

# THE IMPLEMENTATION OF COGNITIVE ACADEMIC LANGUAGE LEARNING STRATEGIES (CALLS) TO HELP THE STUDENTS IN RECOGNIZING THE LEXICAL CONSTRAINTS ON THE STUDENT'S TRANSLATION

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**Abstract:** This study aims to describe the sorts of lexical constraints that appeared on the students' translation when translating some source language texts into some target language texts. The competence of linguistic fields that the students have acquired is in the fact assumed to be inadequate and it can cause the lexical constraints. The lexical constraints that appear as the problem in translating some source language texts into the target language are related to some disciplines such as morphology, syntax and semantics. The socio-cultural factors and the mental state of the students are found having contribution in causing lexical constraints to occur. These factors were identified through the students' notes that consisted of their reflection about their difficulties while accomplishing the tasks and their problem-solving methods. CALLS as the strategies which are combined from the cognitive strategies and the meta-cognitive strategies were implemented to help the students in recognizing the lexical constraints.

**Key Words:** CALLS, lexical constraints, source language text, target language text.

**Abstrak:** Penelitian ini bertujuan untuk mendeskripsikan macam-macam hambatan leksikal yang muncul pada terjemahan siswa saat menerjemahkan beberapa teks berbahasa asli kedalam teks bahasa terjemahan. Kompetensi di bidang linguistik yang para siswa capai pada kenyataannya diasumsikan tidak memadai dan kondisi ini dapat mengakibatkan hambatan leksikal. Hambatan leksikal yang muncul sebagai permasalahan dalam menerjemahkan teks berbahasa asli ke dalam teks bahasa terjemahan dihubungkan dengan beberapa disiplin ilmu semacam Morfologi, Sintaks dan Semantik. Faktor-faktor sosiokultural dan keadaan mental dari para siswa ditemukan memiliki kontribusi dalam menyebabkan hambatan leksikal. Faktor-faktor ini diidentifikasi melalui hasil catatan siswa yang berisikan refleksi para siswa tentang kesulitan yang mereka hadapi saat mengerjakan tugas terjemahan dan metode penyelesaian masalah yang mereka gunakan. CALLS sebagai strategi yang terdiri dari strategi kognitif dan strategi meta-kognitif diimplementasikan untuk membantu siswa dalam mengenali hambatan leksikal.

**Kata Kunci:** CALLS, hambatan leksikal, teks berbahasa asli, teks bahasa terjemahan

## INTRODUCTION

The lexical constraints have been phenomena that appeared on the students' translation when they translated some source language texts written in English into some target language texts written in Indonesian. The lexical constraints occurred because the competence of linguistics that the students have acquired in the fact was assumed to be inadequate.

According to Bell (1991:40), a translator or students who are learning to translate some source language texts must gain expertise and skills needed which scope a knowledge base and an inference mechanism. A knowledge base covers from the knowledge about the source language knowledge (its syntactic rules, its lexicons and semantic units and its text creating systems), target language knowledge, text type knowledge, domain knowledge and contrastive knowledge between target language (TL) and source language (SL). An inference mechanism covers the decoding of texts (reading and comprehending the SL texts) and the encoding of texts (writing the TL texts).

Based on the former statement, the present study related the lexical constraints on the students' translation to some disciplines namely Morphology, Syntax and Semantics. The knowledge of those linguistic fields that the students have acquired is essential to help the students comprehending the content of the source language texts before translating the texts into the target language texts. The level of comprehension on the content of the source language texts is essential for the students in searching for and applying the right equivalents in the target language. Nida (Nida, 1969:13) stated that the nature of translating takes emphasis on the process of reproducing the original messages, concerning equivalence rather than identity,

finding a natural and the closest equivalent, the significance of style, and the priority of meaning.

Morphology studies about the lexicon and lexicon deals with the word storage. There are two assumptions accommodated here, the first is lexicon considered as the vocabulary of a language. It posits meaning about the lists of vocabulary in a dictionary. The second, lexicon has to do with psycholinguistics that in linguist's term, this means the language user's mental dictionary. The former one is static and the other can allow some changes in the content. Therefore, the inadequacy on morphological knowledge that the students acquired could cause the lexical constraints. This condition could constrain the students to find out the right equivalents in the target language. Bauer (Bauer, 2006:13) explained that the morphological process are influenced by the conception of individual has about the grammar and how the morphological process operates. Further, Bauer (Bauer, 2006:126) argued that some restrictions on the bases (free morphemes) of various affixes which they can be attached to, these restrictions can be some constraints on collocations of some lexical elements.

