input but instead to aid students enter into the kinds of authentic social discourse situations that they would later encounter outside the classroom.

The development of the internet brought with it a shift from human-to-computer interaction to human-to-human interaction. Two significant developments that have

emerged with the advent of the internet are the evolution of computer-mediated communication and globally-linked hypertext or hypermedia (Kern & Warschauer, 2000). Computer Mediated Communication (CMC) itself has existed since the 1960's but has only become wide-spread in the 1990's with the expansion of the internet. There are two types of CMC: asynchoronous communication such as electronic mail and synchoronous communication, represented by Internet Relay Chat. With CMC one-to-one communication or one-to-many communication is possible and learners can communicate directly, inexpensively, and conveniently with people all over the world. Globally-linked hypertext and hypermedia can be seen in the World Wide Web (WWW). The important features of WWW for language learning are 1) Informational representation through multilinear strands linked electronically, 2) Integration of graphic, audio, and audio-visual information together with texts, 3) Rapid global access and 4) Ease and low-cost of international publication (Kern & Warschauer, 2000). With these features learners now have quick access to authentic materials of their own personal interests.

At this stage the computer is no longer seen as a tool for studying with one particular software package. Instead, the computer is now a machine that can deliver limitless authentic materials to the learners' desktop, helping to create an optimal environment for language learning (Egbert et al. 1999). The computer now allows learners to engage in genuine meaningful negotiations. CALL activities now include task-based learning in which learners are engaged in authentic tasks such as e-mail exchange with native speakers of their target language and content-based learning in which learners study language and content simultaneously as can be seen in the publishing of home pages on the World Wide Web.

2.3. Internet-based language learning

Network-based language teaching (NBLT) is defined as "language teaching that involves the use of computers connected to one another in either local or global networks" (Kern & Warschauer, 2000). Therefore it is proper to define internet-based language learning as language learning that involves the use of the internet. In contrast to NBLT, whose primary focus is on human-to-human communication, internet-based language learning does not necessarily focus solely on the communication aspect of the internet.

From the perspective of internet-based language learning the internet should be utilized for information and communication. The World Wide Web (WWW) represents information, and communication is achieved mainly through electronic mail (e-mail), although there are other methods of communication present on the WWW as well. The same can be said for information, which can be obtained in e-mail messages as well. However, for the sake of clarity the information and communication aspects of internet-based language learning will be dealt with separately.

Categorization will be examined based on the specific aspects of the information the learner appreciates and holds an interest in. Communication will be considered based on the kinds of tools available for human-to-human communication. Examples of implementation in EFL of these aspects - information and tools - will be found in Appendix A. The objective of this chapter is to explain all the possible aspects and tools of internet-based language learning for EFL independent learners. This will be achieved not by focusing on the technology of the internet, but rather on aspects of EFL teaching and learning.

2.3.1. World Wide Web (WWW)

The computer language used on the WWW is HTML (Hypertext Markup Language) which makes possible the linking of web pages. A web page can contain text, links to

sounds and video, graphics, animation, and links to other web pages. A web browser is a tool used to navigate one's way on the WWW. Today browsers are very user-friendly, using graphic interfaces which, because of their easy operation, have attracted millions of users. With search engines such as Yahoo, Infoseek, Lycos and others, users can easily search and retrieve a comprehensive range of information and resources located on the WWW.

The latest features of the WWW are interactivity and multimedia. With innovative languages such as CGI (Computer Gateway Interface) and Java, the user can not only receive information as was the case in the past but can now also send and receive feedback as well. The development of audio and video programs such as Real Player along with high speed internet access has given the user the ability to watch news, movies, or even live events whenever they desire.

Because the most common language used on the WWW is English, a great many sites can be used as material for studying the English language. The web sites used for this purpose can be categorized based on the aspects of the sites the learners most often use them for: references, cultural data, EFL web sites, on-line courses and self-expression.

2.3.1.1. References

Numerous on-line dictionaries and encyclopedias exist on the WWW today which EFL learners make use of regularly for their English study. Many dictionaries and encyclopedias contain, along with the usual definitions and explanations, images, sounds and video clips as further aids in understanding the word or concept being investigated. This assists greatly in comprehension, making the internet an invaluable tool for the language student. The page may also contain links to other web pages, allowing the user to explore the subject in more depth.

Dictionaries and encyclopedias are also available in CD-ROM form for off-line use. CD-ROM's generally contain vast amounts of data, including graphics and sound, which can be accessed faster than through the internet because there is no need to download anything. The drawback to using CD-ROM's is their static nature. Once they have been

produced they cannot be altered, whereas information on the internet can be updated instantly, making the internet the method of choice for the gathering of information for most people.

On-line libraries and databases are also available on the internet. While some can be used free of charge, others cannot. On-line databases allow users to locate and retrieve books, articles or other information without ever leaving their home.

References are essential tools for independent learning. In order to fully utilize the online resources the learner must take responsibility for their study of English. This means they must know when to use the references, how to use them and why to use them. Taking responsibility in this way shapes their metacognitive (learning) skills and research has repeatedly shown that the conscious or deliberate use of learning strategies is related to language achievement and proficiency (Oxford, 1994).

2.3.1.2. Cultural data

Any web sites that are presented in English can be used as study material. However, learners are most likely to choose sites that match their interests and those sites can be easily found using a search engine. The learners can read the latest or archived issues of magazines and newspapers, listen to radio programs and English songs, and watch news or movies. The advantage of these sites from a language learning point of view is the provision of authentic input and cultural cues.

2.3.1.3. EFL web sites

These are the sites created for the purpose of English language instruction and learning. Certain sites have been created for teachers while others are for learners - and some are for both. EFL web sites for teachers contain information and help on English instruction such as teaching plans and materials, and discussion groups. Sites for learners usually contain drills and quizzes, message boards, and keypal lists (to be explained later in this chapter) for socialization. Most also contain links to other web

sites the author believes will be of interest. Some sites are organized to make it possible for learners to interact with an instructor, someone who teaches English. The learner can send an e-mail message to a teacher for communication practice or to find answers to questions.

These types of sites can be considered as all-in-one learning tools for EFL learners. Through a combination of activities available on one site the learners have an opportunity to interact with an authentic audience and carry out genuine tasks with support from peers or teachers. The atmosphere of these kinds of sites appeals to most learners since the authors usually strive to create an atmosphere of friendliness in an attractive, relaxing setting so that learners can learn in a comfortable, motivating environment.

2.3.1.4. On-line language course

On-line courses can be an effective way of studying English for self-access independent learners provided they have chosen the course independently, of their own free will. As discussed, independent learning mode does not necessarily mean the student works alone, without a teacher.

Some organization such as universities, colleges and ESL schools offer on-line EFL courses via the internet, usually for a fee. Some organizations offer non-fee courses on a trial basis, allowing learners to reduce the financial risk of withdrawing halfway through a course if it does not meet their needs. On-line courses range from beginner to advanced, and from non-credit to full credit.

One-line language courses can be very attractive for those who want to study English but are faced with the time and location restrictions typical language courses impose. Partaking in on-line courses helps to strengthen learner autonomy since in this type of course the learner carries the responsibility of whether to join the course or not, and when and how to study.

2.3.1.5. Individual web sites

These are web sites created by learners to aid their own language learning. Some students create their own homepages as a school course requirement. Other independent learners create homepages in English on their own for self-expression. The creation of a homepage is quite easy today because of advances in HTML editing software. They can then post their site on the WWW via their Internet Service Provider (ISP) or directly on web sites devoted to this type of service, such as geocities.com.

The creation of a homepage is often recommended for EFL students because it provides them not only with an authentic audience but real, genuine goals for their work. For students to not only learn about English but also to be engaged in the use of English with native speakers provides enormous improvements in motivation, inspiration, and self-esteem (Egbert, 1999).

2.3.2. Communication

Communication on the internet can be synchronous (occurring at the same time) or asynchronous (not simultaneous). The most common form of synchronous communication is internet chat groups. Other, less popular forms include internet telephone communication and video conferencing. Tools for asynchronous communication include electronic mail (e-mail), mailing lists, newsgroups and message boards.

2.3.2.1. E-mail

With user-friendly e-mail applications users can compose e-mail messages on or off-line and send them to one or many people whenever it is convenient to do so, and can receive e-mail messages by connecting to the server. E-mail messages arrive almost instantaneously, usually within one minute from one end of the world to the other. Sent or received messages can be saved on the user's local computer for future reference as well. The stored messages can later be sorted and searched by subject, date, sender,

receiver and so forth. Email messages can also be used to send file attachments. Any files on the user's computer, such as text documents, graphics, sound files or even a complete program can be sent to another user. The advantages of e-mail are many: it is fast, easy, inexpensive and extremely convenient compared with the regular postal system.

Keypal exchange, similar to the pen-pal system of writing letters to people in other countries, is a very common use of e-mail for English language study. Students write e-mail messages in English and send them to either a native English speaker or a learner of English. The aim of the keypal exchange system is to improve writing and reading skills and to understand the target country's culture through meaningful exchange of English messages. Although most keypal activities are initiated by school teachers as an English lesson activity, there are sites on the internet that provide lists of people who are searching for keypals to exchange English messages with.

2.3.2.2. Mailing lists

Mailing lists are lists of subscribers' e-mail addresses who share common interests. An e-mail message sent to a mailing list will be sent to every person who has submitted their e-mail address to the list. Mailing lists allow groups of people to discuss issues, share information or ask questions related to a common topic via e-mail (Graus, 1997). To join or leave a mailing list is quite easy because of sophisticated mailing list programs such as Listserv, Mailserv and Majordomo. Often in order to be added to or removed from a mailing list one need only send an e-mail message containing the command SUBSCRIBE or UNSUBSCRIBE <name of list> <one's name>. At other times the user can join a mailing list by entering a name or e-mail address in a designated box and clicking an OK button.

There are numerous mailing lists targeting EFL/ESL teachers. Some of them are very popular such as the TESL-L mailing list, which has more than 20,000 members. For EFL learners, there are thousands of lists that have been created by native English speakers that are of potential interest to them. However, sometimes mailing lists may

be too complex to understand or too overwhelming for beginner students, which will cause them to hesitate in posting messages.

Students Discussion Lists are mailing lists that specifically wish to target students. They often provide introductions and explain how to participate in mailing lists of interest (Graus, 1999). However, in order to subscribe to many of the lists provided the student must first register for a particular English class, making many inappropriate for self-access learners. Many EFL web sites for self-access learners have their own mailing lists which learners can join by clicking an icon or button.

