

Chapter One

Chapter One

Introduction 1.1

Whenever, the word technology is heard, nothing would come first to one's mind other than computer and its various applications. As Hanson- Smith states, "PC has become an important device for language teaching and learning and, particularly after emergence of the internet which has created incredible opportunities for learners to strengthen their communicative skills, both by "individualizing practice and by tapping into global community of other learners" (cited in Carter and Nunan, .(2002, p. 107

Computer-assisted language learning (CALL) researchers addressed different areas of interest. They compared computer use with other technologies, e.g. computer-based listening activities and audio-taped materials in traditional labs (Thornton and Dudley, 1997). They investigated how computer strengthens the instructed acquisition (Eskenazi, 1999), lexical items (Laufer and Hill, 2000), skill areas, e.g. conversational analysis by Negretti (1999), reading comprehension skills by Chun and Plass (1997), and explorations of connections among reading, .(writing, speaking and critical thinking by Sullivan (1998

The bulk of information electronically stored and retrieved creates a hugely rich source of authentic tasks and projects that might play a genuine role in promoting language acquisition and language use, since the tumultuous chaotic information in the internet imposes necessity of devising strategies for effective learning and communication, to make this new technology an 'environment' for learning and communicating, as Egbert and Hanson-Smith assert (1999). However, this on-line database allows engaging in linked multimedia discourses authored in a non-linear format what enhances computer-mediated communication via web-based chat rooms, .discussion forums and educational sites

:Statement of the problem 1.2

Though computer allows language learners to communicate with native speakers around the world via the internet, and allows classes to communicate in safe, guided atmosphere, where they enter a virtual reality, such as schmooze University (Falsetti, 1998) or Diversity university at Marist College (www.du.org) to attend distance learning, the process of measuring the impact of computer use , as a technology, on-line communication involves different factors that influence communicative abilities, since communication strategies which aim to overcome specific communicative problems, differ from learning strategies, which aim to maximize the effectiveness of the overall .(learning process (Mitchell and Myles, 1998, p. 94

:The purpose of the study 1.3

The purpose of this study is to highlight the difference between communication strategies and learning strategies in order to sort out the different models of explaining the former and thus infer from them factors that influence communication competence within technology environment.

:Questions of the study 1.4

This study raises questions to find answers for the following:

1. Whether students using computer share motivation, or .there are various attitudes
2. Presence and absence of social patterning of the .practice
3. Awareness of participants
4. Variance of outcomes

:Objectives of the study 1.5

This study mainly aims at describing and investigating the practice of computer use as communication strategy among second year students in some secondary schools in Khartoum Locality to identify variance in students' performance due to psychological, social factors and due to .lack of awareness

:Hypotheses of the study 1.6

H1 There is a statistically significant variance in students' performance in the computer-enhanced session due to .psychological factors

H 2 There is a statistically significant variance in students' performance in the computer-enhanced session due to .social factors

H 3 There is a statistically significant variance in students' performance in the computer-enhanced session due to lack of awareness

Methodology 1.7

This study follows the descriptive analytic method. It collects its primary data from students in four randomly chosen first year classes in secondary schools in Khartoum Locality. The four classes are from girls secondary schools. Secondary data is collected from hardware and software publications, data collected will be statistically processed and discussed

The researcher holds a computer-enhanced session in each class to practice instructed communication activities, then a test and a questionnaire is distributed to participants at the end of the class to be filled by them. The questionnaire involves data that would help investigating the different factors that influence communication

:The Plan of the Study 1.8

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Chapter Two

Chapter Two Literature Review

Information Processing 2.1

Technology is a medium and strategy is a mental plan that learners undertake either to make their language learning as effective as possible, in case of learning strategies or to use them to overcome a specific communicative problem, in case of communication strategies (Mitchell, Rosamoud and Myles, Florence, .(1998,p.90

Learning and communication strategies originate from information processing models developed by cognitive psychologists: McLaughlin's information processing model (1987, 1990) and Anderson's model (1983, 1985). Soon, these cognitive processes found recognition among linguists. O'Malley and Chamot (1990) applied the model in the field of learning strategies, Towell and Hawkins (1994) in the field of development of fluency, and Kasper and .Kellerman (1997) in the field of communication strategies

McLaughlin's Information Processing Model 2.2

McLaughlin's model was based on that 'complex behaviour builds on simple processes' (McLaughlin and Heredia, 1996, p.213). Moreover, these processes are modular and can be studied independently. The main characteristics of McLaughlin's information-processing :approach can be summarized as follows

- .1 Humans are autonomous and active
- .2 The mind is a symbol processing system
- .3 Complex behaviour is composed of simpler processes
- .4 Component processes are modular and can be studied .independently

McLaughlin views second language learning as the acquisition of a complex cognitive skill, since various aspects of the task need to be practised and integrated into fluent performance, which in turn requires atomization of component sub-skills.

Automization originates from the work of psychologists such as Shiffrin and Schneider who claims that the manner in which we process information is either controlled or automatic, and that learning involves a transformation from controlled towards automatic processing (McLaughlin, 1987). McLaughlin's model according to Mitchell and Myles, (1998) works as follows

1. Learners first resort to controlled processing in the second language which involves the temporary activation of a selection of information nodes in the memory, which requires a lot of attentional control, besides, it is constrained by the limitation of Short-Term Memory (STM).

2. Through repeated activation, sequences first produced by controlled processing become automatic. Automatic sequences are stored as units in the Long-Term Memory (LTM), i.e. this can be retrieved rapidly whenever the situation requires it, with minimal attentional control. As a result, automatic processes can work, activating clusters of complex cognitive skills simultaneously.

3. Learning in this view is seen as the transformation from controlled to automatic processing via practice (repetitive activation).