Syntactic knowledge is needed for the students who are learning to produce a good translation. There are some essential components that deal with the syntactic structures that interconnect syntax with translation. First, syntax deals with lexical items or some linguists call it as lexical entries. In understanding a syntactic structure of English language as source language, the students must understand how specific phrases are constructed by inserting lexical items into a general syntactic structure. The process of insertion requires some rules that deal with the grammatical rules and the knowledge about the grammar. Second, since

syntax deals with how to set word classes and build the words into a good construction of a sentence, however, it can't be separated from grammar rules. In English language, it has devices that signal which words belong together as heads and modifiers, that they signal syntactic linkage, namely agreement and government. In syntactic government, one word requires other words or phrases to have a particular inflectional value.

Thus, the lexical constraints can take place in translation because there are some factors resulting in lexically relationship (Priyono, 2005:223). According to Priyono (Priyono, 2005:224), the problems have appeared since the two languages, Indonesian and English are having different expression system and Lexical Conceptual Structure. It covers the knowledge in how the words are pronounced, how the words are spelled, the lexical meanings of the words and the syntactic patterns of the words. According to Bauer, lexical constraints take place in individual's mind about the existence of words that the words already exist in speech community of native speakers (Bauer, 2006:34-5). Bauer argued that the constraints in lexical fields can be categorized into recursion and repetition constraints, blocking, and stratal constraints (Bauer, 2006:127-39).

The lexical constraints can be triggered with the inadequacy knowledge about the socio-cultural knowledge from the individual student. It can be inferred that learning some foreign languages will include the process of learning the culture where the languages belong for the students. The inadequacy of knowledge about the source language culture can cause the lexical constraints take place. Wardhaugh (Wardhaugh, 2006 :221) stated that the culture in this case is different from the appreciation of 'high culture' such as music, literature, art and so on instead of the

knowledge in knowing how to get through with the daily task. Further, Wardhaugh argued that there are relationships between the culture and the language. These arguments basically lied on the theories of Whorf that he claimed the structure of a language completely determines the ways its speakers view the world (Wardhaugh,2006:223).

Whorf viewed that language provides a screen or filter to reality, and it is used to conceptualize the word which belongs to certain language including the language's grammatical system that they make the speakers of a language become more aware about the distinctions they refer to. These distinctions of grammatical system that refer to gender, time, number and animacy affect the speaker of a language to learn in dealing with the world and assist the speaker to develop the cognitive and cultural knowledge. Whorf (Wardhaugh, 2006:226) also emphasized that the importance in understanding metaphoric language in social language use between L1 and L2.

Further, the lexical constraints also can be triggered with the mental states of the students in learning and accomplishing the translation tasks. This argumentation is constructed from Brown that Brown (Brown, 2000:142-56) states the internal factors of EFL students reveal in studying L2 or second language acquisition, such as affective domain, self-esteem, inhibition, risk-taking, anxiety, empathy and extroversion can influence the EFL students in learning L2 successfully or not. Affective domain can be understood as the emotional aspect of human behavior and this aspect is placed side by side to cognitive domain. The domain consists of five principles, first is receiving. In this stage, individual would receive information from his/her surroundings and be conscious of any situations, phenomena, people, and objects to be learned. Second is responding. In this

stage, the individual gives responses to the phenomena or people and she/he will get satisfaction from the responses. Third is valuing. In this stage, the individual will internalize the characteristics of beliefs or attitudes that he/she has learned from the environment. The fourth is organization of values into a system of beliefs, in determining interrelationship between the individual and other people and also establishing a hierarchy of values within the system. The fifth is value system. In this stage, the individual has integrated his/her beliefs, ideas and attitudes into a total philosophy or self-consistent system.

The interference of native language in second language acquisition can be resulted from the differences in phonology, vocabulary and grammar that L2 has and the EFL's students have in their L1. Brown argued that there is important role of L1 in making interference the process of linguistic belongs to L2 in adult learners (Brown, 2000:68). It happens when the second language acquisition is processing, at the same time, the EFL learners making overgeneralization. In the target language, the EFL learners generalized a particular rule or item in the L2 such as at specific situation in learning irregular verbs. It will produce lexical constraints in EFL students' cognition (Brown, 2000:96).

