Applying Cognitive Development on Second Language Acquisition (SLA)

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Abstract: “Language Acquisition requires meaningful interaction in the target language- natural communication- in which speakers are concerned not with the form of their utterances but with messages they are conveying and understanding.” Stephen Krashen.

Second language acquisition (SLA) is the process by which people learn a second language in addition to their native language(s). The term second language is used to describe the acquisition of any language after the acquisition of the mother tongue. The language to be learned is often referred to as the ‘target language’ or L2, compared to the first language L1.

Cognitive learning theory has focuses on unobservable change in mental knowledge. Cognitive or mental change, as psycholinguists say, should no longer be ignored as a rejection of the behaviorist views. Cognitive abilities of SLA vary from one person to the other; presumably the recent studies suggested a synthesis in which the process of language acquisition may interact with cognitive development to produce an improvement in acquired language.

SLA is often viewed as part of Applied Linguistics; it is typically concerned with the language system and learning processes, whereas applied linguistics may focus more on the experiences of the learner particularly in the classroom. The cognitive development of the second language acquisition is developed in this research through student-directed projects, presentations and classroom discussions to supplant the traditional lecture format.

The purpose of this research is to combine these vital strands of investigation into close dialogue that will be applied on a group of university students studying a course of Sociolinguistics in Al Alsun Faculty, English Department. Results will be recorded to show the improvement of the second language (English Language) on this group viewable in their presentations and performances.

Introduction

The purpose of language learning is to improve the speakers’ four skills of listening, speaking, reading and writing, with the base of large vocabulary and good grammar but this is not the final purpose. The final purpose is to let speakers be able to use the language. Most of the speakers do better in reading and writing than in listening and speaking. They can hardly communicate and express themselves (Lingualinks-Library1999).

The four basic skills are related to each other by two parameters: the mode of communication: oral and written and the direction of communication: receiving or producing the message (Perego,S.F.,& Boyle, O.F. 2001).

Since 1960’s the Cognitive Learning Theory has provided the predominant perspective within which Learning Research has been conducted and theories of learning have evolved. The theory of Cognitive Learning, one of the most historically influential theories, was developed by Jean Piaget a Swiss Philosopher (1896-1980). His genetic epistemological theory provided many central concepts in the field of developmental psychology in relation to the growth of intelligence which for Piaget, meant the ability to more accurately represent the work and perform logical operations on representations of concepts grounded in interactions with the world. The theory concerns the emergence and construction of schemata – schemes of how one perceives the world – in ‘developmental stages’, times when children are acquiring new ways of mentally representing information. The theory is considered ‘constructivist’, meaning that it asserts that we construct our cognitive abilities through self-motivated action in the world (Chapman 1988).

The cognitive theory is best defined by exclusion, as it is not behaviorist or humanist but cognitive. Broadly cognitive theory is interested in how people understand material and the aptitude and capacity to learn. Cognitive processes and mental events which are central to human learning must therefore be incorporated into theories of learning. Individuals are actively involved in the learning process they are not passive receivers of environmental conditions, they are active participants in that learning process. Learning involves the formation of mental associations that are not necessarily reflected in overt behavior changes. An
individual’s knowledge is self organized through various mental associations and structure. Learning is a process of relating new information to previously learned information in other words learning is occurred when an individual associate new learning with previous knowledge (Lightbrown & Spada 2006). To conclude, the cognitive theory focuses on how people process the information they receive from the environment how they find what they have learned when they need to use the knowledge (Ormrod 1999).

Cognitivism focuses on an observable change in mental knowledge, it came about as a rejection of the behaviorist views. Psychologists believed that mental events and cognitivism could no longer be ignored. Cognitivism emphasizes mental processes and proposes that many aspects of learning may be unique to the human species. It has affected educational theory by emphasizing the role of the teacher in terms of the instructor’s effectiveness of presentation of instructional material in a manner that facilitates students’ learning (e.g. helping students to review and connect previous learning on a topic before moving to new ideas about that topic, helping students understand the material by organizing it effectively, understanding differences in students’ learning styles, etc. (Bransford, Brown & Cocking, Rodney, ed., 2000) (Scaffolding Teaching Strategy).