This continuing transformation from controlled to automatic processing results in a constant restructuring of the linguistic system of the second language

:Anderson's Act Model 2.3

Anderson's Adaptive Control of Thought model is another processing model from cognitive psychology applied to aspects of second language learning compared to McLaughlin's model, it is more wide-ranging, and the terminology is different, but practice leading to automatization plays the same central role as in McLaughlin's. In addition to Short-Term Memory, Anderson poses two Long-Term memories: a declarative LTM and a procedural LTM (Anderson, 1985,p.232

Mitchell and Myles, while illustrating what is meant by declarative and procedural knowledge, they use the metaphor of car-driving

In the early stages of learning to drive, however, knowing that (declarative knowledge) you have to do this does not necessarily mean that you know how (procedural knowledge) to do it successfully ...you go through a declarative stage before acquiring the procedural knowledge linked with this situation. With practice ... declarative knowledge becoming procedural

.(Mitchell and Myles, 1998.p.87)

According to Anderson, the shift from declarative to procedural knowledge comes in three stages (Anderson, :1985, p.232) as follows

The cognitive stage: A description of the procedure is .1
.learned

The associate stage: A method for performing the skill is .2
.worked out

The automatic stage: The Skill becomes more and more .3
.rapid and automatic

:Learning Strategies 2.4

O'Malley and Chamot felt the need to apply the ACT model in the field of language learning strategies (1990). Language learning strategies as defined by Oxford (Carter and Nunan, 2002, p.166), are 'operations [procedures] employed by the learner to aid the acquisition, storage, retrieval and use of information ... to make learning easier, faster, more enjoyable, more self-directed, more effective, .and more transferable to new situations

Learning strategies are related to the features of
.control goal directedness, autonomy and self-efficacy

Goals, according to Dornyei, are the engine that fires language learning action and provide the direction for the action' (Dorney, 1998, p.60). Examples of goals are to use English fluently and accurately in business, to order meals, to ask directions etc. attainment of such goals is realized by aiming for Short-Term language goals, or as Dornyei calls (Ibid, p.60) 'proximal sub-goals' linked to specific language .tasks

Example of such specific language tasks, the aim of rapidly but accurately reading English discourse of many disciplines which can be addressed by reading and understanding one such topic of discipline per week until good comprehension is matched by speed. Relevant learning strategies for accomplishing this weekly task include scheduling to read topics, skimming for main ideas, noting key vocabulary and guessing from the context, all of which might be called strategy chain: a set of interlocking, .related and mutually Supportive Strategies

Also learning strategies help learners become more autonomous what requires conscious control of one's own learning processes. Self-efficacy, individual's perception that one can successfully complete a task or a series of .(tasks, can be enhanced as well (Banaduras 1997

:Classification of Learning Strategies 4.1 .2

Major varieties of language learning strategies as classified by O'Malley and Chamot (1990,p.43) are cognitive, metacognitive, and social or affective strategies. Oxford (2002,p.167) adds mnemonic and compensatory strategies. Theoretical distinction can be made among them, however, the boundaries, are fuzzy, particularly that learners sometimes employ more than one strategy at a .given time

Cognitive strategies .2.4.1.1

They help learners make and strengthen associations (connectionism) between new and already known information (O'Malley and Chamot 1990; Oxford, 1990, 1996) and facilitate the mental restructuring of information

(Iran-Nejad et al, cited in Carter and Nunan, 2002).
Examples of cognitive strategies are: guessing from context, analyzing, reasoning inductively and deductively, .taking systematic notes and reorganizing information

:Metacognitive Strategies 4.1.2 .2

They help learners manage themselves to learn, the general learning process, and specific learning task. Self-knowledge Strategies include identifying one's own interests, needs and learning style performance. Knowledge of learning styles help learners choose strategies that comfortably fit with their learning styles, although using and .learning others is obviously useful

Another set of metacognitive strategies relates to managing the learning process in general and includes identifying available resources , deciding which resources are valuable for a given task, setting a study schedule, finding or creating a good place to study, etc. (Oxford, cited .(in Carter and Nunan, 2002

:Mnemonic Strategy 2.4.1.3

They link a new item with something known. These items are useful for memorizing information in an orderly string (e.g. acronyms) in various ways. Examples are: by sounds (rhyming): by body movement (total physical response, in which the teacher gives a command in English and learners physically follow this) or by location on a page .or blackboard

:Social Strategies 2.4.1.4

Social strategies facilitate learning with others and help learners understand the culture of the language they

are learning. Examples of social strategies are asking questions for clarification or confirmation, asking for help, learning about social or cultural norms and values and .studying together outside of class

Compensatory Strategies .2.4.1.5

They help learners make up for missing knowledge when using English in oral or written communication, just as the strategy of guessing from the context while listening and reading compensates for a knowledge gap. Compensatory strategies (or communication strategies) for speaking include using synonyms, circumlocution and .gesturing to suggest the meaning

Cohen (1997) asserts that communication strategies are intended only for language use, not for language learning, and that such strategies should not be considered language learning strategies. However, Little (1999) and Oxford (1990) contend that compensatory strategies even when employed for language use, simultaneously aid language learning: each instance of language use provides an immediate opportunity for 'incidental learning' incidental language is one of the most important but the least reached .areas in language learning

O'Malley and Chamot (1990, p.217) summarize the benefits applying cognitive theory in the field of second :language acquisition as follows

Individuals make use of a variety of information and •
.strategic modes of processing

- Language has properties in common with other complex skills in terms of how information is stored and learned
- Learning a language entails a stagewise progression from initial awareness to full automaticity; and
- Learning strategies have the potential to influence learning outcome in a positive manner

Fluency Development in second language acquisition 2.5

Fluency as defined by Allen. J. Hoge (< www.effortlessenglish.com.>) is the ability to speak easily, naturally, and automatically without thinking or translating

In a comprehensive review Schmidt (1992) analyses and evaluates how well a range of current psychological models account for fluency and fluency development in learners (cited in Mitchell and Myles, 1998, p.92). Likewise, Towell and Hawkins (1994) make use of some aspects of the ACT model in order to account for fluency development ((1994, p.248

