

# KHUNG KHÁI NIỆM VỀ VIỆC XÂY DỰNG VỐN TỪ VỰNG CHO SINH VIÊN TRƯỜNG ĐẠI HỌC MỎ - ĐỊA CHẤT

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**Tóm tắt:** Để sinh viên có thể nói tiếng Anh tốt thì việc học từ vựng là một yếu tố hết sức cần thiết. Do mỗi ngày sinh viên cần phải nhớ rất nhiều từ mới, nên cần có một cách hiệu quả để giúp các em nhớ từ vựng dễ dàng hơn. Bên cạnh đó khi sinh viên có một vốn từ vựng phong phú, các em có thể giải thích vấn đề và biểu đạt ý kiến rõ ràng hơn, điều này dẫn đến sự sáng tỏ và lô gic trong suy nghĩ và lời nói của các em. Từ mới học được cần sắp xếp vào các danh mục có nghĩa, vì não bộ trữ từ cũng giống như một thư viện lớn trữ sách, nếu chúng ta không sắp xếp quản lý chúng thì việc tìm được đúng sách hay đúng từ vựng sẽ vô cùng khó khăn. Để giải quyết vấn đề này, tác giả đã đưa ra một khung khái niệm với mục tiêu nhằm gia tăng vốn từ vựng của sinh viên Trường Đại học Mỏ - Địa chất. Nghiên cứu này sử dụng lý thuyết cấu tạo của cấu trúc khái niệm để giúp sinh viên học từ vựng tiếng Anh hiệu quả hơn. Kết quả của nghiên cứu này sẽ có thể hữu ích cho giáo viên, người học ngoại ngữ và các nhà nghiên cứu quan tâm đến việc giảng dạy ngoại ngữ.

**Từ khóa:** *khung khái niệm, khái niệm, danh mục, từ vựng*

## A CONCEPTUAL FRAMEWORK ON VOCABULARY BUILDING FOR HUMG STUDENTS

**Abstract:** Learning vocabulary is an essential part for students to speak English well. Since there are a lot of new words students have to remember each day, it is necessary to find the effective way to help them remember new words more easily. Beside that, when they have a rich vocabulary, they can explain problems or express ideas more clearly, which leads to the clarity and logic in their thinking and speaking. New words learned need organizing into meaningful categories because our brain is like a big library which is used to store books, and if we do not manage them, it will be very hard to find the right book or the right word. To solve this matter, a conceptual framework has been built with

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the aim to increase Hung students' vocabulary. This study employs the theory of the organization of conceptual structure to help Hung students learn English new words more effectively. The findings of this study will be beneficial for EFL teachers, English learners and researchers who are concerned with language teaching.

**Keywords:** *conceptual framework, concept, category, vocabulary*

## **1. INTRODUCTION**

English training has become more and more important in today's world. The corporate world needs people not just knowledge but with the expression of knowledge and it's just with language that one can use. Although students at technical universities are very well aware of the fact, they still lack efforts in learning communication. Learning vocabulary is an essential part for everyone to speak English well. Since there are a lot of new words students have to remember each day, it is necessary to find the effective way to help them remember new words more easily. Beside that, when they have a rich vocabulary, they can explain problems or express ideas more clearly, which leads to the clarity and logic in their thinking and speaking. New words learned need organizing into meaningful categories because our brain is like a big library which is used to store books, and if we do not manage them, it will be hard to find the right book or the right word. To solve this matter, a conceptual framework has been built with the aim to increase Hung students' vocabulary. This study employs the theory of the organization of conceptual structure to help Hung students learn English new words more effectively. Next part of the paper deal with the conceptual structure as the theoretical foundation of this study, then the conceptual framework will be introduced and explained to clarify how words work or link to each other as symbols of concepts, and to depict the relations between systems of concepts ,and categories... Finally, when language users access to all the essential knowledge that relate to the word, they can understand the meaning of that single word. In order to achieve the objectives above, this study focuses on the following research questions: How to increase Hung students' vocabulary by using a conceptual framework. This study employs the quantitative method and qualitative methods. The data collected from the CG and the EG are analyzed quantitatively. Then the results of

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the analysis are discussed and compared in terms of students' performances to reveal the efficiency and validity of the conceptual structure in English teaching.