The benefits and drawbacks of utilizing mailing lists for English study have not been investigated in very much detail to date. However, it can be imagined that learners will have similar experiences to being involved in keypal activities because participating in mailing lists also provides the opportunity to use English in a meaningful way with a genuine audience on interesting topics. One disadvantage of keypal projects is that sometimes a student will not receive a reply, thus decreasing their level of motivation. In contrast, mailing lists usually have a large number of participants, and thus more opportunities to overcome this problem.

2.3.2.3. Newsgroups

A newsgroup consists of a group of people discussing a particular subject via e-mail. Rather than sending their messages to each other, their messages are stored on a server where every member is then able to read them. If the newsgroup is open to all readers, then anyone can read the messages that have been posted.

Newsgroups are organized so that it is easy to navigate through the information to find the subject you are searching for. The first several letters of the subject are listed, and as the focus narrows, more letters are added onto the newsgroup subject name. Examples of newsgroup categories are lang (language), sci (science), comp (computers), etc. To illustrate, if the reader is looking for a newsgroup about Japanese EFL learners, the category can be something like jap.lang.efl or jap.lang.esl.

E-mail programs usually include software that allows the user to use newsgroups, allowing the user to easily navigate through the vast numbers of newsgroups available on the internet today. The software allows users to post new messages, respond to previous messages, and even create their own newsgroup.

There are thousands of newsgroups available on the WWW today, each with a different topic of discussion. To participate in a newsgroup, one's internet provider must have a Network News Transfer Protocol (NNTP). This is not a problem usually, as most ISP's now have this feature. However, the ISP may not subscribe to every newsgroup available and it is important for the student to find out which groups their particular ISP will allow.

To date there has been little research on the use of newsgroups for EFL learners. Many EFL learners are believed to subscribe to newsgroups that are concerned with either English itself, or to an English-speaking newsgroup focusing on a subject they are interested in. Reading or posting messages on the subject of English study can greatly aid students. Replies from more than one person, giving different opinions on what can be done to solve a particular problem will help to improve a learner's ability to deal with difficult English issues.

2.3.2.4. Message boards

Message boards, areas on the world wide web where users can post questions, answers, and opinions, have been in existence for several years. Many web sites host and manage their message board(s) for their visitors. By accessing a particular board on the internet visitors can post or read messages related to the topic of the site.

If a user wants to post a message on a message board, all that is required is for them to type the message in a box designated by the web site and then click on an icon to submit it. Instantly the message will be posted on the message board and everyone who accesses that message board will now be able to read the message. Usually messages are presented in the order they were posted. On more sophisticated message boards, the messages can be organized and presented in a stratified way. The original message is

shown as a head topic and any replies are presented as a branch of the original message. If there is a reply to the reply message, it will be shown as a branch off of the second reply. This way the readers can follow the branches of the topic they are most interested in rather than having to read through all of the postings as must be done on a simpler message board that is not organized in this way.

Creating a program for a message board system can be difficult and time consuming. Fortunately there are message board programs available that can be downloaded on the internet for free or for a minimal charge. Because of this anyone can set up a message board on their web site with a minimal amount of difficulty. Some web sites exist solely for the purpose of providing message boards along with the space needed for them to people who wish to use their services. In this case one's web site merely needs a link to the message board site where their board has been set up.

Like mailing lists and news groups, there has been very little research carried out on this type of communication from a language learning point of view and it is impossible at this point to determine how large a role the message boards play in language learning. However, a number of EFL learners enjoy reading and sometimes posting messages on English language web sites that focus on the topics they hold an interest in. It has also been observed that on some EFL web sites students use message boards as a method for finding keypals. By leaving messages introducing themselves and asking for private e-mail replies they are often able to find English-speaking writing partners.

2.3.2.5. Chat

Internet chat programs allow users to type messages in real time to other users sharing the same "chat room". The chat room exists on the particular web site being accessed. This highly interactive form of communication is more exciting than static message boards, but requires the user to be able to type with relatively good speed. In some cases, a private chat can be arranged between two parties who meet initially in a group chat. Chats can be ongoing or scheduled for a particular time and duration. Most chats

are focused on a particular topic of interest. Many web sites offer the ability to save the contents of a chat for later reference as well.

Although Chat is real time communication, it will never replace face-to-face human contact, which includes facial expressions, gestures, and other body language. Nevertheless, since in many cases students rarely come into contact with native speakers. Chat can offer them the chance to interact and use the knowledge they have gained in their classroom in a real communicative situation. This is not only motivating, but it can also be a beneficial middle stage in the students' development of speaking skills. Chat is a mixture between writing and speaking. Just like speaking, it is an instantaneous way of communicating, but it gives students a few extra seconds to think about how to express themselves and as such it can be a useful leg up to real face-to-face conversation (Graus, 1999).

2.3.2.6. Internet telephony and video conference

For real-time communication there are even programs in existence that enable users to talk to each other live (Internet telephony) and see each other at the same time (video-conferencing). However, these applications require high-speed internet connections with few bandwidth restrictions and usually extra equipment, such as microphones and video cameras. A slow internet connection can make the experience frustrating and annoying, resulting in voices being cut off or lost and pictures that are choppy or incomplete. For theses reasons both internet telephony and video conferencing are not popular. It is likely that in the future these applications will improve dramatically, so that international communication at the cost of a local phone call, or even free of charge, will become a reality. Real-time communication with people around the world will then be commonplace in the EFL classroom.

2.4. Integrative CALL Research

In his earlier article Warschauer referred to the third phase of CALL as Integrative CALL (Warschauer, 1996). Later he designated this phase as the sociocognitive perspective of CALL (Kern & Warschauer, 2000). The focus of the sociocognitive perspective was on the sociocultural and sociolinguistic aspects of CALL whereas the Integrative perspective centered more on technology, including multimedia, hypermedia, the internet and world wide communication through networks.

This chapter will discuss what recent CALL research has revealed, with particular emphasis on the sociocognitive and integrative aspects of CALL (the third phase).

2.4.1. The teacher-learner relationship

The changing role of the teacher in the language classroom has been an object of discussion and debate since the early stages of CALL's history. The argument usually centers around the shift from teacher-centered to student-centered forms of teaching. The process of taking the control of information away from the teacher and into the hands of the students began when students first began to use the computer for drill practice. From that point on the relationship between the teacher and his/her students began to change.

As the students' collaborative work began to be implemented in CALL this change in relationship became clearer. The teacher's role became more of a facilitator, helper or counselor for students who now had more control in the classroom. Now the chief responsibility of the instructor had changed to one of "help[ing] learners develop their learning competence" and "creating the material conditions favorable to language learning" (Gremmo & Riley, 1995: p159).

When a learner studies in self-access mode using the internet, an emphasis must be placed on the multiplicity of resources - including people - available for learning. Learners are likely to be involved in a variety of different tasks, developing expertise in

differing areas. Thus, this type of learner is more likely to consult fellow students as well as the teacher on sources of information, appropriate materials and so on. At this stage, the relationship between the teacher and the learner is not much different from that of two learners (Johnston, 1999).

2.4.2. Equality

In Computer Mediated Communication (CMC) more equal participation by women, minorities, disabled or shy students, and students with unusual learning styles have all been observed (Warschauer et al, 1996). Researchers believe this is mainly due to the anonymity provided by CMC.

Unlike face-to-face communication, in which up to 73% of the message can be non-verbal cues, common CMC tools do not provide for the auditory, visual, kinesthetic cues available in face-to-face intercourse (Bosher, 1990). This reduces static social context clues related to race, gender, handicap, and status that can often reinforce unequal participation in some types of interaction (Kiesler & Sproull, 1991). It also reduces dynamic social context cues, such as frowning and hesitating, which may intimidate some people (especially those in positions of less power and authority) by reminding them that their comments are being evaluated (Finholt, Kiesler and Sproull, 1986).

Equal participation is also due to individualization. Since CMC allows students to contribute at their own time and pace, it neutralizes the effect of traditional classroom dynamics, which favor those who speak up most quickly, most often, and are most willing to interrupt (Selfe and Meyer, 1991).

2.4.3. New ways of learning

The findings relate not only to the area of EFL but also to education in general. In the past learning was defined as answering the teacher's questions with proper answers or simply memorizing the facts. However, the ability of the internet to facilitate the

sharing of ideas among students and others is changing the essential meaning of learning. Learning today is a social activity. Learners learn through interaction with others, by sharing ideas and building on the comments or writing of others. The ability to access and interpret information is at the core of the learning process today, as opposed to the memorization of facts seen in the past. (Warschauer et al, 1996)

2.4.4. Individualization and autonomy

The expansion of the internet has brought with it an increase in individualization and self-empowerment and as a result, autonomy in learning. One experiment demonstrated how the simple introduction of e-mail into an ESL classroom contributed to individualization and student autonomy. Marsh (1997) conducted an experiment to find which learning strategies would work best for different kinds of learners and to determine the best approach for teachers in facilitating these strategies. At the time his students were submitting a journal to him regularly but he found that with this selfinstructional mode of study the students were experiencing feelings of isolation and loneliness. To combat this problem Marsh introduced the use of e-mail between the teacher (himself) and students. After changing to e-mail Marsh noticed that the messages were becoming less formal with students expressing their feelings about their language learning experience far more freely. During a 10 day absence by Marsh from using e-mail the students spontaneously began to e-mail each other. At first the topics of their messages were purely social. However, after a week, wider issues such as their impression of Britain and other cultural issues were discussed, followed by the issue of English grammar. He saw evidence of students attempting to tackle their problems independently, without the aid of the teacher. Marsh's findings show how the use of email can foster problem solving through interaction with others with the result being increased student motivation and autonomy.

Along with e-mail, other aspects of the internet support diversity in learning methods: multimedia technology can provide new, creative learning styles and is especially useful for visual and auditory oriented learners. Socially oriented learners can learn through

interaction with others with programs such as chat rooms and mailing lists. Technology, especially the internet, makes it increasingly feasible to individualize and personalize the learning process and this technology is fostering the autonomy of learners (Murray, 1999).

2.5. Japanese Context

2.5.1. English education in Japan

2.5.1.2.EFL vs. ESL

Although the terms Foreign and Second, when referring to language, are often used synonymously, there is today consensus that a necessary distinction can be made between English as a Foreign Language (EFL) and English as a Second Language (ESL) (Stern, 1983). ESL refers to English learned within the country or community where English is spoken by the majority of people (the student is immersed in the English-speaking community), whereas EFL refers to English learned outside the English-speaking country.

A major disadvantage to learning English as EFL is that the learners have far fewer opportunities to practice their English outside the classroom. ESL learners, on the other hand, are forced to use English in order to carry out daily tasks in the community. EFL learners often practice their English only during their classes.

In Japan, where the majority of people speak Japanese only, opportunities are very limited for students to use their English knowledge. Japanese students are a classic example of EFL learners who have few opportunities to use English outside the classroom.