Their model attempts to integrate how learners learn the second language system with how they learn to use the system. Towel and Hawkins reject the idea that Anderson's model can account for all aspects of second language learning, particularly the acquisition of 'core' grammatical knowledge. Instead , Towell and Hawkins used models of natural language processing. They resort to a Universal Grammar approach to understand how learners use this

grammatical knowledge in increasingly efficient ways, Towell and Hawkins 'appeal' to an information processing .account

As can be seen in Figure 2.1, the internally derived hypotheses about second language structure (shaped by UG and L1) are stored in different ways in the mind at different stages of the learning process. In a first stage, a hypothesis will be stored in the declarative long-term memory (controlled). When put to use, this kind of internally derived knowledge will give rise to a production stored in the procedural long-term memory, initially in 'associative' form (i.e. under attentional control from the learner). The hypothesis may then be revised and cause some reorganization of the declarative knowledge, which will then give rise to other revised productions. After successive reorganizations, these productions will become autonomous (i.e. automatized and free from attentional control) and are stored as such in the 'autonomous part of the procedural memory (Towell and Hawkin's 1994, page .(284

UNIVERSAL GRAMMAR

Figure 2.1

THE FIRST LANGUAGE

(t)

(m)

INTERNALLY DERIVED HYPOTHESES

DECLARTIVE
LONG-TERM
MEMORY
(CONTROLLLED)
Time 1

Time 2
EXPLICIT
RULES
FORMULAS
REORGANIZED
MENTAL
REPRESENTATION

Time 3
REORGANIZED
MENTAL
REPRESENTATION

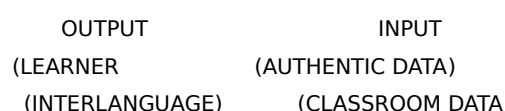
SHORT-TERM
MEMORY

PROCEDURAL
LONG-TERM
MEMORY
(AUOMATIC)
.Ass. Aut
Time 2a

Time 2a

SHORT-TERM
MEMORY

SHORT-TERM
MEMORY



(Fig. 2.1 Towell and Hawkins, 1994, p.284)

Communication Strategies in L2 use 2.6

Communication strategies are tactics used by the non-fluent learner during second language interactions, in order to overcome specific communicative problems. According to Mitchell and Myles (1998, p.94) Communication Strategies (CS) is a relative newcomer in the field of second language research.

Initially, work within the field of communication strategies concentrated on descriptive issues, such as definition, identification, and classification, and soon followed by psychological models. For some researchers communication strategies tend to be looked at as some kind of "self-help" module within the learner, located within the models of speech production. (Farch and Kasper 1983b)

or within general models of cognitive organization and
.(processing (Bialysock, 1990

For other researchers, communication strategies are seen as a much more interactional, inter-individual activity in which learners solve problems by negotiating meaning (Tarone, 1983). Communication strategies for these researchers are seen within the framework of conversational analysis (Wagner and Firth, 1997) or sociolinguistics (Rampton,1997). Sociolinguistics work to observe natural phenomena, while psychologists make
..experiment with controlled variables

Identification of communication strategies as pointed out by Mitchell and Myles (1998) depends on two methodological approaches, the study of explicit strategy markers, such as increased hesitation , or metalinguistic
..comments, such as 'I am not sure how to do it

Classification of communication strategies early approach tended to be taxonomic, and concentrated on the description of differences in strategy output, for in term of
..paraphrase, gestures, mime,ect

A sample taxonomy of CS 2.6.1

Researchers largely concentrated on lexicon, as word-finding difficulties are much easier to identify and investigate than other communication problems. The classification given here and shown in Figure 2.2., is from (Kasper and Kellerman, 1997, p.20), and the examples given below is taken from (Bialystock, 1990, p.62) to help

illustrate some of the different types of Communication
 .Strategies in the taxonomy