## 2. LITERATURE REVIEW

### 2.1. The organization of conceptual structure

The theory about the conceptual structure is postulated by Ray Jackendoff (1983), and this kind of structure is an autonomous level of cognitive representation. It is related to syntactic and phonological structure on the one hand and other, non-linguistic levels of representation on the other hand. It decomposes meanings and represents concepts in terms of conceptual primitives which are closely linked to the mental states and human experience.

#### 2.1.1. Frame semantics

Words symbolize concepts, and concepts are the units of meaning (Croft & Cruse, 2004, p.7). There are the relations between words and their corresponding concepts. System of concepts related in such a way that in order to understand any one of them. Language users have to access to all the essential knowledge that relates to the word then they can understand the meaning of that single word. Frame semantics is semantics of understanding, which means the full, rich understanding that a speaker intends to convey in a text and that a hearer constructs for that text; a hearer invokes a frame upon hearing an utterance in order to understand it. Structural semantics/semantic features/truth-conditional semantics: the analysis of semantic features is often justified on the basis of lexical sets analyzable in terms of a set of features (Croft & Cruse, 2004, p.8):

<b>Male</b>	<b>Female</b>	
Man	Woman	Adult
Boy	Girl	Young
Bachelor	Spinster	Unmarried
Mister	Mistress	Married

Lexical set: gender, age, marital status. Semantic features: *male/female; young/adult; married/unmarried*. However, the understanding of these concepts is more complex than this paradigm of feature contrasts implies. The relationship between

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*man/boy* and *woman/girl* is not the same. For many people, the term *girl* is used for *female human* at a significantly higher age than the term *boy* is used for *male humans*. It depends on the social culture or the society in which we are living. These concepts evoke frames that include not just the biological sexual distinction but also differences in attitudes and behavior towards the sexes that would explain the asymmetry in the use of *boy/girl* and the more recent change in the use of *woman*, including its hyper-corrective use. For another example, in a frame semantic analysis *live* and *alive* are associated in different ways to three different frames (Fillmore, 1977a:76-77): 1) life in *Those are live lobsters/Those lobsters are alive*; 2) personality in *Her manner is very alive/She has a very alive manner*; 3) mode of performance in *His performance was live/He gave a live performance*.

### **2.1.2. Domains and the organization of concepts**

#### *Profile-frame organization*

No concept exists autonomously. All are understood to fit into our general knowledge of the world one way or another. The profile refers to the concept symbolized by the word in question. Langacker (1987) explained the term **profile** is also used to define the relationship between a word form and a word meaning: thus, the word *radius* profiles a particular line segment in a *circle* base/domain/frame. E.g. *Radius*: a line segment that joins the center of a *circle* with any point on its circumference. One can understand *radius* only against a background understanding of the concept *circle*, therefore, the concepts of *radius* and *circle* are intimately related, and this relationship must be represented in the conceptual structure. The relationship between *radius* and *circle* is compared as the relationship between a profile and a base/domain/frame.

#### *Domains*

A concept profile is insufficient to define a word concept, but a single base, such as *circle*, is a complex conceptual structure that includes a wide range of concept profiles, such as *radius*, *arc*, *center*, *diameter*, *chord* and so on. The base alone is insufficient to define a linguistic concept either. The meaning of a linguistic unit must specify both the profile and its base. A domain is a semantic structure that functions as the base for at least

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one concept profile (typically, many profiles). “Land” and “Ground” denotes/profiles what seems to be the same thing, but against different frames: “Land” describes the dry surface of the earth in contrast with “sea”, while “ground” the dry surface of the earth in contrast with “air”.

There are two types of domains, Langacker (1987) calls domains rooted in directly embodied human experience **basic domains**. The other type is **abstract domains**. The relations between an abstract domain and the basic domain it presupposes is NOT a taxonomic relation (classifying domains into ordered categories), but a schematic relation (structuring patterns of understanding and reasoning within our cognitive processes). Some domains involve more than one dimension. Lines/physical qualities grounded in the experience of sensory perception (temperature, pitch) need only one dimension, circle needs only two dimensions and space involves three dimensions. A concept may presuppose several different dimensions at once, which include a domain matrix as in the concept such as human being person (abstract domain of human being along with man, woman, etc.) – body (physical domain) – soul (nonphysical/ spiritual domain) .