2.5.1.2. The Japanese public school system

The Japanese public school system shares many similarities with western school systems. Children attend elementary school from the age of six years followed by junior high school at 12 years old. At age 15 they enter high school although the law does not force them to. However, most people choose to continue in school. Approximately sixty to seventy percent attend post secondary school such as college or university.

English is taught throughout junior high and high school. In college and university students can choose to study either English or French as a second language and most students choose to study English. English lessons are usually three hours per week in junior high school and four hours per week in high school while private schools may have more.

2.5.1.3. Grammar and reading for entrance examinations

The grammar-translation method is still dominant in Japan. Very competitive high school and university entrance examinations are considered to be one of the main reasons for this. An English teacher describes how EFL is taught in Japanese schools: "In junior high school, English is taught with a lot of communicative activities, mostly working in pairs or small groups. However, the way of teaching gradually shifts from communicative to entrance exam-oriented, especially for the ninth graders, most of whom are to take the high school entrance exam later that year, and classes are conducted mostly in Japanese with emphasis placed on teaching translation and grammar. In senior high school, the situation gets even worse. From the beginning English is taught with a lot of emphasis on teaching reading comprehension (or rather translation) and grammar. Most of the teachers teach English in Japanese, spending a lot of time explaining about how to translate sentences and grammar and asking the students to do rote learning, which they think is important and necessary for them to prepare for the college entrance exam" (Yukita, 2000).

The fact that so many Japanese have acquired so few communication skills after many years of studying English is proof that the system used in their schools needs to change. As a response to criticism of the Japanese method of teaching foreign languages important figures in the area of education have begun to discuss solutions to this problem.

Every year the Japanese Ministry of Education, Science, Sports and Culture publishes instructional guidelines for each subject taught in Japanese schools (Sakamoto, 1998). Recently the focus has begun to shift to the importance of communication skills such as

the ability to speak and understand another language as opposed to grammatical knowledge for reading and writing ability. However, the expectation that English lessons are conducted mainly to prepare students for entrance exams is still very much a part of Japanese culture. For this reason grammatical knowledge and skill is still valued highly in comparison to the ability to speak and understand English.

2.5.2. The internet in Japan

2.5.2.1. Popularity of the internet

In 1997, the number of internet users in Japan was approximately 11,550,000 and the number of households with internet connections was 2,870,000 - 6.4% of all households. By 2005, the number of users is predicted to increase by 3.6 times, to 41,360,000, and the percentage of households with an internet connection will be 41.8%.

Figure 2 shows the percentage of Japanese households with an internet connection as compared with other countries. Japan has been assigned a value of 100 for comparison reasons. As can be seen in the chart, Japan is behind most other industrialized countries in the connectivity of its citizens to the internet.

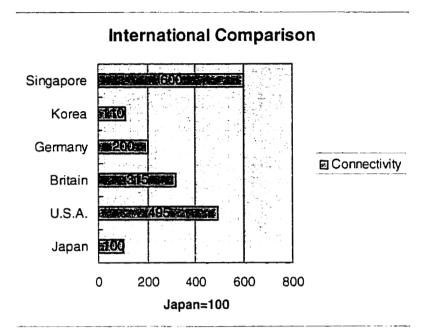


Figure 2. Internet connectedness of Japanese households in comparison with other countries (Ministry of Post and Telecommunications, 1998).

A survey conducted by the Japanese Postal and Telecommunications Ministry in 1996 showed that 88.6% of the respondents replied that they had never used the internet, although 71.4% replied that they would like to use the internet in the future. The survey also found that of Japanese already with internet connections, 83.5% said they use the internet daily for both business and personal reasons, with personal use outweighing business use slightly. When asked what they expected the internet to provide, respondents said they wanted to use the internet for information gathering, especially from other countries, online shopping, providing information (e.g. homepages), e-mail communication, and online banking (Ministry of Post and Telecommunication, 1996).

2.5.2.2. The internet in education

In 1995, the Japanese Headquarters for the promotion of the Advanced Information and Communication Society, an organization headed by the country's prime minister, issued an article entitled, "Basic policy for the promotion of the advanced information and

communication society". This article defines present Japanese society as being, "based on a new socioeconomic system that realizes the unrestricted creation, distribution, and sharing of information and knowledge produced from human intellectual activity; and that harmonizes life, culture, industry, economy, nature, and the environment as a whole" (Sakamoto, 1995a: p1). Education is naturally geared into this system. In the same year, the Ministry of Education, Science, Sports and Culture published guidelines on information in education. At this point it is clear that the promotion of multimedia and information technology has become a national policy in Japan (Sakamoto, 1995b). In 1996 Nippon Telegram and Telephone Corporation (NTT) carried out a project entitled the Konet Plan in which 1.014 schools were provided with a networked environment (internet access). This marked the true arrival of the multimedia age in the schools. However, not every school in Japan was included in the project. Nonetheless it was an important first step in getting Japan involved in the expression of information and ideas through technology. In 1998, 18 percent of all schools in Japan had internet connections (Sakamoto, 1999).

2.5.3. Autonomous learners in Japan

There are many ways in Japan for EFL learners to study English autonomously. Radio and TV programs provide daily lessons, ranging from 5 to 30 minutes in duration. Most programs provide textbooks which learners can subscribe to and have delivered regularly through the mail or purchase at a bookstore. Attending private English language schools is also popular. Because they are run privately the cost is usually relatively expensive. Private English schools remain popular nonetheless because they provide lessons that focus on communication skills as opposed to knowledge of grammar. This appeals to many EFL learners who, through school, have high grammar and vocabulary skills but want to improve their conversational abilities. Correspondence courses, reading publications related to English language learning and participating in study abroad programs are other popular methods of studying for autonomous Japanese EFL learners.

Chapter 3 Research

3.1. Research task

3.1.1.Research questions

This study was carried out in order to describe and analyze the internet-based language learning experience of Japanese self-access EFL independent learners using the interpretive qualitative method. The intention is to fully describe the perceptions, beliefs, practices, and expectations of Japanese self-access EFL independent learners toward the use of the internet, including communication tools such as e-mail, for their English study. The research questions consist of the following, but it is expected that the questions may be elaborated on and reorganized during the course of the research, as discoveries are made.

- How do Japanese self-access EFL independent learners use the internet for their English study?
- Why do they use the internet for this purpose?
- How do they perceive internet-based learning?
- What do they expect of the internet?

3.1.2. Why interpretive research?

The qualitative tradition is effective in research about a new environment because it aims at increasing understanding of or insight into the research target (Tella, 1995). CALL research is recognized as still being "in the testing stage, not in an evaluation stage" (Windschitl, 1998). This study targets self-access Japanese EFL independent learners with internet-based language learning, an area which is in Windschitl's early testing stage, and therefore a qualitative interpretive framework will be used.

Another advocate for the interpretive qualitative research framework comes from the critical research approach. As briefly addressed in the introduction, the absence of and need for more interpretive qualitative research in the area of CALL has been recently discussed (Warschauer, 1999: Tella, 1995).

Two main approaches have been criticized for not being capable of fully explaining CALL in a social context. The deterministic approach viewed the computer as "an allpowerful machine that in and of itself brings about certain determined results" (Ebersole, 1995). This perspective is not valid when considering the fact that the computer itself does not bring certain determined results independently of the particular way the technology is put to use. The instrumental approach proposes "the common sense idea that technologies are 'tools' standing ready to serve the purpose of their users... " (Feenberg, 1991: p5). In this perspective language, learning and the learners are all seen as unchanged by the introduction of new technologies. However, L2 (second language) learning and L2 learners are transformed by the introduction of new technologies. L2 learning now includes electronic literacy: reading, writing, and communicating in an electronic environment through the composing of e-mail, searching on the world wide web, etc. Successful L2 learners do not necessarily possess the same character as that of previous generations. Thus it is impossible to fully evaluate the language experience in CALL using general criteria adapted from oral or print-based activities in which a determinist and an instrumental approach were used to view L2 learning.

How then can we research the development of new technology-based L2 learning? Warschauer suggests that CALL research be guided by what Feenberg calls a critical theory of technology. A critical approach sees technology as neither a neutral tool nor a determined outcome, but rather a scene of struggling between different social forces. This approach is considered to be valid considering the example of how the print technology changed the map of social forces (Feenberg, 1991). A critical approach naturally leads to questions which do not lend themselves to the experimental designs that characterized the deterministic and instrumental research approaches. Instead, the critical approach "seeks to define the meaning of actions from the point of view of the

local actors, and is helpful for investigating students' and teachers' evolving attitudes or sense of identity in changing" (Warschauer, 1998). At this point interpretive qualitative research is seen as a very powerful method for CALL research.

3.1.3. Researchers' position

Ethnographers LeCompte and Goetz (1984) speak of the empathy which researchers develop with their subjects of study, which affects their interpretive comments during their fieldwork. In ethnography it is recognized as a natural process that the researcher's position will change during the period of field work, gradually getting closer to the informant's position. Phenomenologist Van Manen states, "To reflect on the experience of teaching or parenting I do not reflect on it as a philosopher, or as a psychologist, or even as a phenomenologist or critical theorist. Rather, I reflect phenomenologically on experiences of teaching and parenting as a teacher or as a parent" (Van Manen, 1990: p78). Here he warns of the importance of seeing the problem from the view point of the researcher's own personal life.

It can be said then that one of the goals of interpretive qualitative research is for the researcher to acquire the eyes or perspective of the informants and let them communicate what is happening, while explaining the phenomenon in the researchers' words. The researcher acquires the informants' viewpoints and analyses the phenomenon with her/his relevant life experience along with a theoretical knowledge of the subject.

In this study, the subjects are self-access Japanese EFL independent learners using the internet for their study, in which the researcher herself is included. Since the researcher "belongs" to the same group as the one being studied she must necessarily share the similar experience with the EFL learners, and thus will be able to fully reflect on the experience of a self-access Japanese independent EFL learner.

3.2. Research method

3.2.1. Subjects

The subjects of this study are Japanese independent EFL learners who access the internet of their own will. Thus high school or university students who access the internet as a class activity are not included in the study. However, if one of these students chooses to access the internet outside the classroom in order to carry out their own English study, s/he will be included as a subject. As well, it was expected that subjects will be adult learners - not necessarily physically but mentally.

As is explained in chapter two, independent is not an all-or-nothing concept but rather a matter of degree. Therefore the subjects will range from very independent learners to partially independent learners. Their use of the internet may be totally unrestricted or partially limited due to modem speed, connection expense and other factors, but the learner still will be using the internet on their own for English study. The subjects might vary in their degree of independence, their internet environment such as computer quality and modem speed, and computer literacy, their English proficiency, educational level or personal background. The important issue is that the subjects are learners who access the internet autonomously for the purpose of their English study.