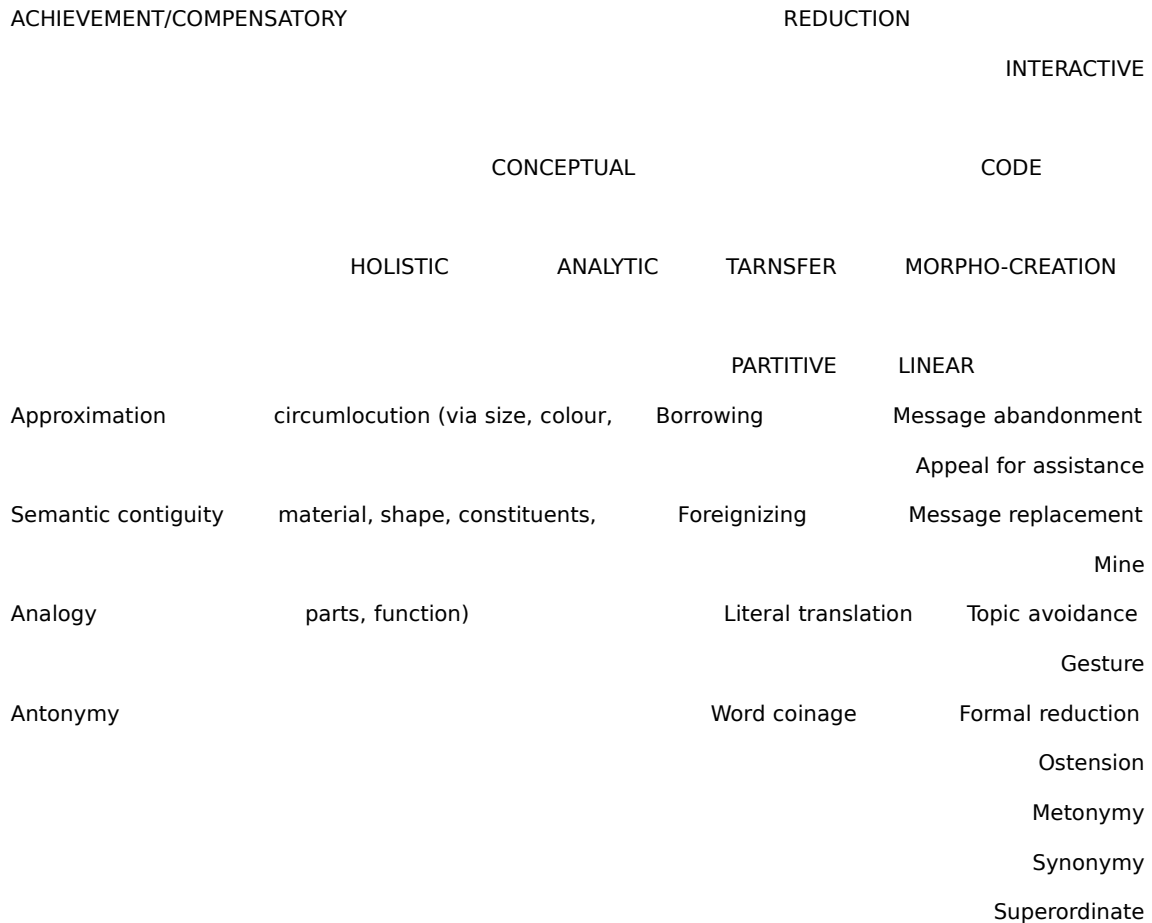


Figure 2.2
 (Kasper and Kellerman, 1997,p.20)

- Message abandonment: 'garden hose': second language speech ... (=the water comes out of it. It is attached to (...)
- Approximation: 'play pen': second language speech (= (.you put a baby in it. There is like a hole
- Circumlocution: 'can opener': second language speech (=something you use in the kitchen when you want to (.open bottles

- Word coinage: 'wooden spoon' second language speech
(. (= It's a spoon of wood
- Literal translation: 'beater': second language speech (= (.It's for if you want to mix
- Language switch: 'child's car seat': second language speech (=It's a chair for a baby that you put in a car to
. (.keep you safe
- Appeal for assistance: 'nail': second language speech (=I
. (.don't know what a nail is

Communication Strategies and Language 2.6.2 Processing

As CS are resorted to when the learner has word-finding difficulties, any account of CS therefore has to be placed in the context of what is known about the way in which we access words in our mental lexicon. Poulisse (1993) used a model of lexical access and applied it to the study of communication strategies. The model she uses is a 'spreading activation' model of lexical access. The model depends on that lexical items have a list of features characterizing them. For example a word such as woman might have the feature [+ noun], [+animate], [+human] , [+adult], [+female], and a word such as man might consist of the features [+noun], [+animate], [+human] [+adult], [+male]. Lexical retrieval in this view consists of narrowing of possible candidates to just the one needed. The more .features are shares, the stronger the activation

Sociocultural Perspectives on Second Language 2.7 Learning

The introduction of learning theory associated with the name of the Soviet developmental psychologist Lev S. Vygotsky to the domain of second language learning. Born in the Russian provinces, Vygotski was active in Moscow. His work fell into disfavour within Soviet Psychology, and the first of his writings to be translated into English, 'Thought and Language', appeared only in 1962. Since then his sociocultural theories of child development have become influential. Many of his wide-ranging writings remain .untranslated

Mediation 2.7.1

According to Lantof (1994 a ,p. 418, cited in Mitchell
:(and Myles (1994

Vygotsky's fundamental theoretical insight is
that higher forms of human mental activity are
always, and everywhere, mediated by symbolic
...means

symbolic tools are the means through which ...
humans are able to organize and maintain control
over the self and its mental, and even physical
.activity

:The Zone of Proximal Development 2.7.2

The domain where learning can most productively take place is called the Zone of Proximal Development (ZPD), i.e. the domain of knowledge or skill where the learner is not yet capable to work independently, but can achieve the

desired outcome given relevant scaffolded help (supportive dialogue which direct the attention of the leaner (Wood et al, 1976). The ZPD was defined by Vygotski as 'the difference between the child's developmental level as determined by independent problem solving and the higher level of potential development as determined through problem solving under adult guidance or in collaboration

.(with more capable peers' (1978, p.85

The metaphor of scaffolding has been developed in neo-Vygotiskian discussions to capture the qualities of the types of other-regulation within the ZPD which is supposedly most facilitative of learning or appropriation of new concepts. According to Wood et al (1976), scaffolded help has the

:following functions

- .1 ;recruiting interest in the task
- .2 ;simplifying the task
- .3 ;maintaining pursuit of the goal
- .4 marking critical features and discrepancies between what
.has been produced and the ideal solution
- .5 ;controlling frustration during problem solving
- .6 demonstrating an ideal version of the act to be
.performed

This agrees with what Donato puts (1994, p.4) that 'scaffolded performance is a dialogically constituted interpsychological mechanism that promotes the novice's internalization of knowledge co-constructed in shared
.activity

:Activity Theory 2.7.3

Activity theory was developed by one of Vygotsky's successors A. N. Leontiev (Lanlof and Appel, 1994, pp. 16-22). Activity theory comprises a series of proposals for conceptualizing the social context within which individual learning takes place. Danato and McCormick (1994.p 34.)
:give the following account about activity

*the operational level of activity is the way an action ...
is carried out and depends on the conditions under
.(which actions are executed ... (1994, p. 455*

Socio-cultural view of language learning 2.7.4

Socio-cultural theorists assume that the same learning mechanisms will apply to language, as apply to other forms of knowledge and skill (Danato 1994), however, all learning is seen as first social, then individual; first inter-mental, then intra-mental. Also learners are seen as active constructors of their own learning environment, which they
.shape through their choice of goals and operations