#### *Idealized cognitive models (ICM)*

Knowledge represented in the frame is itself a conceptualization of experience that often does not match the reality. A simple conceptual analysis of *bachelor* is an *adult unmarried male*. This definition may suit most normal cases but there are a number of cases where speakers react with uncertainty as to whether the person involved is a *bachelor* or not. E.g. *the pope, Tarzan, and a boy who is studying at school*. The frame for *bachelor* represents an idealized version of the world that simply does not include all possible real-world situations. Lakoff (1987) calls such a frame an *idealized cognitive model*.

### **2.1.3. Spaces**

It is the physical space (PS) and it is the unlimited expanse of the universe. We also have Abstract space (AS), in geography, which is a hypothetical space characterized by equal and consistent properties. In linguistics, we have Mental spaces (MS) which are established in real time in discourse and are stored in the short-term memory of the

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speakers. Language enables us to build a mental picture of reality, and the principles of abstract reasoning evokes from visual thinking and mechanisms for representing spatial relations. Conceptualization is regarded as being based on the embodiment of knowledge, building on physical experience of vision and motion, and *Space* is a good candidate for a directly embodied human experience.

An alternative model of representing the status of knowledge was proposed by Fauconnier (1994). He replaces the notion of a possible world with that of a **mental space**, and argues that the mental space is a cognitive structure. The **built space** is a set of principles for the interpretation of utterances and the assignment of situation to the appropriate mental space. E.g. Utterances such as *Jim bought a sports car* are normally construed as situating events or states in a **base space/reality space**, normally the present reality/the mutually known world of the interlocutors. The space builders are the elements included in their meaning, which is the setting up of a new space different from the base space and linked to it. E.g. *George wants to buy a sports car. George believes Jim bought a sports car.* They evoke semantic frames/domains; at the very least, they build the base space. There is a mapping of the elements found in each space between the base space and any built space. This phenomenon in the mapping is divided in to two parts. First, what do the named elements of the built space (e.g. *George* and *sports car*) correspond to, if anything in the base space? Second, what conceptual structures from the base space also occur in the built spaces, and vice versa? In *George wants to buy a sports car*, the person named *George* in the desire space built by *George wants...* is mapped onto *George* in the base space. However, the object described as a sports car may or may not correspond to anything in the base space. He may have seen a particular car on the lot, or he may not have any specific car in mind (*He wants a wife*). This is the distinction between a specific and a non-specific reading, respectively. In this way, we have the relationship between *George* and *sports car* like roles/instances/tokens which are the linguistic description describing categories and values which are individuals being able to be described by those categories.

## 2.2. Categorization and cognitive processes

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Categorization is a natural act of human cognitive activities. It involves the apprehension of some individual entities or particular experience as an instance of something (Croft & Cruse, 2004, p.74). For instance, a specific path of color as a manifestation of the property **red**, a **chair** with four legs as an instantiation of furniture of the house. This abstract mental construct is called a **conceptual category** which is used as a cognitive tool. We use this tool to categorize concepts into different categories based on the most salient features or commonalities for some specific purposes like learning, planning, communication, economy. It is important to distinguish the generic concepts and individual ones. Conceptual categories can be viewed as collection of individuals. The properties of collection are different from the properties of individuals as members of that collection. Then we can determine category boundaries and graded centrality or a category must have a core tapering to a periphery. When we have a conceptual category, the next step is to define how we characterize its individual members, how can we distinguish them from other members of other categories. This process is a horizontal analysis, and each category may have more than one layer, which means we may have different levels of categorization like: super-ordinate, basic/generic and subordinate categories. Because not all the members of a category have the same status, members are judged as the best examples of a category must be the most prototypical and central in the category. An example of these levels is like from *fruit* (superordinate), *apple*, *grapes* (basic) to *mackintosh apple*, *green seedless grapes* (subordinates).