―Language acquisition does not require extensive use of conscious grammatical rules, and does not require tedious drill” Stephen Krashen. ’“Acquisition requires meaningful interaction in the target language-natural communication- in which speakers is concerned not with the form of their utterances but with the messages they are conveying and understanding”, “The best methods are therefore those that supply ‘comprehensible’ input in low anxiety situations, containing messages that student really want to hear. These methods do not force early prediction in the second language, but allow students to produce when they are ‘ready’, recognize that improvement comes from supplying communicative and comprehensible input, and not from forcing and correcting production” Stephen Krashen (1988).

According to Krashen there are two independent systems of second language performance: the acquired system “and ‘the learned system’. The acquired system or ‘Acquisition’ is the product of a subconscious process very similar to the process children undergo when they acquire their first language. It requires meaningful interaction in the target language—natural communication- in which speakers are concentrated not in the form of their utterances, but in the communicative act.

The learned system or ‘learning’ is the product of formal instruction and it comprises a conscious process which results in conscious knowledge about the language, for example knowledge of grammar rules. According to Krashen ‘learning is less important than ‘acquisition ’, the acquisition system is the utterance initiator, while the learning system performs the role of the ‘monitor’ or the ‘editor’.

Theories concerning the relationship between language acquisition and cognitive development are examined and implications for education are discussed. There is disagreement about the sources and processes involved in achieving linguistic performance and in particular determining linguistic competence. Among many theories and modifications is the Speaking Skill as a function of thinking. Various interpretations of this skill have been proposed by Chomsky (1965), McNeill (1966), Katz (1966) and Piaget (1967). It is suggested that while language acquisition may not be a sufficient condition for thought with respect to most cognitive functions, it may play a role in significant ways that are at present little understood. Language may well have a more significant role in the formation of thought than Piaget would allow, even though it may still not be the principal determinant of thought claimed by Bruner and Vygotsky (Reed, Rodney. Louis 1977).

Researchers have found that most learners begin their acquisition process of the language with the process of ‘Silent Period’ in which they speak very little if at all, and while appearing silent they are rehearsing important survival phrases and lexical chunks. These memorized phrases are then employed in the subsequent period of ‘Formulaic Speech’. (Naiman 1975)

The study of the effects of teaching on second language acquisition seeks to systematically measure or evaluate the effectiveness of language teaching practices. Such studies have been undertaken for every level of language, from phonetics to pragmatics and for almost every current teaching methodology (Cook 2001). It is therefore impossible to summarize their findings here. Researches have indicated that many traditional language—teaching techniques are extremely inefficient (Mitchell & Myles 2006).

The aim of this study is to solve the problem of the students at the university level encountering the problem of communication using their second language.

Case Study

Students understand the Second Language but they cannot speak it, students start learning their second language which is the English language at a very early age probably the elementary stage, the target is
always to teach new vocabulary and to read short passages along with some rules of grammar. The evaluation is always in a written form testing their knowledge of grammar and vocabulary.

The problem is observed in Al Alsun Faculty, when the students participate in class using the second language, which is considered a major element in their studies as they comment and state their ideas on the material they read and study. When they speak they focus on the wording of the language not the meaning, they are always worried of making mistakes which proves lacking of skill and self-confidence.

When applying the cognitive theory on the students to develop their Second Language Acquisition, the reflection of the cognitive learning that took place in their minds unconsciously declares itself in their performance. The factors which help in developing the acquisition of the language are: the relaxing learning atmosphere inside the class as well as the handy material used that encourage them to perform without the fear and the emphasis is on the meaning delivered not the wording utterances.

The following hypothetical questions are answered in the study
- What is the effect of applying the cognitive processes on acquiring the second language?
- Does the class atmosphere accelerate the acquisition of the second language?
- How does the role of the activities inside class improve the cognitive development which leads to the second language acquisition?