Most of the Vygotskian studies which concern language development have been done in the context of form-focused instruction. Donato (1994) argues that language items reviewed or co-constructed in this way have been 'learned', because they were reused next day by
.individual, in performing a (planned) oral presentation
About this Mitchell and Myles point out that Vygotskian tradition say little on issues to do with rates and routes of learning. Moreover, they ask whether 'the people who

receive timely and effective scaffolding or means of mediation actually learn any faster than those who get help
.(less? (Mitchell and Myles, 1998

Sociolinguistic perspectives 2.8

Sociolinguistics, or the study of language in use, is itself a diverse field, with multiple theoretical perspectives.
.Sociolinguistics is primarily concerned with language in use

Ethnography of second language 2.8.1 communication

The ethnography of communication studies the social roles of language, in structuring the identities of individuals and the culture of entire communities and societies. Linguistic anthropologists such as Hymes, Saville - Troike and others have studied the characteristics of speech events which have patterning and significance for members of a particular speech community (cited in Mitchell and Myles, 1998). Examples of speech events might be telephone conversations, service encounters, classroom lessons, job interviews, etc. The ability to participate appropriately in relevant speech events is an important part of
.communicative competence

The ethnography of second language communication aims similarly to study contexts and events where participants striving to achieve communicative goals through the means of second language. However, roles and identities of participants may be much more problematic in
.cross-linguistic, cross-cultural encounters

Gate keeping and Power Relation in Second 2.8.2 Language Communication

Many classroom studies in second language learning have noted the mismatch of power relationships between the teacher and students, with teachers seen as dominant figures who control the details of second language classroom discourse (Chaudron, 1988, pp. 50-4). Some recent sociolinguistic studies have also tackled the problematic social relationships in which adult second language learners can also find themselves. Adult immigrants, in particular, may regularly be subjected to discrimination and racial harassment. Yet they may depend for essential social goals and services on second language medium interactions with representatives of the majority community, gate keepers with whom they have to negotiate successfully to obtain, e.g. housing, jobs, health care , etc

The European Science Foundation (ESF) project on adult migrants undertook more sociolinguistically oriented work, and concentrated in particular on examining adult migrants' encounters with a wide variety of gatekeepers (Bremer et al. 1996). Bremer and her colleagues concentrate on how the participants in such unequal encounters succeeded (or detailed) in developing and maintaining mutual understanding

Another example of the diverse ways in which power relations can affect learners' participation in second language speech events is done by Losey (1995) who conducted a classroom study to examine roles of different ethnic and gender groups. Losey concluded to that unequal power relations can control both learner's overall

opportunities and willingness to take part in second
.language interaction

Speaker's Social Identity and Self-esteem 2.8.3

The concept of social identity has been borrowed from social psychology. As quoted in Hansen and Liu (1997, pp. 567-8), social identity is defined as 'that part of an individual's self-concept which derives from his knowledge of his membership of a social group (groups) together with
'the emotional significance attached to that membership

The concept of social identity as such has come under criticism for being too static and too focused on the individual. A Canadian researcher, Bonny Norton Pierce called for a more comprehensive theory of social identity, one that 'integrates the language learner and the language learning context' (Pierce, 1995, p. 12). For Pierce, social identity is dynamic; it is described as "multiple, a site of
(struggle, and subject to change overtime (p.20

Pierce conducted a study of small group of immigrant adult women, concentrating on changes in their social identity over time, and in particular, on their struggle to achieve the right to speak in second language settings. Pierce proved potentiality of identity change from submissive immigrant to caregiver able to speak and learn
.the second language

The researcher reports a range of strategies employed by second language speakers, in response to such threats. At one extreme, they found examples of resistance and reassertion of the speaker's first language identity. At the other extreme, they found speakers whom worked hard

during second language introductions to assert a positive,
.(native-like identity (Bremer et al. 1996, p.100

:Ethnography of Second Language Learning .4 .2.8

According to Mitchell and Myles (1998, pp. 171-2),
'chances of using a second language are socially patterned,
in ways that increase the difficulty of the learning task'.
However, Bremer et al. (1996, p. 105) comment briefly on
interactional patterns which seem most likely to lead to an
.increase in learning opportunities

*The data we have analyzed show that the
discourse of minority interactants who seem to be
conscious of the learning issues and of the
necessity to work on their ability to understand ...*

:their majority patterns involves

*the use of metalinguistics comments on •
understanding and non-understanding and
;attention to the linguistic issues*

*initiative rather than dependency in their •
relationship to the majority partner in the
;interaction*

;a sensitive management of issues of face •

.an awareness of the issues in general •

.(p. 105 ,1996)

Second Language Socialization 2.9

Some ethnographic studies of second language learning
have also focused more explicitly, on 'socialization through

language and socialization to use language' (Ochs, 1988, p.14). Jerri Willet like Ochs in her study, links research methods drawn from ethnography (participant observation and interviewing) with Vygotskian sociocultural learning theory and with activity theory. She is interested in the contributions of social class and gender to the structuring of learners' experiences and opportunities to develop second :language competence. She stresses that

Language socialization, however, occurs through the micropolitics of social interaction ... in the process of constructing shared understandings through negotiation, the social practices in which the interaction is embedded .(are altered. (Willet, 1995, p.475

Sociolinguistics Perspectives on Interlanguage 2.10 communication

Interactionist tradition does of course systematically approach second language interaction, but adopts a mainly quantitative approach, examining the occurrence or non-occurrence of significant functions such as the negotiation of meaning, recasts, etc. Moreover, the ethnographers of second language communication whose work we looked at in this chapter explore complete speech events in a much more holistic way. They take a multilevel view of conversational interaction. They are concerned with the relationships between linguistic and non-linguistic aspect of

communication, rather than with the linguistic aspect which
.is not seen as autonomous or pre-eminent