### **3. METHODOLOGY**

#### **3.1. Participants**

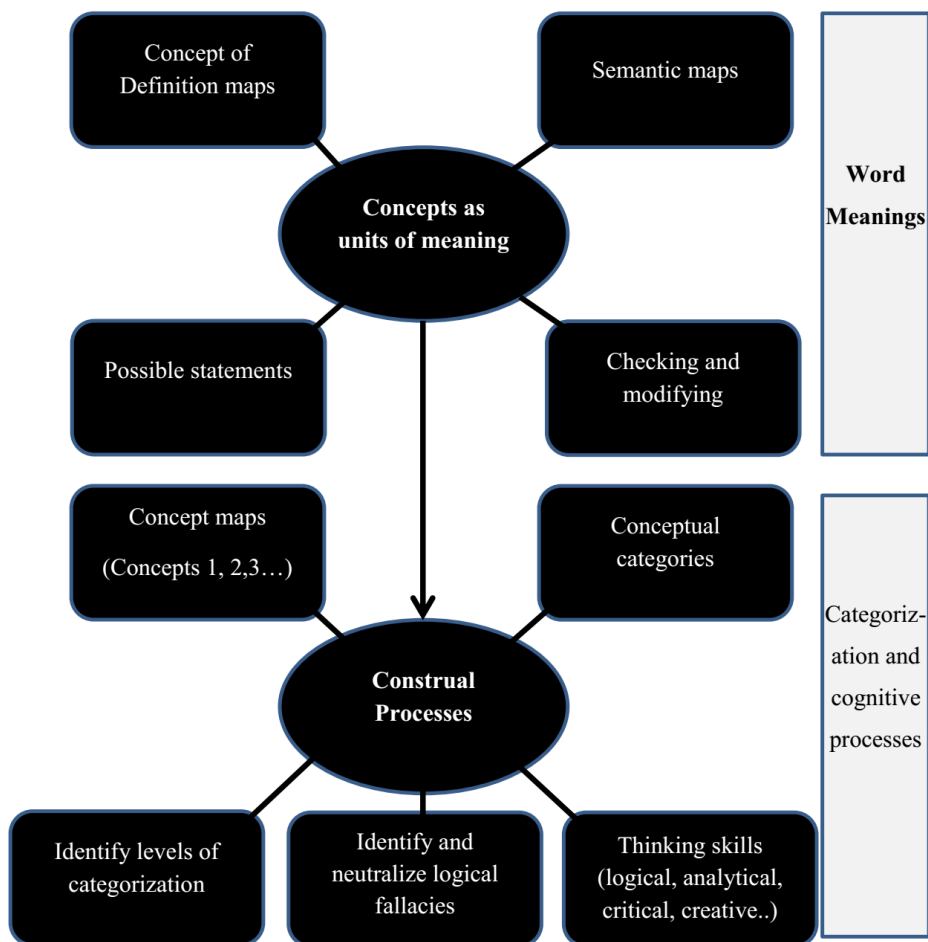
There are 80 students as research participants of this study, they were divided into two groups, control group and experimental group. Control group (CG) will go through conventional English speaking class while experimental group (EG) will experience the conceptual framework on vocabulary building. Eighty HUMG students in two classes were chosen after two modules of English subject. The participants are non-native speakers. They were mostly the first-year students with an age range from 18-19. They are from different majors including information technology, business administration, oil

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and gas processing fields and chemical engineering. They participated in all sessions of training.

### 3.2. Procedure

#### 3.2.1. Conceptual Framework



**Figure 1.** Conceptual framework on vocabulary building

Figure 1. shows the conceptual framework on vocabulary building. Students will experience two phases from learning word meanings as concepts to construal processes. The first phase has two inputs (the definition maps and semantic maps) which provide them with information to form concepts leading to their memorization process. Then students must recall what they have learned and try to deliver the correct sentences to describe the concepts. If the sentences are wrong, others can help to check and modify them. This activity is supervised and facilitated by the classroom teacher. The next phase is about a more complex process, it is about how students construe the world, how they



categorize things into different groups and layers. There are two inputs: concept maps and a tool called conceptual category. With the provided data, they need to identify the levels of categorization to build different thinking skills. Sometimes students may fail to link the concepts and make incorrect inferences, the classroom teacher must play an important role to identify and neutralize logical fallacies in order to help them feel free to give their own opinions.