Since it is impossible to reach every self-access EFL learner in Japan, a goal was set to recruit thirty informants through various asynchronous communication tools: e-mail, mailing lists, newsgroups and message boards.

3.2.2. Data collection

The data collection procedure consists of two parts. The first component has two stages: an e-mail survey and telephone or e-mail interviews. The second section consists of observations of informants' use of the internet, face-to-face interviews and their learning documents' audit. The first part was conducted in May, 2000 with the second part being conducted in June, 2000.

3.2.2.1. e-mail survey

Open-ended questionnaires were sent to ninety five individual learners' e-mail accounts which were obtained from two major EFL web sites. Those learners left their e-mail addresses either on an electronic guest book or a keypal (penpal) wanted list. The same open-ended questionnaires were posted to two EFL learners' mailing lists, one EFL learners' newsgroup and two message boards for EFL learners. A list of EFL web sites where learners' e-mail accounts were obtained, the mailing lists, newsgroups and message boards used can be found in Appendix B.

The survey gives the option of non-participation, which means participants may choose to return it only if they wish to participate in the research. The survey has another option of participating via the WWW. A notice was included in the survey message that they can choose to go to www.ucalgary/~mhoshi to submit an on-line questionnaire form rather than returning an e-mail message. The English translation of the original questionnaire can be found in Appendix C.

Although participating by returning the questionnaire as an e-mail message is very simple and less time consuming than participating via the WWW, two aspects of the online questionnaire appealed to many participants. First, the online questionnaire include links to an explanation of the study's purpose, an introduction to the researcher and the results of the study which will be published on the site when the study is concluded. Secondly, the participant's e-mail address will not be automatically shown on the submitted response unless the participant chooses to fill in the e-mail address box, since the response will be sent to the researcher from the University of Calgary's server. This appealed to some participants who wished to remain anonymous.

Thirty responses were received, of which twenty four questionnaires were submitted directly from the participants' e-mail account to the researcher. Six questionnaires were returned from the WWW via the University of Calgary's server. The responses were printed out and examined before being interpreted by the researcher.

3.2.2.2. Telephone and e-mail interview

The purpose of the telephone and e-mail interview was to clarify the results of the e-mail survey and gain deeper insight to the answers given. Thus the interview was also open-ended, although a few questions were prepared based on the answers of each participant's e-mail survey.

The participants for telephone or e-mail interviews were chosen from those who returned the open-ended questionnaires directly from their e-mail account or from those who left their e-mail addresses on the online questionnaire as an agreement for the telephone or e-mail interviews. The researcher chose 14 people who aggressively use the internet for their English study and asked for their participation in telephone interviews. Nine people (4 females and 5 males) agreed to participate in a telephone interview and two people (two males) replied that they would participate only in e-mail interviews. Three people did not respond.

The length of the telephone interviews ranged from twenty minutes to one hour. The interviews were all tape-recorded, with the permission of the participants, and transcribed into text word for word. The transcripts were then interpreted and analyzed by the researcher.

Along with the two participants who refused the telephone interview but agreed to an e-mail interview, the researcher chose five other people who expressed their opinions in the previous open-ended questionnaire. Three people (3 males) replied to further questions sent via e-mail and two did not reply. The results of the e-mail interviews were printed out and examined and then interpreted by the researcher.

3.2.2.3. Observation, face-to-face interview, and document audit

Three EFL learner mailing lists (see Appendix D) were observed for a two month duration to find the most active participants. The researcher sent e-mail messages to five active members asking for their participation in a study including observation, face-to-face interviews, and document auditing (see Appendix E for the English translation

of the original e-mail message). Two (1 male and 1 female) people agreed to participate in the study.

During the study the informants were asked to use the internet in front of the researcher as they would normally for their English study and were also asked to "think aloud" so that the researcher would understand the purpose of their actions. These observations were recorded both on audio tape and in the researcher's field notes. Open-ended interviews were then conducted after the observation session. The main reasons for the interview were 1) to give a rich interpretation of the participant's actions while using the internet and 2) to reveal their learning environment and learning experience outside the internet. Following this, a document audit was conducted to examine the participants' learning materials such as English textbooks as well as any other resources being utilized.

3.2.3. Reliability and validity

The way of recruiting the participants is a convenience sampling in the sense that these subjects were chosen because they were available for and agreed to participate in the email survey, telephone interviews, e-mail interviews and so forth. For this sampling procedure an argument concerning the objectiveness may emerge. However, since the primary purpose of this research is not the ability to generalize the results, but to understand the self-access Japanese EFL independent learners and their perceptions of internet-based language learning, the sampling procedure is not thought of as biasing the results. Moreover the fact that they were willing to participate in the study insured that they would offer informative and knowledgeable input to the subject.

Chapter 4 Results

4.1. Practice and belief

4.1.1. English web site

Japanese EFL learners use web sites written in English as well as in Japanese for their English study. However, there are different beliefs behind these practices. There are two different ideologies underlying the way in which Japanese EFL learners use English-written web sites: content focused and language focused. Japanese EFL learners will utilize one ideology more than the other, at least to some degree.

4.1.1.1. Content focus

Many Japanese EFL learners regularly check or visit the same English-written web sites for their English study. These include sites focusing on world news, professional magazines, and specific topics such as stock market information and on-line shopping. These web sites were not created specifically for English learning. The learners are interested in the "content" of these web sites rather than any grammatical lessons. Although they assume that their English skills (especially reading) will improve by visiting these sites, their principal purpose is not to improve their English skills but to access the information that the web sites provide.

What, then, are the aspects of the web sites that the learners appreciate? First is the variety of information the WWW is able to provide. From the content-focused perspective, the internet provides a nearly infinite amount of current as well as past information. The richness and variety of information allows users to find valuable information on nearly any topic. Learners have found that they can locate information that cannot be found in a local encyclopedia, for example.

Secondly, learners appreciate current information - and the internet provides the most up-to-date information of any media. Because the internet is paperless and can be delivered instantaneously the information is published much faster than by traditional means such as newspapers and magazines. Best of all, the information is immediately available from anywhere in the world.

Thirdly, learners appreciate the distinct nature of the information found on the WWW, known as "group knowledge" (Barker & Kemp, 1990). Group knowledge is different from individual knowledge in the way the knowledge is created and presented. This has a strong relation with the nature of the internet itself which allows users to interact with the information. Compared with information provided by other forms of media, information which is often one-sided, and acquired or created by one individual or one small unmodified group of people, the information on the WWW, once it is presented, can be modified and shaped by the contributions and opinions of others. Often articles on the internet ask for criticisms and opinions, and any that are offered are usually posted immediately for others to read. The original piece is now "altered" through the addition of fresh insight, and readers feel more involved in the information presented. This "group knowledge" appeals to some Japanese EFL learners because it provides them with a convenient and exciting way of communicating with other learners and voicing their opinions of topics of interest. The input from the readers also makes the process much more interesting to the writer because he/she can receive immediate feedback on what she/he has written.

The learner's appreciation of and desire to be involved in "group knowledge" is expressed in the words from an interview with one learner who often accessed an English-written web site to obtain information related to his profession, which is computer programming.

Interviewer: Do you enjoy reading information related to your profession on the WWW? Is it more enjoyable than when you used to read manuals on the same topics? Interviewee: Enjoyable...It depends on the content of the information. The information I get on the internet is the news [about computer programming] and the latest

information. It's not like technical information you get from a manual but rather the opinions or evaluations from other people. The exchange of opinions with people who used the same product and the presentation of the new product... you know, the explanation of the features. I can search for that kind of information on the WWW. It is not the detailed type of information [like that found in manuals], though.

The Japanese EFL learners appreciate the rich quantity of information, the speed of delivery and unique nature of the information found on the internet, made possible by the interaction and contributions of many other people.

4.1.1.2. Language focus

By visiting web sites written in English, Japanese EFL learners find that they are studying English in new, exciting ways. Whether the web site focuses on the topic of English or something completely different, because the site is written in English there are opportunities for the EFL student to learn. From the language focus perspective, the WWW provides opportunities for them to improve their language skills. Web sites listed solely for this purpose such as EFL web sites are created and maintained especially for EFL learners, where they can practice English by taking an on-line quiz, learning idioms and proverbs, or exchanging e-mail with teachers who are provided by the site. The students also utilize English-written web sites which have not been created specifically for EFL learners. One participant said that she prints out the web pages she finds interesting and studies those pages by looking up the unknown vocabulary or checking the grammar structures. Another participant said that he visits a particular news web site to check the newest Japanese news in English. The primary focus is not the content because he is able to obtain the same information by watching the Japanese news on TV. He listens to the news in English and reads the English subtitles to confirm what he just heard was correct in his understanding. In this case his focus is not the information as much as the language provided by the web site and he believes that he is improving his listening ability, which he is able to verify by checking the subtitles.

Content focus and language focus are not always separate approaches to viewing web sites. In fact, it seems that for most participants both focuses exist together within one practice. For example one participant stated he often visits a particular web site for stock market information. He uses the site not only to access market information but also to improve his English reading skills by reading about economic issues and individual companies.

From the language focus perspective the WWW is often a difficult place for the learner to find the information s/he needs. Complaints include "it is difficult to find a web site which suits my level" and "It's a good web site, but it's too complex - too difficult to understand how to use". These types of problems usually do not emerge when users are using web sites with a content focused approach.

4.1.2. Japanese web site

Japanese EFL learners also utilize Japanese-written web sites, web sites created and maintained particularly for Japanese EFL learners. These types of web sites usually provide an expert's opinion on how best to approach the study of English for maximum results. The experts found on these sites usually are not teachers but rather very skilled learners. Rather than teach in the traditional sense, they merely discuss what they did and the mistakes they made related to their study of English. The sharing of experiences and knowledge is information the EFL learners greatly appreciate. The experts provided information on how best to study English, which textbooks to use, dictionaries or English paperbacks they feel are useful, and links to web sites which they find valuable. This information is appreciated by Japanese EFL learners not only because it is based on real experience but also because it stimulates their motivation to continue. One participant noted this saying, "just knowing how much effort the person made in his study of English really motivated me".

These experts' opinions are sometimes presented by the expert herself/himself on a web site they have created or on EFL related message boards created by a third party where people exchange opinions on English study. On bulletin boards the experts' opinions

are rich in quantity and become "group knowledge" as explained above. The more people exchange their opinions, the more galvanized the group knowledge becomes, and this is what Japanese EFL learners appreciate.