In addition to some conditions from the individual student which contribute the lexical constraints to occur on the students' translation, it was assumed that it would be important to implement the effective learning strategies in helping the students to recognize the lexical constraints. CALLS (Cognitive Academic Language Learning Strategies) is developed from the cognitive approach. According to Chamot (1996:260), CALLA model based on cognitive learning theory in which learners are viewed as mentally active

participants in the teaching learning interaction. Chamot suggested that the mental activity can be viewed by the application of prior knowledge to new information, the search of meaning in new information, higher-level thinking and the developing ability to regulate one's own learning

The reason in choosing CALLS (Cognitive Academic Language Learning Strategies) as the strategy in teaching learning process to be applied in this study because CALLS model ways suggest the teacher to ask the students making reflection about their learning strategies based on the problems that they're facing. The students are taught to make learning logs consist of their learning notes, individual learning strategies, individual learning solutions and their mental state in learning.

CALLS has designed several activities for the teacher and the students in teaching learning process. In teaching Translation, the implementation of CALLS has been modified to construct some instructional activities for the teacher. The activities are (1) Preparation, in this phase, the teacher would do several things as follows: identify objectives, activate the background knowledge of the learners, develop vocabulary and provide motivation, (2) Preparation, in this phase, the teacher would do several steps: present information in varied ways, model processes explicitly, explain learning strategies and discuss connections of the given texts to students' prior knowledge, (3) Practice, in this phase, the teacher would apply these steps: use hands-on/inquiry based activities, provide different cooperative learning structures, use authentic content tasks and ask the learners to use learning strategies, (4) Self-evaluation, in this phase, the teacher would encourage and motivate the learners to do the steps: the learners reflected on their own learning condition, the learners

evaluated themselves by making a note about their difficulties in doing the assignment and their emotional aspects while they were interacting with and completing the assignment and the learners were asked to assess their strategy use by asking the students how effective and efficient their learning strategy individually, and (5) Expansion, in this phase, the teacher would motivate the learners to: apply the knowledge to their lives, make connections between language and content, relate information to their first language and contribute each other by doing brainstorming with their peers.

## METHOD

The method used in this study was descriptive qualitative design. It was carried out to obtain the description of the implementation of CALLS in teaching Translation. The subject of the research the students at the fourth semester in a college located at Sidoarjo, East Java Province. The data of this research were questionnaires, English texts from international journals on internet, students' translation and students' notes. In order to get qualitative data, the researcher chose three techniques; journal, interview and documents.

## RESULTS AND DISCUSSIONS

A. The implementations of CALLS are presented in three divisions as the following:

### 1. The Instructional Setting and Learning Activities in CALLS

In this phase, the teacher prepared instructional designs based on the implementation of CALLS (Cognitive Academic Language Learning Strategies) that defines the five instructional stages such as preparation, presentation, practice, self-evaluation and expansion. In each stage, the

implementation of CALLS instructed several activities to the EFL students.

In preparation phase, the teacher who taught Translation selected authentic content texts which she gave as the translation tasks. The teacher then gave some clues by highlighted some words that were rarely used by the students. The highlighted words were used to catch the students' attention that the words needed to get more focuses in order to grasp the idea of 'those words' concept. In scaffolding the students to grasp the concept, the technique that the teacher used was presenting some descriptive information orally in dialogues. She activated the students' background knowledge by asking some questions from the title and the first paragraph starting from the grammatical structures of words, phrases and clauses. She persuaded the students to make some predictive diagnoses about the content of the given texts.

In presentation phase, the teacher gave the students 15 minutes to read the given text. The teacher asked the students to look for the topic discussing in the text. Then, the teacher asked the students to write some key words from the text and some difficult words or phrases.

In practice phase, the teacher asked the students to work cooperatively in discussing the content of the given text and the meaning of difficult words or phrases for 15 minutes. Then, in the following 60 minutes, the students were asked to accomplish the assignment in translating the given text into the target language.

The fourth step of the teacher's roles in CALLS was encouraging self-evaluation activities for the students. The teacher asked the students to write a personal journal about their reflection on their learning situation. The students were asked to write the descriptive paragraphs reflecting about their evaluation

on their individual translation products and their emotional state while they were completing the tasks. The students' descriptive paragraph would be some input for the teacher to make reflections about her teaching learning conditions.