Method of the study

This study is designed as a qualitative research approach which aims at gather in depth understanding of human behavior and the reasons that govern such behavior. The qualitative method investigates the ‘why’ and ‘how’ of decision making, not just what, where and when. It produces information only on the particular cases studied and any more general conclusions are only propositions (informal assertions). Qualitative method is more subjective: describes a problem or condition from the point of view of those experiencing it. The most common analysis of qualitative data is observer impression by expert or stander observer.

The problem in this study is diagnosed by observation of students at the university level having difficulty with their second language speaking skill.

Criteria
- Learning as a process of relating new information to previously learned information influenced the choice of the course because the students have to have previous knowledge about it (schemata). ‘Introduction to Sociolinguistics’ is the course of application and the rational behind it is that the core of the course is the relation between language and society, the students are able to link their society and their language to the information introduced in the course.
- The role of the instructor is effective to facilitate the students’ learning by helping them to understand the material, organize it and understand the students’ different learning styles. Accordingly the preparation for the new atmosphere in class started by explaining the idea of splitting the class into groups of their choice and each group choose a name for identity. They in turn will perform a presentation, with or without the data show, or a debate or a mind mapping chart or a discussion. The choice of the activity should match the material introduced.
- Rules in class are set:
  - Listen and watch attentively to the performance of your colleagues
  - Keep the questions till the end of the performance
  - Respect the ideas of each other
  - Each one in the group should get involved in the activity
  - English language is the language of communication in class
  - Time your performance so as to leave time for discussions and questions on what has presented
  - The groups should vary the activity they present every time
- New strategies in class stemmed from the cognitive theory which is incorporated into theories of learning. Learners accordingly are not passive receivers but active participants. The mental process that emerges along with the progress in language acquisition can be detected and evaluated
- ‘The best methods are therefore those that supply ‘comprehensible ‘input on low anxiety situations, containing messages that students really want to hear. These methods do not force early prediction in the second language, but allow students to produce when they are ‘ready’, recognize that improvement comes from supplying communicative and comprehensible input , and not from
forcing and correcting production” Stephen Krashen (1988). Students are given the freedom to design their own performances the way they think is agreeable and easier to deliver the message. They come up with new ideas such as acting scenes in their first language to emphasis meanings like: Diglossia and its two varieties, the different dialects of one language, code switching and code mixing. They even video tape scenes in the street acting and interacting with the public. When they feel that they are controlling and producing their own ideas and they feel the reaction of their performances on their colleagues and professor they feel more self confident and get stimulated to immerse new ideas.

- Among many theories and modifications of theories is the Speaking Skill as a function of thinking, various interpretations of the last notion have been proposed by Chomsky(1965), McNeill(1966), Katz(1966) and Piaget(1967). The importance of the speaking skill is unquestionable because it consolidates the acquisition of the language. The student should cross the “Silent Period “into the “Formulaic Speech”. In this study the students passed the silent period and with motivation and encouragement in a proper atmosphere they become capable of using the language more effectively and fluently (formulaic speech).

**Conclusion**

The students need to use all their skills in reading, writing, listening and speaking. The difference between the students at their early join to the university and towards their graduation is recognizable, they acquire more self confidence and their English language improves immensely. The more practice and interaction in class the more the development of the oral skill occur. The implementation of this experience on the students taking a course of Sociolinguistics in spring 2007 proves success. Since then I continued using the same procedures and adding more to the idea. It is noticed that they started with a very timid and reserved attitude being unable to use the language freely and fluently and by time they gain more confidence and signs of progress in their language is detected.

The students develop their speaking skill as well, it is the reflection of the cognitive learning that took place in their minds and unconsciously it declares itself in their performance. The factors which help in developing this skill is the relaxing learning atmosphere inside the class as well as the handy material used to encourage them to perform without fear and the emphasis is on the meaning delivered not the wording utterances. The steady state and the continuity help in forming the skill and polishing it. The recurrence of the performance for each group brings us nearer to our target.

It is as if we are cleaning the path of the river from the rocks to let the flow of water runs smoothly and rapidly. It did flow.
References


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