4.1.3. E-mail

E-mail exchange with English-speaking keypals (penpals) was reported to be a popular activity of Japanese EFL learners in the e-mail survey and the interviews. Some learners found their keypals on lists provided by EFL web sites while others exchange e-mail messages with English-speaking friends they made when they went abroad. All of them agree that exchanging e-mail messages is a good opportunity to use English for real communication purposes. Some learners see this activity as an opportunity to reach beyond Japan's borders and expand their ties with the people of other nations. Some regard this activity as a stimulus for motivation. It is difficult for some learners to stay motivated without a clear goal in mind and an opportunity to exchange information with their keypals acts as a strong motivating factor by forcing them to write in English on a regular basis.

From the content focus perspective, e-mail exchange is a way to broaden their scope and create new friendships. In contrast, from a language focus perspective e-mail exchange is an opportunity to record their English knowledge in written form and in this way improve their English language skills.

Related to these two different perspectives, the motivation created or maintained by e-mail exchange can be separated into two types. Both types are intrinsic motivation because the motivation is created from within the learners themselves. The learners were never told to do this activity by other people. One type of motivation is anxiety resulting from the desire to communicate and another type of motivation is a desire to carry out a task they have created for themselves. A content-focused perspective is influential in the anxiety formed through the desire for communication, and the language-focused perspective is at work when the learner experiences anxiety over

completing the task. However, as can be seen in the following interview, both perspectives can be at work at the same time in differing degrees.

Interviewer: When was the first time you felt that you had really communicated in English?

Interviewee: When I exchanged e-mail in English. I was worried that maybe my English wasn't good enough to make myself understood but it was! I was told by the other person that my English wasn't too bad, although it might have been just a compliment.

Interviewer: What is your next goal?

Interviewee: To improve my writing skills. I want to write English e-mail messages in a shorter period of time. Especially when writing about everyday things,, I want to write without having to check a dictionary. Right now it takes half a day just to write one e-mail message.

Some learners reported that although they tried exchanging e-mail messages in English, it didn't last very long. One reason for the discontinuation was that they were unable to find common interests to write about. Another reason was not receiving a reply to their messages, which quickly caused them to lose interest. However, some exchanges continued for a long period of time and the difference in these exchanges from the previous ones was examined. First, the learner made a conscious effort to find topics to write about that the other person would be interested in: for example, by subscribing to various newsgroups. The second factor can be attributed to a concept of give and take. The learner searched for people who were studying Japanese and their e-mail exchanges could then be ways of correcting each other's writing mistakes. One learner explained how in his first message he explicitly stated that his purpose was to improve his writing skills and that he wanted the keypal to correct his mistakes as he was willing to correct his keypal's mistakes in return.

Some learners were not in favor of e-mail exchanges with keypals. Those learners felt uncomfortable exchanging sometimes private information with somebody they have

never met. As well, some participants did not consider the exchange of e-mail to be a form of communication and therefore do not view it as a way of improving their communication skills.

4.1.4. Mailing lists

Learners utilize three different types of mailing lists. One is a mailing list in which the majority of the members are English-speakers, writing on a certain topic in English. The learners see the value of this kind of mailing list as improving their reading skills by reading something they are interested in.

The second is a mailing list in which participants are Japanese EFL learners and the topic is anything related to English study. The topics can be English grammar, learning strategies, English dictionaries, new products for studying English and so on. The learners who participate in this kind of mailing list appreciate the opportunity to discover different opinions and information on a variety of related topics and having their questions answered usually very promptly. They also experience a sense of community by being a member of the list since everybody in the mailing list shares the same goal of improving their English language skills. Thus, the sense of community, instant feedback, and the richness and variety of information and opinions found is what holds the learners' interest in this type of mailing list.

The third type is a mailing list in which most members are Japanese EFL learners who mainly write in English. The learners believe it is beneficial for them to write in English because it provides an opportunity to communicate in English in a more relaxed environment than via a mailing list maintained by English-speaking people. Seeing other people make mistakes in their English writing reduces their fear of making mistakes in their own writing. Because the members of the list also share the same goal, as in the second type of mailing list, the members share a sense of community with this type of list as well. This sense of community creates an optimal atmosphere for Japanese learners to express themselves freely in English. One concern of members of this type of mailing list is that they may acquire bad habits if improper expressions or

other mistakes are used by many members, becoming commonplace in the process. Some learners believed that it would be convenient if there were someone who could correct the mistakes in the messages.

A problem found in many mailing lists was that sometimes the volume of mail in one particular mailing list becomes too great, resulting in their questions being overlooked. As well, there are sometimes discussions that are off topic, defeating the purpose of the mailing list.

4.1.5. Mail Magazine

Quite a few participants reported that they make use of mail magazines: e-mail newsletters.

Subscribing to an e-mail newsletter will cause the newsletter to be delivered regularly to one's e-mail address. Newsletters often contain articles related to the topic, links to a particular site of interest, and may contain advertisements if they are created commercially. Since they often look very similar to regular magazines, the Japanese have dubbed these types of e-mail newsletters as "mail magazines" (meilu magajinu in Japanese). In contrast to mailing lists which allow all subscribers to contribute by posting messages, the subscribers of mail magazines cannot. Subscribers merely receive the newsletter and read it. It is, therefore, a one-to-many, one-way form of communication.

Mail magazine web sites can be found on the world wide web. These sites have two main functions: to allow an individual to publish a mail magazine using their management and distribution system and to allow people to subscribe or unsubscribe to any mail magazine which is published through its management system. The web site will usually have a database of all the mail magazines distributed through it so that the user can choose the mail magazine they want to subscribe to by searching with keywords.

The content of the mail magazines the participants utilize for their English study varies from business English to daily English conversation to English grammar, TOEIC (Test

of English as International Communication), TOEFL (Test of English as a Foreign Language), English proverbs, famous English quotes, English idioms, English jokes and more.

The participants who subscribe to mail magazines appreciate the fact that they come regularly and directly to their mail box, free of charge. Because they are often relatively short the readers do not experience the fatigue of reading long, drawn-out articles. The regularity of delivery is also appealing, especially to independent learners who sometimes have difficulty maintaining regular studying habits.

This issue is expressed in the following interview with a study participant.

"I can have at least the opportunity to deal with English if there is something sent to me regularly. Otherwise I have to take action myself by buying a newspaper for example. If it comes to my mail box and is sitting there, I have to read it... or at least glance at or skim over it."

Mail magazines are sometimes perceived as a substitute for textbooks or sometimes seen as being better than conventional textbooks. One participant subscribed to a mail magazine that sends her TOEIC example questions regularly. She stated in the interview that the mail magazine is more helpful to her than buying a TOEIC textbook. Another aspect the learners appreciate is that the mail magazines sometimes include a link to a relevant web site. These links save learners' time by not having to search for such web sites by themselves.

One problem with mail magazines is related to their strong appeal. Many Japanese will subscribe to too many mail magazines since they are all interesting and free. Consequently they can not read all the magazines or end up spending too much time trying to read all of them, causing frustration.

4.1.6. Newsgroups

Newsgroups were not found to be as popular as other communication tools such as e-mail, mailing lists and mail magazines. When the researcher searched for a Japanese newsgroup related to English study, she could find only one such newsgroup. A few participants had not even heard of their existence. Only one study participant reported he subscribed to both English-written and Japanese-written newsgroups for his English study. One participant who had used them in the past reported the volume of information found in them was too great to be of any use.

4.1.7. Chat

The English chat sites Japanese EFL learners utilize for their English study are of two main types depending on whether they are made up of mainly Japanese or English-speaking participants.

For the users of chat sites made up of Japanese EFL learners, chat is a good opportunity to use the knowledge of English they have acquired. They learn English off the internet or by going to English conversation schools, purchasing English textbooks and so on, but opportunities to use what they have learned are difficult to come by. For these learners, chat provides an ideal forum for practicing their English. The chat rooms made up of Japanese EFL learners also seem to form a sense of community, especially when the each participant knows that the rest of the participants are Japanese EFL learners who often make mistakes as well. The participants form a bond with each other since they all share the same problems, goals and interests. Although some participants voiced concerns over possibly picking up bad English habits from other non-native speakers, they still have a strong desire to "meet with their friends", indicating that this is a highly motivating factor.

Japanese who participate in chat rooms made up of mainly native English speakers perceive it as a valuable opportunity for other reasons than those listed above. Because the language in these chat rooms is closer to the spoken language they can learn new varieties of expressions. In addition, the recording function which allows the learner to

record and review what was written appeals to learners since they can study the conversation again at their leisure to review words and expressions that need further analysis. In summary the learners tend to place more value on the opportunities for output than input when they participate in English chat made up of Japanese learners but place more value on the opportunity for input when they participate in chat rooms made up of native English speakers.

Some learners reported that they are not satisfied with chat rooms because they don't offer sound and the conversation often moves too slowly. However, these very same factors are welcomed by learners whose speaking or listening ability is low or by learners whose typing speed is slow.

4.1.8. On-line course

One learner reported that he participates in a non-credit on-line course provided by an EFL organization. What he most appreciates among its features is the one-to-one interaction with teachers. He can e-mail questions to the teachers and have them correct his compositions. Although he studies one of their text-based courses, the questions he asks the teacher often are not from the course study. Since this particular learner's occupation is a Japanese-English translator, most of his questions emerge from the problems he encounters in his profession. He reported that he is very satisfied with this type of course since it allows him to receive prompt answers to problems he is currently dealing with.

He also mentioned his satisfaction with the instructors that are provided. Each instructor has an introduction on the web site explaining their credentials and interests, and they are generally very open and responsive.

Some participants reported their appreciation of the balance of cost vs. performance of the internet. Most learners enjoyed the fact that most things available on the world wide web are free. While this is the case, access to the internet itself is still relatively expensive in Japan. In addition to the cost of an internet service provider, in Japan local

telephone usage is billed by the minute. These charges can add up quickly for heavy internet users

4.2. Expectations

4.2.1. Technology

Most learners believe that the internet is not advanced enough to allow them to improve their English conversation skill in understanding what was said and reply to it in speech form instantly. Even though chat rooms provide written forms of spoken language, because it is presented in text form there is always a delay that allows the learner to consciously think about what was written and decide how s/he is going to reply. They believe real conversation skills can only be improved in simultaneous human-to-human interaction involving sound and motion. Thus one anticipated technological improvement eagerly awaited is the arrival of sophisticated, instantaneous sound and video technology on the internet.

It can be argued that human-to-human interaction with instantaneous sound and video is technically possible already on the internet through the use of internet telephone or video conference technology. However, the slow internet access environment in Japan prevents them from taking advantage of these new technologies. In Japan most internet connections are by telephone lines and are charged on a fee-per-minute basis. Therefore, in addition to the slow speed, high cost is another problem. With the deregulation of Japan's telephone system, which has begun recently, this problem may be resolved with time.