Sociolinguistic Perspectives on Language 2.11

Learning and Development

It is clear that sociolinguists of second language as noticed in this chapter have concentrated mainly on describing the context for language learning, and the speech events (from gate keeping encounters to classroom lessons) through which it is assumed to take place. Like the Vygotskian sociocultural theorists the ethnographers believe that learning is a collaborative affair, and that language knowledge is socially constructed through interaction. Likewise, current ethnographies of second language communication and of second language socialization offer a great deal of evidence about how the learning control, and the learners style of engagement .affect the rate of second language learning

Sociolinguistic Accounts of the Second 2.12

Language Learner

Sociolinguists are highly interested in a wide variety of second language learners, from the youngest classroom learners to adult migrants. Most striking though, is the emphasis placed by contemporary ethnographic researcher such as Pierce and Willet on the dynamic and alterable nature of learners' identity. Self-esteem, motivation, etc. are believed to be constructed and reconstructed in the course of second language interaction, with significant results for .the rate of learning and ultimate level of success

2.13 Technology and Second Language Learning and :Communication

The world now has achieved huge advances in technology, and educational technology is not an exception. Starting by traditional audio-taped material, and now rising highly in the sky of a virtual reality. As mentioned in chapter one of this study, technology and its application shape an authentic source aiming at facilitating both learning and communicating.

Chapter Three

Chapter Three

The Methodology

The paradigm of this study is both qualitative and quantitative, i.e. a mix of paradigms. The study follows the descriptive analytic method. It aims at examining three axes: psychological factors , socioeconomic factors, and awareness of language proficiency from the part of students .

Tools used in primary data collection are: (1) observation, a computer-enhanced session for practising communication activities, (2) a test and a questionnaire worked out by students, secondary data is collected from .hardware and software publications

A populations of the study is represented in second year female students in four Model Secondary Schools in Khartoum Locality randomly chosen. A questionnaire is given to ten students in each class according to two criteria: five students with noticeable participation in the session, and other five students who dared not to participate or with less noticeable participation. Code of the first group is .Pierce and the second group's code is Willet

The computer-enhanced sessions' material chosen from <www.fortlessenglis.com>, directed by J.Allen Hoge who believes in potentiality of speaking and communicating naturally and automatically from the side of non-native

speakers. The material is called: 'Crazy Story Section: Our Universal journey Mini-Story. Hoge's mini-story is simple and .told in a continual modified repetitive way Hoge's techniques in telling his stories depend on modifications, e.g. synonym, paraphrase, and asking .questions to remind his listeners with new vocabulary Data collected will be processed to reach meaningful information by subjecting the former to statistical analysis, .interpretation, and evaluation

Chapter Four

Chapter Four

Analysis and Discussion

:Paradigm 4.1

As mentioned in chapter 3, the paradigm of this study is both qualitative and quantitative, the first is represented in impressionistic observation practiced in the computer-inhered session and led to dividing the sample in each class into two groups, Pierce and Willett. The second is represented in the test and the questionnaire carried out by .the students and is presented numerically

:Data .4.2

The collected data in this study include age, socio-economic status and students' performance in both of the computer-enhanced session and in the test. Age may help

disclose the progression of the students through basic school, whether students have been left back once or twice in previous grades. Socioeconomic status may reflect students' familiarity with technology and aptitude of interaction and going along with others. Performance may help disclose psychological factors and students' lack of awareness.

Presentation 4.2

Presentation will involve frequency distributions and percentages in two steps, individually, in which data of each school is presented, and collectively, which presents data of the four schools.

:Individual presentation 4.4

Khartoum Al-jadida School for Girls 4.4.1

4.4.1.1Age

Total	17	16	15	14	Range
10	2	0	6	2	

The higher age is 17 and realized here by two students and both of them are classified within the category of weak performance. Since aged regular admission in basic schools is 6, age of normal second year student in the secondary school should be 15. This may indicate that progression of

the two students through their basic school was not straightforward, and they might have been left back once or twice in pervious grades

:Socioeconomic status 4.4.1.2

Negative		Positive		
Willett	Pierce	Willett	Pierce	
0	1	5	4	
0	20%	100%	20%	%

There is only one negative socioeconomic status and it is within Pierce group

Performance 4.4.1.3

%	Pierce	%	Pierce	
40%	2	0	0	Good
60%	3	100%	5	Weak
100%	5	100%	5	Total

No one of Pierce's group achieved good performance though its members showed noticeable interaction during the computer- assisted session, and the opposite is right,

40% of Willett's group achieved good performance though they did not show noticeable interaction. This means that 40% of Willett's group who achieved good performance might be intermedated from participation by some psychological factors, such as lack of self-confidence or might be unaware of their language proficiency. The same applies to Pierce's group whose members all failed to achieve good performance, but in an opposite way. This means that their socioeconomic qualify them to be confident interactors who are familiar with technology or .they may be unaware of their language proficiency

Anyhow, good performance is achieved only by two .students form Willett's group which is not expected

.Erkewit Al-jadida School 4.4.2

Age 4.4.2.1

Total	17	16	15	14	Range
10	1	5	2	2	

The higher age is 17 and realized here one student and she .is classified within the category of good performance

Socioeconomic Status .4.4.2.2

Negative		Positive		
Willett	Pierce	Willett	Pierce	
0	0	5	5	
0	0	100%	100%	%

All students in the two groups fall under positive .socioeconomic status

Performance 4.4.2.3

%	Willett	%	Pierce	
40%	2	100%	5	Good
60%	3	0	0	Weak
100%	5	100%	0	Total

All members of Pierce's group succeeded in achieving good performance while up 40% of Willett's group achieved that. Again one can say that Willett's 40% did not participate in the computer-assisted session by cause of a psychological factor: self-confidence, and the 60% students who failed to achieve good performance beside the psychological factors that impede their participation they may be unaware of .their language proficiency