The fifth step was Expansion. The teacher motivated the students make connections between the new materials and what they've learned at the college.

## 2. The EFL Students' Activities while Implementing CALLS

The EFL students' activities in CALLS were started when the students applied learning strategies in completing the task. The students were encouraged by the teacher to activate their prior knowledge in understanding the given text. In activating the students' prior knowledge to the given text, the students should be active in taking participation to the teacher's questions. The questions were constructed to associate and explore the content and the message of the text.

In the practice session, the EFL students were asked to implement the learning strategies in accomplishing the task. The first strategy was metacognitive strategy which consisted of three major steps including planning, monitoring and evaluating. The EFL students read the slides which the teacher exhibited in the front of the whiteboard by projector. The slides presented the organization of metacognitive strategy's steps. In planning step, the students read four steps including advance organization, organizational planning, selective attention and self-management. In monitoring step, the students were introduced the main steps

mainly monitoring comprehension and monitoring production. In evaluating step, the students were taught how to do self-assessment. The second strategy was cognitive strategy which consisted of resourcing steps. The students were asked to find various sources in determining the meaning of some words and the equivalents in TL such as from internet or dictionary.

The students were completing the task cooperatively with the other ones. They could discuss the content of the text, the meaning of some words and the equivalents in TL with their friends. They brainstormed to comprehend the text and assisted their friends to get the understanding or comprehension on the text. Some students were caught using the translation machines on the websites like google translate to help them translate the text.

In making self-evaluation, the students were asked to describe their difficulties in accomplishing the task and their mental state in facing their individual difficulty. The students also were asked to give the description of their solution in solving their individual problems by working cooperatively with the others.

## 3. The Sequences of Evaluative Steps in Implementing CALLS

The evaluative steps were taught to the students in order to implement the three major steps in metacognitive strategies: planning, monitoring and evaluating. These steps were considered important since the students were encouraged to improve their personal academic skills by working socially. In avoiding the interdependence of students to make decision in their group when they accomplished the task and in the effort to handle the situation where the students could be less competitive in improving their

individual academic skills, the students were trained to be more aware in doing the metacognitive strategies, the students should keep their individual learning log and track that consist of their individual planning, monitoring and evaluating. Findings showed that some students who applied making their learning logs become more positive thinking when they encountered the difficulty in doing assignment. They were also self-starter to connect some materials that they have learned with some experiences in their daily activities.

In presenting the text, the teacher asked the students to scan and skim the text. Then, she directed the students to do the steps as follows in details. In planning stage, the teacher broke down the steps as previewing the main ideas, finding the general idea or the gist of the given texts in helping them to be able in identifying the register and the genre of the text. Then, the students were directed to plan their own learning track in accomplishing the task by deciding the sequences of learning activities individually and socially or cooperatively. The students should read the text selectively by focusing on key words, specific phrases, clauses and information. By self management, the students were trained in being aware to accomplish the task individually and cooperatively to prevent the interdependence among the passive students to the others.

In monitoring stage, the teacher directed the students to monitor their individual comprehension on the given text. While the students accomplished the task cooperatively, they should be able to monitor their translation.

In self-evaluation stage, the students were motivated to keep their learning log by reflecting on what they have learned and done. For optimal result of learning, they should make connection what the new materials that they have learned with their real

condition. Findings showed that some students who became the subjects were aware to practice this skill. The result that their performance in written translation become improved since they became more active students in asking for the materials that they haven't understood and being more creative in using many information sources.

#### B. The Lexical Constraints on the Students' Translation

The lexical constraints that have been analyzed from the students' translation were triggered by some factors. The interference of L1 to L2 in processing some linguistic features from L1 and L2 appeared as the lexical constraint trigger by doing the tendency in relating the cognate that is nearly identical in spelling and meaning across source language and target language to become the clues in making the decision from some students in finding out the equivalents of some words. Janet (2005:2297-8) in her study, showed that the bilinguals in selecting words which dealing with the sentence context in source language can be influenced by the existence of the cognates in both Source Language and Target Language. Janet claims that in performing a lexical decision task in the second language, bilinguals would consider a set of identical cognates (words with identical meanings and spellings across source language and target language), a set of identical interlexical homographs (words with an identical spelling but different meaning between source language and target language) and matched controls for all non-cognates. The results of this procedure in translating have made the students incorrectly interpreted the word class of some words from the source language and consequently, those words were translated improperly into the target language. The findings showed the students ignored

whether the words from the given texts belonged to phrases or not and the students tended to translate the phrases by word to word procedure since the students focused on the use of cognates or associated words for the equivalents in the target language.