Some learners have a clear idea of what they expect from the internet. Sending textbooks by e-mail regularly is one. This concept is very close to the use of mail magazines. Although most current mail magazines consist of text only, the new concept of textbooks involves the integration of multimedia such as sound, images, animation and video technology, as well as hyper links.

Expert systems are another anticipated technology. The ideal expert system recognizes the learner's level, goal, need, learning style and so on and allows them to learn through interaction with both the computer as well as the people who are connected to the network.

Some participants predict that the internet will be integrated with other existing technology such as television and cellular phones. Learners dream of being able to access the internet through many different channels and being able to "carry around" access to the internet as they do with a cellular phone in order to be absolutely free from the restrictions of time and place.

Cellular phones with e-mail and even internet capability are entering the market in Japan, allowing the user to write and receive short e-mail messages and browse some web sites via a small monitor on the telephone. Many web sites have been especially created for cellular phones users and if one sees these sites on a home computer they seem to lack an attractive design. This is because their focus is on functionality and not on multimedia, which consumes bandwidth and requires considerable amounts of time to download. Some EFL web sites for cellular phone monitors have already been created for Japanese EFL learners and they are expected to be viewed while the users are waiting for trains, standing in lines, etc.

4.2.2. Mentality

The expectation of ESL learners towards the internet is not limited to its technical aspects, but also can be a factor of the learners mental aspect. Some learners feel there are very strong barriers to learning English and experience high anxiety when they have to communicate in English, which they attribute to the special features of Japan where only one language and one nationality is dominant. The openness and internationalism of the internet is expected to lower this barrier and lessen language anxiety by exposing learners more to the English language, English culture and English-speaking people. The learners believe that "getting used to English" is a very important factor for their success in language learning.

4.2.3. Internet as a tutor

Another expectation of the internet is the role of the tutor. Some independent learners said that they refer to dictionaries and grammar books when they have problems. However, they stated that sometimes solutions can't be found this way. One participant said that a message board where she can post questions and receive answers is ideal for dealing with this problem. Another participant said that he doesn't know whether his English is correct or not while he is speaking or writing. For him, software that corrects errors immediately is ideal.

However the internet does play a role as a tutor for some learners already. One participant said, "Whenever I have a question, for example about writing my resume in English, I always ask those questions to my friends who are either native English speakers or Japanese friends with better English knowledge. I met those friends through a chat room." As was seen in the utilization of Japanese mailing lists, immediate feedback to their questions from someone with better knowledge was appreciated. This shows that a mailing list can also act as a tutor for certain people now.

4.3. Perception

4.3.1. Contribution of the internet to motivation

The internet seems to be contributing in three major ways in terms of motivation. One perception Japanese EFL learners hold is that the internet itself provides a great deal of motivation. This perspective is represented well in one participant's phrase; "It is not as

though I like English. It's just that it's inconvenient if I don't know English". This opinion strongly correlates with the content-focus perspective. For the learners approaching English with a content-focus perspective the information they can obtain through the world wide web or other communication tools is what they are seeking. They want to know the content whether it is written in Japanese or English. For them most of the information on the internet just happens to be presented in English and understanding the English language is essential for that reason. This eagerness to understand the content can itself motivate people to learn English.

Another perspective sees the internet as an environment that creates or fosters learners' motivation. One participant said, "it would be wonderful if I could understand English novels, English movies, and English songs without any pain." This statement seems to be close to the first motivational influence mentioned. However, the focus of this participant is not the content but rather the language itself and the internet continually reinforces this feeling by providing new and interesting information in English. In this sense it can be said that this learner's motivation is fostered by the environment created by the internet.

The internet can also further the learner's motivation in a negative sense. This perspective is represented in a participant's statement, "I will be at a double disadvantage if I know neither English nor the internet." Since English is the most dominant language on the internet, some learners feel that they will fall behind if they cannot access most information available on the internet. Thus it can be said that the existence of the internet is creating a fear of being left behind as the rest of the world advances technologically, motivating people to learn English as a part of the process of "staying current". Although this is intrinsic motivation emerging within learners themselves, this perception of the internet should be separated from the previous perception since in this perspective the internet is seen as a threat.

A further perception sees the internet as merely another tool for English study, along with other high-tech tools such as walkmans, electronic dictionaries and cable TV. Although learners perceive the WWW and communication tools on the internet as very important tools for their English studies, their motivation doesn't come from within the

internet - they are not motivated by the information the internet provides nor is their motivation fostered by the existence of the internet. One participant expressed this perspective by saying, "With the appearance of the internet I now have more choices in how I study English. But I still have a problem maintaining my motivation."

4.3.2. What does "I can communicate in English" mean?

Although the ways of learning have become more varied and more individualized, the subject. English, has not changed. However, the meaning of, "I can communicate in English" has changed since the appearance of the internet. According to some participants of the study, the focus today is on "convenience". For them it is inconvenient not to be able to understand English and they believe that this can be resolved by acquiring the ability to communicate in English.

This perception has changed over time. The sentence, "I can communicate in English" once meant to the Japanese learner, "I am special" or "I am intelligent". It used to be a personal matter of intelligence. Today the internet causes learners to believe that acquiring English ability is akin to acquiring the ability to navigate one's way over the internet, a constant source of new and interesting information in English.

This new perception can be found in the following participants' confessions:

"It would be wonderful if I could understand English novels, movies, and music freely, without the annoyance of English translation."

"It would be very convenient to communicate with foreigners if I could use English."

"I studied Vietnamese and French too, but I realized that English is the most convenient language so I came back to English."

Chapter 5 Discussion

5.1. Autonomous learners

The participants of this study were all autonomous learners. These are people who decide for themselves whether to study English or not, whether to access the internet for that purpose, how often they will use the internet and how they will make use of the internet. They take total responsibility and control over their English study. This study found that there were some aspects that these autonomous learners all share.

Firstly, their reasons for why they study English are clear. These reasons may vary, from the desire to understand the content of the internet to success in their personal life such as job promotions, school examinations, or making travel abroad more enjoyable. It is sometimes a purely intellectual desire to understand another language. The reasons vary from learner to learner but all the participants had a clear answer to the question, "why do you study English?"

They are also well aware of which skills are important to them and which need to be improved. One participant acknowledged that although he knows his listening skills are poor and that there are some sites dedicated to listening practice, he is not doing anything to improve his listening ability yet since he feels there is a stronger need to improve his writing skills first. Another participant reported that although writing email to a keypal is a good opportunity to practice writing English, it is not a good way for her to improve her conversational skills since she can spend as much time as she needs to make sentences on her own, and it may even be detrimental to her communication skills because there is no immediate, instant feedback. Being an autonomous learner, she understands what her strengths and weaknesses are and knows which area to focus on for maximum benefit.

Although they are all keenly aware of the reasons why they study English and which skills need improvement, differences were found in their knowledge of how to improve

their skills - some were aware of their learning styles or learning strategies and some were not. One participant who has been studying English for 10 years on her own said, "I have never carried out plans. If I make a plan, I don't do it. English is the same. I do it when I feel like doing it. That (making no plans) helps me carry on my English study." Another participant discovered which methods do not work for himself: "I hate repeating, you know. When I went to an English conversation school I was told to repeat after the teacher. I hated that. I can't continue studying English in that way." One participant was constantly seeking for a learning method that would work best for himself. His main concern was to improve his listening ability. "I can listen to English radio programs on the internet now so as an experiment, these days I always leave the English radio on in the background whenever I use the computer."

Another element seen commonly in the autonomous learners was satisfaction of achievement. When they found that they had made progress they felt satisfied, and this was an important factor in their English study. The feeling of satisfaction came in many forms: successful communication in English in e-mail exchanges, participating effectively in a chat room, or making progress in their TOEIC or TOEFL scores. One learner working on his listening skills said he listened to the news on the internet and checked the accuracy of his understanding subtitles of the news, an example of self-assessment. Although the method of self-assessment varied among the autonomous learners all of them experienced satisfaction as a result of that self-assessment.

5.2. New teacher's roles

5.2.1. Teacher as an expert

Considering the characteristics of autonomous learners, one might wonder whether a teacher has any role to play for this type of learner. The role of the teacher has been discussed since CALL first emerged - no longer does the instructor have a central role; they have now taken on the role of helper, facilitator or counselor for CALL students.

The question then emerges of, "What then, if anything, should the teacher teach?" This study attempts to answer the question based on what the autonomous learners are able to learn and what aspects of the internet they appreciate.

As for the autonomous internet-based EFL learners, they have clearly identified goals for studying English and are aware of which skills they need to improve. However, although they realize which areas need improvement they do not always know the most effective way to improve that particular skill. At this point the teacher has a role to play as a guide, showing the student the most effective methods to use in achieving their goals. Teachers can counsel students on effective learning strategies, a practice that will be especially useful to autonomous learners, who are already motivated. Autonomous learners have access to the content and tasks that need to be worked on, things that were once the sole domain of the instructor. The teacher now can and should provide a way for them to carry out their task most effectively.

Teachers still have a role to play as mentor, an expert in the field. We saw that learners appreciate the opinions of experts, such as how they study English, what textbooks or dictionaries they use, and which web site they find most valuable. The teacher of a foreign language is often not asked to assume this role, as it has not been highly recognized as of yet. Most EFL or ESL teachers have never been asked to acquire the necessary knowledge on how to teach English learning strategies and skills through their own experience or how to decide which learning process is most effective for a particular group to learn a foreign language. There are many aspects of methodological theories that new teachers must learn in order to teach ESL or EFL effectively, but the importance of teaching this knowledge based on the teacher's own experience has been largely ignored so far. This study demonstrates the need for this type of knowledge quite clearly.

5.2.2. Teacher as a tutor

We have also seen how learners appreciate the tutor's role on the internet. This involves knowledge of the English language imparted as a form of instant feedback to the

individual learner. In the conventional classroom, although most teachers possess a thorough knowledge of English, it is sometimes difficult for the learner to receive a complete, detailed answer to their question. One participant expressed his frustration with this type of situation saying, "In the classroom, it is hard to receive an answer to my question. In the classroom the communication is one-way (from teacher to student)." The teachers therefore need to focus on which knowledge they should provide to the learners in an effective manner in the form of instant feedback. This is akin to a skillful tutor imparting knowledge to a student on a one-to-one basis. A discussion of this role (teacher as tutor) has not occurred largely because EFL and ESL pedagogy has focused on the classroom rather than on on-line teaching or autonomous learning. However, as methods of learning become more varied and individualized the teacher's role as a tutor will be discussed more in ESL and EFL pedagogy.