Halawyat Saad Model School for Girls 4.4.3

Age 4.4.3.1

Total	17	16	15	14	Range
-------	----	----	----	----	-------

10	0	2	8	0	
----	---	---	---	---	--

The higher age is 16 and realized here by two students the
.dominant age is 15

Socioeconomic Status 4.4.3.2

Negative		Positive		
Willett	Pierce	Willett	Pierce	
0	0	4	5	
0	0	80%	100%	%

Only one student in Willett's group falls under negative
.socioeconomic status

Performance 4.4.3.3

%	Willett	%	Pierce	
40%	2	20%	1	Good
60%	3	80%	4	Weak
100%	5	100%	5	Total

This table asserts the impact of social factor among Pierce's group, since 80% of them failed in achieving good performances in the test, through their interaction during the computer-assisted session was fairly impressionistic. A gain the take indicates a psychological factor of confidence
.among 40% of Willett's group

Al-Barari Model School for Girls 4.4.4

Age 4.4.4.1

Total	17	16	15	14	Range
-------	----	----	----	----	-------

10	0	0	9	1	

.The higher age is 15 and realized here by nine students

Socioeconomic Status 4.4.4.2

Negative		Positive		
Willett	Pierce	Willett	Pierce	
0	2	5	3	
0	40%	100%	60%	%

Only two students in Pierce's group fall under negative
socioeconomic status

Performance 4.4.3.3

%	Willett	%	Pierce	
100%	5	80%	4	Good
0	0	20%	1	Weak
100%	5	100%	5	Total

This table asserts the impact of a psychological factor of confidence among Willett's group whose performance was 100% good, meanwhile they did not show good impression during the computer-assisted session. The only one who failed to achieve good performance among Pierce's group falls under negative socioeconomic status. Anyhow Al-Barari Model School achieved the higher score of good performance, nine students out of ten 90%

:The Four Schools 4.5

Age 4.5.1

Total	17	16	15	14	Range
40	3	7	25	5	

.The higher age is 17 and the dominant age is 15

The Socioeconomic Status .4.5.2

Willett		Pierce		
-	+	-	+	
1	19	3	17	
5%	95%	15%	85%	%

Only four students fall under negative socioeconomic status
:their performance is as follows

Weak	Good	-	School
1	1	2	Al-Barari
		0	Erkawet
1		1	Halwyat Saad
1		1	Khatroum Al-Jadidda

Performance 4.5.3

%	The two groups	%	Willett	%	Pierce	
52,5	21	55%	11	50%	10	Good

%						
47,5	19	45%	9	50%	10	Weak
%						
100%		100	20	100%	20	Total
		%				

Willett's groups achieved the highest score in good performance 55% within the group in the four schools and .within the total number of the whole students

:General Commentary 4.6

Table 4.5.3 show that members of Willett's group who did not show enthusiasm to participate in the computer enhanced session achieved better results in performance 5% compared to 5% in Pierces group. This may be due to inconfidence- a psychological factor. The table also shows that 50% of the students in Pierce's group who participated fairly in the computer-enhanced session failed to achieve good performance. One may attribute their enthusiasm to participate in the computer-enhanced session to their familiarity with technology and interaction with others - a social factor. Finally, it shows that 47.5% of the two groups are not aware of their language proficiency. One can say what has been shown in the table asserts validity of the :hypotheses of the research

Chapter Five

Chapter Five

Conclusion

:Findings 5.1

From the primary and secondary sources of the study
:the researcher concludes to the following

Technology can play a vital role in improving student's .1
.communicative competence

Many students have good communicative skills, but they .2
hesitate in exhibiting such skills due to psychological
.factors

Many students are not aware of their language .3
proficiency. They either give good impression as
interactors, or they achieve weak performance in
.addition to their reluctance in participation

Recommendations 5.2

:The researcher recommends the following

Necessity of using technology in teaching communication .1
.in secondary schools

Teachers should use different techniques to eliminate .2
.fear or speech anxiety

Language proficiency should be given good care when .3
.teaching communication

5.3 Preliminary Bibliography

- All Wright, D. and k. Bailey. 1991. Focus on the Language Classroom: An Introduction to classroom Research for Language Teachings. Cambridge University Press. .1
.Cambridge
- Anderson, I. 1985. Cognitive Psychology and its .2
.Implications. Freeman New York
- Bandura, A. 1997. Self-Efficacy: The Exercise of Control. .3
.Freeman New York
- Bialystok, E. 1990. Communication Strategies: a .4
Psychological Analysis of Second-Language Use. Basil
.Blackwell. Oxford
- Boswood, T. (ed.) 1999. New ways of using computer in .5
.Language Teaching. TESOL. Alexandria : VA
- Bremer, K. et al. 1996. Achieving Understanding: .6
.Discourse in Intercultural Encounters -Longman. London
- Carter, Ronald and Nunan, David (eds) 2002. The .7
Cambridge Guide to Teaching English to Speaker of
Other Languages. Cambridge University Press.
.Cambridge
- Chandron, C. et al. 1988. Second Language .8
Classrooms: Research and Teaching and Learning. New
.York

- Chapelle, C. A. 2001. Computer Applications in Second .9
Language Acquisition: Foundations for Teaching and
.Research. Cambridge University Press. Cambridge
- Chun, D. and J. Plass. 1997. Research on Text .10
Comprehension in Multimedia Environments. Language
Learning Technology 1(1), 60-81. Available:
.http://lt.msu.edu/vol3num1
- Cohen, A.D. 1997. Language Learning Strategies and .11
Language Use Strategies. Strategies-Based Instruction
.Workshop. University of Minnesota. U.S.A
- Danato, R. 1994. Collective Scaffolding in Second .12
Language Learning. In Lant of, J. and Appel, G (eds).
Vygotskian approaches to second language Research. A
.blex Publishing Corporation, 33-56
- Dewey, J. 2009. Democracy and Education: An .13
Introduction to the Philosophy of Education. WCL Books.
.New York
- Donato, R. and McCormick. 1994. Socio cultural .14
Perspective on Language Learning Strategies: the role of
.medication. Modern Language Journal 78, 454- 64
- Dornyei, Z. and K. Kormos. 1998. Problem Solving .15
Mechanisms in L2 Communication: A psycholinguistic
Perspective: Studies in Second Language Acquisition 20,
.349- 385
- Egbert, J. and Hanson- Smith. 1999. CALL Environments: .16
Research, Practice and Critical Issues. Alexandria, VA:
.TESOL
- Ellis, R. 2001. Introduction: Investigation from-focused .17
.Introduction. Language Learning 51 (SI): 1 - 46