Further, the complex syntactic structure of phrases can cause the lexical constraints on the students' translation. It can cause the students to infer some difficult phrases that have been specific terms by making single interpretation based on the meaning of single words that they have known well and deciding to not translate the remained words of the phrases as the whole meaningful phrases. Significantly, this process of translation can shift the meaning of the phrases across the source language and the target language. It would eliminate the importance of meaning on the translation product. The internal factor from the individual student such as the level of anxiety traits that the students experienced could bring inhibition condition to them. As the consequence, the students easily grasped the single definition of the words or the phrases in the source language relating to their previous knowledge. The mental state and condition have brought the students losing their creativity in using many various sources to explore the meaning of the words or the phrases that were rarely exposed on their learning materials.

The lexical constraints also can be triggered with the improper use of translation procedures. The inadequacy knowledge about the socio-cultural knowledge from the individual student can cause the students incorrectly determining the procedure in translating the given text. In the case of metaphoric expressions and some terms which accommodate the local color of the source language culture, the findings showed

that the students have translated those literally instead of adaptively.

## CONCLUSION

The lexical constraints on the translation have been observed to appear at the level of morpheme, phrase and clause. The findings show there are multi-factors contributing lexical constraints to take place. First, the factor of low-standardized competences in linguistic sectors from the students can cause the students to produce lexical constraints on their translation. The students' limited knowledge on syntactic competence in the source language and in the target language is in parallel with the students' limited grammatical knowledge in both the source language and the target language. The students are found being confused in interpreting that the words belong to kinds of parts of speech, kinds of phrase categories or kinds of clauses. Other findings show that the students in accomplishing translation assignments failed to interpret and translate the passive voice sentence. This condition caused the students to apply inappropriate translation procedures in doing translation. Further, the factor of non-competence in linguistic field is the inadequacy of morphological knowledge that the students have. The findings show that the students ignore the morphological structure of a word such as the existence of derivational affixes.

The internal factors of the students such as self overconfidence and anxiety have caused the lexical constraints to take place when the students accomplish translation assignments. The anxiety traits, inhibition, and self-overconfident influence the students in making lexical constraints. The findings that show these phenomena are taken from the students' notes when they are asked to



evaluate their mental situation in doing the translation assignment. These factors influence the students in determining the difficult meaning of a word or a phrase by making a single interpretation and being less creative in using many sources of information to assist them in making interpretation. Overconfidence has caused the students to assess their translation subjectively. Other findings show that the inadequacy of the knowledge about the source language culture has caused the students to fail in determining the word or the phrase which act as a term. This condition has proved the limited number of vocabulary in the students' individual storage. The limited experiences in reading some various source language texts have stored limited vocabulary banks in the students' mind. When the students encounter some new terms, they cannot make interpretation by finding the associative meaning because of limited numbers of their mental lexicons.

CALLA (Cognitive Academic Language Learning Approach) has been observed effectively increasing the students' meta-cognitive skills. These skills are needed for the LEP (Limited English Proficiency) students to be aware on their learning strategies in solving their difficulties on translation subject. Findings show that the students who apply to write their learning logs, they become more trained and alert about their weakness on the subject. Less active students are motivated to find out more creative ways in solving their individual learning problems when they are directed to assess their translation objectively. Findings show that working collaboratively can be resulted in two different impacts since by applying CALLS as the learning strategies, the students were trained to work socially in increasing their individual academic skills. Findings show that positive mental state

students would increase their self-esteem in situation when the other students agreed to approve the one's work. They could be motivated internally to increase their knowledge. On the contrary, there were some students found becoming self-overconfident that they would tend to underestimate about the learning goals. Other impact for passive students, they could be more dependent to the other students in solving the learning problems.

Although CALLS recommended the use of resources in finding the meaning, the use of translation machine on website such as Google translate tool should be avoided. The findings show that this activity can result in the ungrammatical structures of the students' translation products since this translation machine has been proved to have many weaknesses.

The conclusion for this study is that the learning process should be positive to motivate the passive students to become more creative in using many information resources. The collaborative learning should be applied carefully to make the students more competitive and creative instead of being dependent.

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