5.2.3. The importance of sense of community

One participant who is involved in a mailing list professed that his enjoyment of English has increased greatly now that he is able to communicate with others about issues related to the study of English. He told of how studying English in high school left him feeling lonely and isolated because there was nobody to discuss English issues with that were interesting to him. The sense of community, as was discovered in the study, is very important to autonomous learners. By sharing common interests and goals and debating issues related to their study, the learners are able to lessen feelings of isolation while at the same time increasing their motivation to continue studying English. One role of teachers recognized in this study is to create, foster, and support a sense of community among learners. Although this is more difficult in the conventional classroom, learners in this setting can benefit by being provided with information on external learning groups such as these. In this case an important task for the classroom teacher is to provide this kind of information and find out which learners will benefit the most from this information. The importance of a sense of community has been

neglected in ESL pedagogy. However, EFL or ESL teachers need to be aware of the importance of this concept since it promotes efficient learning.

5.2.4. How do learners actually learn?

In the study, how the independent learners actually acquire language skills was not apparent. Although the purpose of this study was not to discover their learning process, it was obvious that some of the subjects learn in very different ways from those in the conventional classroom setting. Some learners expressed this process as acquiring habits through repeated, copious input. Some expressed the opinion that getting used to English is equal to learning English. The difference in learning processes may be explained from a deductive - inductive point of view.

In the classroom setting where ESL or EFL is taught with traditional methods such as the Grammar Translation Method, deductive rather than inductive reasoning is emphasized as a learning process. Instructors teach general principles first and students then infer or deduce specific facts from the principles. However, the students who learn by acquiring habits or getting used to English might learn through inductive reasoning. Through a number of specific examples they may come up with a general rule through induction and reach a conclusion that governs or subsumes the specific instances.

The learning process can also be seen in relation to the discussion on content vs. language focus. As discovered in the study, through activities on the internet some learners focus on content rather than language while others focus on language rather than content. It is possible that learners focused on content may learn inductively since they place more value on the quantity of the data available and appreciate large amounts of information. It may be quite natural for these types of learners to infer grammatical rules on their own through a large number of examples.

A concrete conclusion should not be drawn without more information and research. Nevertheless the study of the learning processes of independent learners may lead to changes in the conclusions reached in a recent study on the optimal ratio of focus on content vs. language.

Recent research in ESL indicates that language should be taught using content as a vehicle (Roessingh & Watt, 1999) so that the student can improve his/her basic interpersonal communication skills (BICS) while not ignoring cognitive academic language proficiency (CALP). In the research a optimal portion of emphasis between language and content in successful teaching was also indicated through the continuum of the students' English level, as can be seen in figure 3.

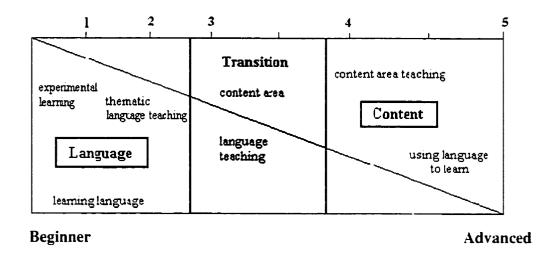
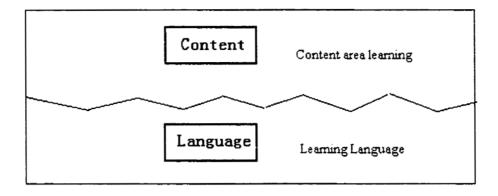


Figure 3. The relationship of language and content for ESL learners (Watt & Roessingh, 1999).

However, the emphasis of content vs. language in the subject of this study (independent learners) will result in the following:



Beginner Advanced

Figure 4. The relationship of language and content for self-access EFL learners.

Figure 4 shows that learners at the beginner level do not necessarily emphasize language over content and the advanced learners do not necessarily emphasize content over language. It is not clear from the data collected from this study what the ratio of content vs. language is in their learning process but it is apparent that language and content are both being used to some extent by Japanese independent learners who make use of the internet for their learning.

This argument cannot be made conclusively at this point since there has not been enough data collected on this issue to reach any definite conclusions. However, a discussion on the learning process of independent learners and its relation to content and learning approaches should lead to more questions for further research. As the method of learning English becomes more individualized and varied, the approach to teaching English should be expanded to meet with these changes.

Chapter 6 Conclusion

Internet-based language learning is a relatively new language acquisition strategy. The number of people taking advantage of this new form of learning is increasing as the convenience and effectiveness of internet-based learning becomes apparent. As the number of users increases, the necessity of studying the potential of the internet becomes even more important to insure it is used most effectively.

The primary purpose of this study was to describe and understand this new style of learning as well as the type of people who use it, through the use of qualitative data. In addition, the way the interpretive qualitative research method is carried out results very often in the discovery of new questions and issues to be investigated.

The study showed that Japanese EFL learners take advantage of every tool available in this new form of learning although each subject applied different reasoning for using each practice and learning style. Content and language are the two main focuses recognized through the practices of internet-based language learning. It was revealed, through the research, that more discussion and research is needed in this area of the learning process.

The new role that teachers must play in this new form of learning has been discussed since the first appearance of CALL. An attempt was made to define this new role by considering what conditions autonomous learners are lacking and what factors they appreciate in internet-based language learning. As a result of the individualization and personalization that is emerging in EFL teaching, these are likely to turn out to be roles such as expert and/or tutor. The support for and fostering of a sense of community among learners is also considered to be an important role of teachers in the new era.

The study also demonstrated how the participants have clear expectations on what constitutes an ideal technology regarding the internet, which varied depending on the learner's vision of what is necessary. One technology the subjects are anticipating is the ability to interact in a more natural environment that can promote their English conversational skills. Technological advances such as cellular phone internet

connectivity were also seen as moving individuals towards greater autonomy in the field of learning

The perception of the internet was explained from the position of a motivating factor. For a number of learners, using the internet is motivation in and of itself while for others the internet is used as a tool to discover stimulating environments that in turn lead to increased motivation. Finally, for certain learners the internet did not act as a motivating influence but instead was seen merely as another language-learning tool. Because maintaining motivation is a key problem for language learners, a closer analysis of individual perceptions - especially the perception that the internet itself is a motivating factor in learning - may lead to solutions in this area.

Rather than being seen as merely another new language-learning tool, the internet is emerging as a new social phenomenon that has the ability to alter all aspect of the language learning process. With the arrival of the internet, teaching and learning is no longer limited to the classroom. Learners are no longer willing to passively acquire language skills through the carrying out of tasks assigned to them by an instructor in a traditional setting. Nor can teaching remain as an act of demonstration, followed by repetition and drilling exercises. The internet has brought with it a revolutionary change in the role of teacher and student which, once experienced, is not easily reversed.

The transformation from a traditional to an information-based society is occurring rapidly throughout the world, causing everyone to be involved in one way or another, whether by individual choice or merely by default. In this sense everyone is a part of, and involved in, the information revolution. We must discard the notion that teachers and educators are the only people making an effort to change EFL pedagogy or that computers are the only element causing this change. As this dynamic revolution causes us to change our way of thinking, there is a need to explore all factors involved in English language study, how language, learning and the learners are evolving in this new context (Warschauer, 1998). This study has shed some light on this phenomenon and will hopefully induce other researchers to expand upon its findings.

We must keep in mind that learners play a very important role in the development of EFL learning and teaching methodologies and their contributions and ideas must be embraced with an open mind in order to achieve the maximum benefits presented to us from the information revolution and advances in technology.

Bibliography

Ahmad, K., Corbett, G., Rogers, M. & Sussex, R. 1985. Computers, language learning and language teaching. Cambridge: Cambridge University Press.

Allwright, D & Bailey, K. 1991. Focus on the language classroom: An introduction to classroom research for language teachers. Cambridge: Cambridge University Press.

Barker, T. & Kemp, F. 1990. Network theory: A postmodern pedagogy for the writing classroom. In Handa. C. (ed.), Computer and Community: Teaching composition in the twenty-first century. Portsmouth, NH: Heinemann.

Benson, P. 2000. What is autonomy and independence in language learning? http://ec.hku.hk/autonomy/what.html

Boshier, R. 1990. Social-psychological factors in electronic networking. International Journal of Lifelong Education, 9(1), 49-64.

Brown, D. H. 1993. Principles of language learning and teaching. NJ: Prentice Hall Regents.

Chomsky, N. 1959. A review of B.F.Skinner's Verbal Behavior. Language learning 28, 55-68.

Deci, E. L. 1975. Intrinsic motivation. New York: Plenum Press.

Dickson, L. 1987. Self-instruction in language learning: New directions in language learning. NY: Cambridge University Press.

Egbert, J., Chao, C. & Hanson-Smith, E. 1999. Computer-enhanced language learning environments: An overview. In Egbert, J. & Hanson-Smith, E. (eds.), CALL Environments: Research, practice and critical issues. Alexandria, VA: TESOL.

Ebersole, S. 1995. Media determinist in cyberspace [Online essay]. www. Regent.edu/acad/schcom/rojc/mdic/md.html. Cited in Warschauer, 1998.

Feenberg, A. 1991. Critical theory of technology. New York: Oxford University Press.

Finholt, T., Kiesler, S. & Sproull, L. 1986. An electronic classroom. Working paper, Carnegie Melon University, Pittsburgh.

Graus, J. 1997. An Evaluation of the usefulness of the internet in the EFL classroom. MA thesis. Department of English. University of Nijmegen.

Gremmo, M. J., & Reley, P. 1995. Autonomy, self-direction and self-access in language learning: The history of an idea. System, 23(2), 151-164.

Hara, N. & Kling, R. 1999. Students' frustration with a web-based distance education course: A taboo topic in the discourse. Bloomington, IN: MA thesis. Indiana University.

Healey, D. 1999. Theory and research: Autonomy in language learning. In Egbert, J. & Hanson-Smith, E. (eds.), CALL environments: Research, practice and critical issues. Alexandria, VA: TESOL.

Heaey, D. & Johnson, N. 1995. A brief introduction to CALL. In Healy, D. & Johnston, N. (eds.), 1995 TESOL CALL interent section software list. iii-vii. Alexandria, VA: TESOL.

Holec, H. 1988. Introduction. In Holec, H. (ed.), Autonomy and self-directed learning: Present field of application. Council for Cultural Co-operation. Council of Europe, Strasbourg, 6-18.

Hymes, D. 1967. On communicative competence. Unpublished manuscript, University of Pennsylvania. Cited in Brown, 1993.

Johnston, B. 1999. Theory and research: Classroom atmosphere. In Egbert, J. and Hanson-Smith, E. (eds.), CALL environments: Research, practice and critical issues. Alexandria, VA: TESOL.

Kenning, M. M. & Kenning, M. J. 1990. Computers and language learning: Current theory and practice. New York: Ellis Horwood.