- Eskenazi, M. 1999. Using Automatic Speech Processing .18
for Foreign Language Pronunciation Tutoring. Language
Learning and Technology 2 (2) , pp. 62-76. Available:
.http: //t.msu.edu/vol2num2
- Falsetti, J, 1998. Welcome to SchMOOZe University. .19
.Available: http://schmooze. hunter.cuny.edu
- Farch, C. and Kasper, G. (eds). 1983 b. Plans and .20
Strategies in Foreign Language Communication. In
Strategies in Interlanguage Communication. Longman.
.London
- Hansen, J. and Liu, J. 1997. Social identity and .21
Language: Theoretical and methodological issues. TESOL
.Quarterly 31, 567-76
- Hanson- Smith, E. (ed.). 2000. Teaching -Enhanced .22
.Learning Environment. TESOL. Alexandria, VA
- Hess, D. E 2002. Discussing controversial Public Issues in .23
Secondary Social Studies Classrooms: Learning from
Skilled Teachers. Theory and Research in Social
.Education 22 (2): 10- 41
- Hess, D. E. 2009. Controversy in the classroom: The .24
.Democratic Power of Discussion. Rutledge. New York
- .Hoge, Allen J. <www.effortlessenglish.com .25
- Kasper, G. and Kellermna, E. (eds). 1997. .26
Communication strategies: Psycholinguistics and
.Sociolinguistics Perspectives. Longman. London
- Lantof , J. and Appel, G. 1994. Theoretical Framework: .27
vygotskian Perspectives on Second Language Research.
.Norwood. New Jersey. U.S.A

- Lauffer, B. and M. Hill. 2000. What lexical information do L2 Learners select in CALL dictionary and how does it effect word retention? *Language Learning ad Technology* .3 (2), 58-76. Available: <http://lt.msu.edu/vol3num2> .28
- Losey, K. 1995. Gender and Ethnicity as Factors in development of verbal Skills in bilingual Mexican .American Women. *TESOL Quarterly* 29, b35-61 .29
- McLaughlin and Hereda. 1996. Information Processing Approaches to Research on Second Language Acquisition and Use. In Richter W. and Bhatia, T (eds). *Handbook of .Second Language Acquisition*. San Diego, 213-28 .30
- McLaughlin, B. 1987. *Theories of Second Language .Learning*. London .31
- Mitchell, Rosamond and Myles, Florence. 1998. *Second .Language Learning Theories* .32
- Negretti, R. 1999. Web-based activities and SLA: A conversation analysis research approach. *Language Learning and Technology* 3 (1), 75 - 87. Available: <http://lt.msu.edu/vol3num1> .33
- O, Reeve, V. 1995. *Speaking to Think, Thinking to speak: The importance of Talk in the Learning Process*. NH: .Boynton - Cook. Portsmouth .34
- Ochs, E. 1988. *Culture and Language development: Language acquisition and Language Socialization in a .Samoan village*. Cambridge University Press. Cambridge .35
- O'Malley, J. and Chamote. 1990. *Learning Strategies in Second Language Acquisition* . Cambridge University .Press. Cambridge .36

Ortega, L. 1997. Process and Outcomes in Networked classroom Interaction: Defining the Research Agenda for L2 Computer- Assisted Classroom Discussion. Language Learning and Technology (1), 81- 93	.37
Oxford, R. 1999. Language Learning Strategies: What Every Teacher should know. Boston. U.S.A	.38
Pierce, B. 1995. Social identity, investment and Language learning. TESOL Quarterly, 29, 9-31	.39
Poulisse, N. 1993. A Theoretical Account of Lexical Communication Strategies. In Schreuder and Weltens (eds) The Bilingual Lexion. Amsterdam	.40
Rampton, B. 199. A sociolinguistic Perspective on L2 Communication Strategies. In Kasp[er and Kellerman (eds). Communication Strategies: Psycholinguistic and Sociolguistic Perspective. Longman. London	.41
Schmidt, R. the Role of Consciousness in Second Language Learning. Applied Linguistics 11, 129 – 58	.42
Sullivan, N. 1998. Developing critical Reading Writing Skills: Empowering Minority Students in a Networked Computer Classroom. In J. Swaffer and P. Markley (eds) Language Learning Online. Austin. U.S.A	.43
Tarone, E. 1983. Some Thoughts on the Notion of "Communication Strategy". In Frach and Kasper (eds). Strategies in Interlangauge Communication. Longman. London	.44
Thornton, p. and T. Dudley. 1997. The (CLL environment: An Alternative to the Language Lab. (CELL Journal 7 (4), 29-34	.45

- Towel, R. and Hawkins. 1994. Approaches to Second .46
 .Language Acquisition. Clevedon
- Wagner and Firth. 1997. Communication Strategies at .47
 Work. In Kasper and Kellerman (eds). Communication
 Strategies: Psychological and Sociolinguistic Perspective.
 .Longman. London
- Willett, J. 1995. Becoming First graders in an L2: .48
 ethnographic study of L2 socialization. TESOL. Quarterly
 .29, 473- 503
- Wood, D., Burner, J. and Ross, G. 1976. The Role of .49
 Tutoring in Problem Solving. Journal of Child Psychology
 .and Psychiatry 17, 89 - 100