Kern, R & Warschauer, M. 2000. Theory and practice of network-based language teaching. In Warschauer, M. & Kern, R. (eds.), Network-based language teaching: Concepts and practice. New York: Cambridge University Press.

Krashen, S. & Terrell, T. D. 1983. The Natural approach: Language acquisition. Oxford: Pergamon Press.

Kiesler, S., & Sproull, L. 1991. Connections: New ways of working in the networked organization. Cambridge, MA: The MIT Press.

LeCompte, M. D. & Goetz, J. P. 1984. Ethnography and qualitative design in educational research. Orlando: Academic Press.

Littlewood, W. 1996. Autonomy: An anatomy and a framework. System, Vol.24, No.4, 427-435.

Marsh, D. 1997. Computer conferencing: Taking the loneliness out of independent learning. Language Learning Journal, No 15, 21-25.

Ministry of Post and Telecommunication (Japan). 1996. Policy Reports. http://www.mpt.go.jp/policyreports/japanese/group/internet/kankyou-4.html

Ministry of Post and Telecommunication (Japan). 1998. Policy Reports. http://www.mpt.go.jp/policyreports/japanese/group/internet/kankyou-4.html

Murray, G. L. 1999. Autonomy, technology, and language-learning in a sheltered ESL immersion program. TESL Canada Journal/ Revue TESL du Canada. Vol. 17, No. 1.

Ngeow, K. Y. 1999. Classroom practice: Enhancing and extending learning styles through computers. In Egbert, J. & Hanson-Smith, E. (eds.), CALL environments: Research, practice and critical issues. Alexandria, VA: TESOL.

Nunan, D. 1992. Research methods in language learning. NY: Cambridge University Press.

Nunan, D. 1995. Closing the gap between learning and instruction. TESOL Quarterly. Vol. 29, No 1.

Omargio, A. C. 1984. The proficiency-oriented classroom. In Higgs, T. V. (ed.), Teaching for proficiency, the organizing principle. Lincolnwood, IL: National Textbook Company.

Oxford, R. L. 1994. Language learning strategies: An update. ERIC Clearinghouse on Language and Linguistic Digest.

Rogers, C. R. 1969. Freedom to learn. Merrill Press. Cited in Dickson, 1987.

Sakamoto, T. 1999. Use of information technology in education: Present state and future prospects in Japan. In Feyten, C. & Nutta, J. (eds.), Virtual instruction: Issues and insights from an international perspective. Colo: Englewood.

Sakamoto, T. 1995a. Basic policy for the promotion of the advanced information and communication society. Tokyo: Headquarters for the promotion of the Advanced Information and Communication Society.

Sakamoto, T. 1995b. Guidelines on the adaptation of information technology in education, science, culture, and sports. Tokyo: Ministry of Education, Science, Sports and Culture.

Sakamoto, T. 1998. R&D project for multimedia use in isolated schools. Tokyo: Ministry of Education, Science, Sports and Culture.

Schuman, J. H. 1975. Affective factors and the problem of age in second language acquisition. Language learning, 25, 209-35.

Selfe, C. & Meyer, P. 1991. Testing claims for on-line conferences. Written Communication, 8(2), 163-192.

Soo, K. 1999. Theory and research: Learning styles, motivation and the CALL classroom. In Egbert, J. and Hanson-Smith, E. (eds.), CALL environments: Research, practice and critical issues. Alexandria, VA: TESOL.

Stern, H. H. 1983. Fundamental concepts of language teaching. Oxford: Oxford University Press.

Stevick, E. W. 1982. Teaching languages: A way and ways. Newbury House.

Taylor, M. B. & Perez, L. M. 1989. Something to do on Monday. La Jolla, CA: Athelstan.

Tella, S. 1995. Introducing international communications network and electronic mail into foreign language classrooms: A case study in Finnish senior secondary schools. University of Helsinki, Department of Teacher Education, Research Report.

Umino, T. 1999. The use of self-instructional broadcast materials for second language learning: An investigation in the Japanese context. System, 27, 309-327.

Van Manen, M. 1990. Researching lived experience: Human science for an action sensitive pedagogy. Ontario: The Althouse Press.

Warschauer, M. 1996. Computer-assisted language learning: An introduction. In Fotos, S. (ed.), Multimedia language teaching. Tokyo: Logos International.

Warschauer, M. 1998. Researching technology in TESOL: Determinist, instrumental, and critical approaches. TESOL Quarterly, 32(4), 755-761.

Warschauer, M., Turbee, L. & Roberts, B. 1996. Computer learning networks and student empowerment. System, 24 (1), 1-14.

Roessingh, H. & Watt, D. 1999. Inclusion, marginalization and language minority education: Curricular implications.

http://rehab.educ.ucalgary.ca/courses/mt_program/lectures/margin.html

Wenden. 1985. Learner strategies. TESOL Newsletter. 19 (1), 4-5.

Windschitl, M. 1998. The WWW and classroom research: What path should we take? Educational Researcher, 27(1), 28-33.

Yukita, H. 2000. How EFL/ESL is taught in class. http://www.hi-net.ne.jp/~hiyukita/taught.html

Appendixes

Appendix A

References

- A Web of On-line Dictionaries
 - http://www.yourdictionary.com/

The Newbury House Online Dictionary

- http://nhd.heinle.com/
- britannica.com (Encyclopedia)
 - http://www.britannica.com/
- informationplease (Dictionary & Encyclopedia)
 http://www.infoplease.com/

Raw cultural data

News

- CNN
 - www.cnn.com
- BBC World Service: Listen Live 24 Hours a Day (News)
 http://www.bbc.co.uk/worldservice

Magazines

- Time Magazine
 http://www.time.com/time/
- Life Magazine

Movies

 The internet movie database http://www.imdb.com/

Songs

mp3.comhttp://www.mp3.com/

EFL Web Sites

- Tower of English
 http://members.tripod.com/~towerofenglish/
- Dave's ESL Cafe
 http://www.pacificnet.net/~sperling/eslcafe.html

Online Courses

- University of Victoria Online English Writing Course http://web.uvic.ca/hrd/OLCourse/
- English for Internet http://www/study.com/

Student Projects

- Kyoto Restaurant project
 http://ccnic14.kyoto-su.ac.jp/information/restaurant/
- TOPICS, Online Magazine for Learners of English
 http://riceinfo.rice.edu/projects/topics/Electronic/Magazine.html

Keypal Exchange

- E-Mail KeyPal Connection
 http://www.comenius.com/keypal/index.html
- Exchange
 http://deil2.lang.uiuc.edu/penpals/

Mailing Lists for EFL students

• SL-Lists: INTERNATIONAL EFL/ESL EMAIL STUDENT DISCUSSION LISTS

Explanation is at http://www.latrobe.edu.au/www/education/sl/sl.html LISTSERV@LATROBE.EDU.AU

- Dave's ESL Cafe Mailing List
 Subscription from http://www.eslcafe.com
- Tower of English Mailing List
 Subscription from http://towerofenglish.com

Message boards

- ESL Japan: Students' Discussion Panel (Dale Bay)
 http://esljapan.com/students/board/index.htm
- Dave's ESL Discussion Center for Students Cinema http://www.eslcafe.com/discussion/da/

Chat

- Chat Room in Broken English (CRIBE)
 http://www.cup.com/bm7/cribe.htm
- Randall's ESL Chat Center (Randall S. Davis)
 http://www.esl-lab.com/chat/

Appendix B

EFL web sites where learners' e-mail accounts were obtained.

• Tower of English

Homepage http://members.tripod.com/~towerofenglish/

Keypal exchange list http://members.tripod.com/~towerofenglish/towerpals.htm

• Dave's EFL cafe

Homepage http://www.pacificnet.net/~sperling/eslcafe.html

Address Book http://eslcafe.com/phone3/

Mailing lists, Newsgroups and Bulletin Boards where the research e-mail questionnaire was posted.

Mailing lists

• Eigo no shitumon ML (English Question ML) eng_study@freeml.com

• Study Kan (Study House) study@ml.cup.com

Newsgroup

• japan.lang.english.communication

Message boards

Space ALC

Homepage http://www.alc.co.jp/

Message board http://home.alc.co.jp/db/owa/bbs_cat

Front Page

Homepage http://www.amy.hi-ho.ne.jp/front-page/index.htm

Message board http://www.amy.hi-ho.ne.jp/front-page/bbs.htm

Appendix C

Questions on e-mail survey (Translated from Japanese)

<Internet General>

- 1. Do you use the internet and e-mail for your English study?
- 1a. If yes, how do you use it?
- lb. If no, what is the reason?

<EFL web sites>

- 2. Do you have any particular web sites you often visit for the purpose of English study?
- 2a. If yes, what is the address of that site?
- 2b. If yes, what are the good and bad points about that site?
- 2c. If no, what site would you be interested in using for your English study?

<E-mail>

- 3. Do you use e-mail (mailing lists, bulletin boards, newsgroups and keypals) for the purpose of your English study?
- 3a. If yes, in what manner do you use it/them?
- 3b. If yes, what are the good and bad points regarding that activity (activities)?
- 3c. If no, what is the reason for not using them?

<Off-line English study>

- 4. Do you have any problems regarding your off-line English study? (Study of English without using the internet or e-mail.)
- 4a. If yes, what is (are) the problem(s)?
- 4b. If yes, can you suggest a resolution for that/those problem(s)?

<Future>

5. What do you expect to be able to do on the internet for your English study?

<Other>

6. If you have any opinions regarding the internet, e-mail or English study, please write them down.

Appendix D

Observed mailing lists

- Eigo no shitumon ML (English Question Mailing List)
 - Eikaiwa no kotsu (Knack for English conversation) english@freeml.com
- Study Kan (Study House)

study@ml.cup.com

eng_study@freeml.com

Appendix E

The e-mail message sent asking for a face-to-face interview:
Hello. My name is Mayumi Hoshi and I am a member of mailing list. I always enjoy reading your postings.
I am a graduate student at the University of Calgary and I am studying internet-based English language learning by Japanese EFL learners. This coming June I will travel to Japan to collect data and I wonder if you would be interested in participating in my study.
The data collection will consist of a face-to-face interview and observing you in the process of using the internet for your English study, and after that an audit of your learning material.
You may feel a bit awkward having a stranger observing you in your own home as you work, but if you can do this it would be very valuable for me. May I suggest that you visit my personal home page on the internet in order to find out a bit more about me. This way you may feel more comfortable when I arrive. My home page address is:
If you wish to contact a third party about me, you have permission to consult my supervisor, Dr at the University of Calgary. Telephone: E-mail:

The interview and the observation will take approximately one hour. If you are interested and are able to participate in early June, please reply to me by e-mail.

Thank you very much for taking the time to read this e-mail.

I am looking forward to hearing from you.

Sincerely,

Mayumi Hoshi