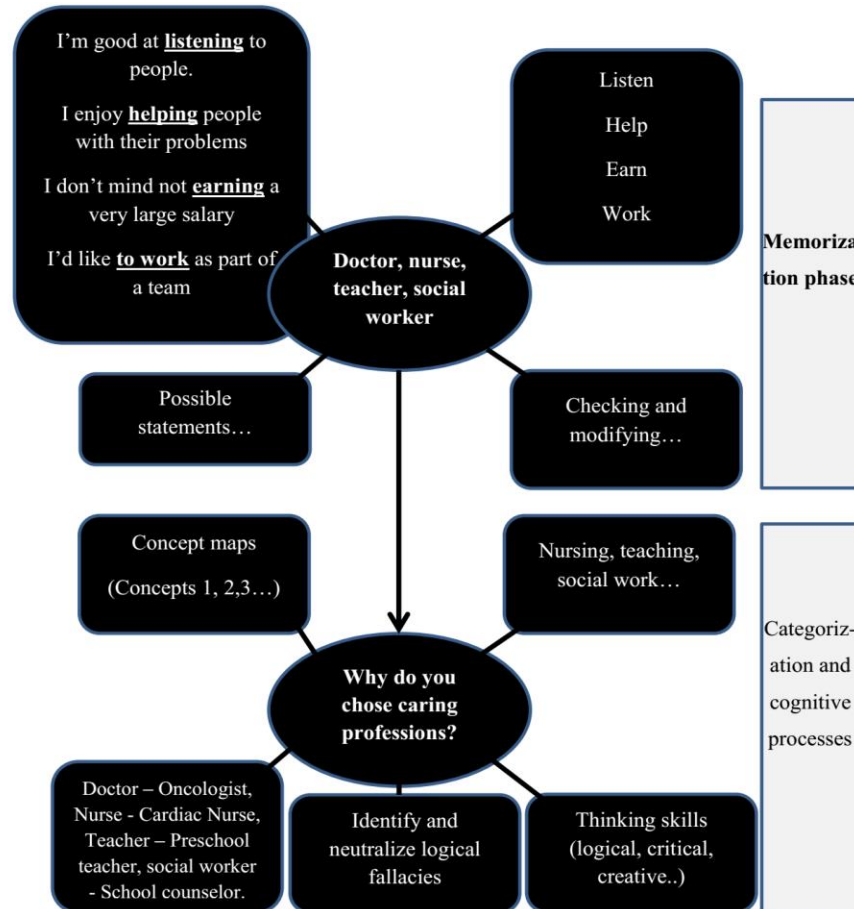
### *3.2.2. Classroom activities*

The participants in two classes were given three activities. They used the same learning materials. Before that they had to do a pre-test (oral speaking) in order to compare mean scores of each class after finishing the activities. They had to do the post-test individually to check their understanding and knowledge. The introduction to the conceptual framework on vocabulary building was carried from the beginning of the first lesson (word meanings, concepts, conceptual categories...) then studied further in the speaking part of the next lessons. This process lasted about two months before the post test.

The oral test was divided into two parts. One part was done while class, their performances were evaluated directly during lessons. For the second part, they had to discuss a specific topic which they had learned before related to economy, education, transport, and so on in around one minute and thirty seconds. This time they needed to share their thoughts, responses and attitude to a specific topic. They must submit their records after preparation. Their results were marked depending on how good the performances were. All of their recordings were scored by five specific criteria of speaking including: pronunciation, grammar, vocabulary, fluency and comprehension.

For instance, we have definition maps related to the central concepts (doctor, nurse, teacher, social worker). In the semantic maps, we have words which are used to recall other words from the definition maps. Students use these data for their output products. When the first phase is well done with good memorization skills, students must go to the second phase. In this phase, they need to use what they have remembered and learned before to discuss a topic oriented to the construal processes. They have to quickly

catch the key concepts in the topic, then analyze and categorize the related concepts. Students must know to link different concepts, and they need to neutralize logical fallacies. Students' thinking skills are also developed in this process.



**Figure 2.** An example of the conceptual framework on vocabulary building.

Students do in the same way with other topics, and they must practice to deal with more complex concepts. When students can find the links between different systems of concepts, they will be able to recall every symbol (word) which they used to learn.

### 3.3. Data analyzing technique

After collecting the data, the lecturer classified the data into two groups as follow:

#### 3.3.1 Analyzing quantitative data

This study would be successful if there was an enhancement of students' vocabulary. It was recognizable when they could past the test, felt easy and enjoyed sharing their viewpoints in the classroom. After the data were collected, the researcher

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calculated the mean of each class in both pre-test and post-test by using descriptive statistics then analyzed the scores from those tests. The researcher used it to answer how effective the conceptual framework was for students' vocabulary building after the action. The mean of the pre-test and post-test can be calculated with the formulas as follows: (Puspita, 2007, p.69)

$$\bar{X} = \frac{\sum X}{N} \quad \text{Where: } \bar{X} = \text{means of pre-test scores}$$

$$\bar{Y} = \frac{\sum Y}{N} \quad \bar{Y} = \text{means of post-test scores}$$

N = the number of sample

### 3.3.2. Analyzing qualitative data

The researcher used Interactive Model of Data Analysis as propounded by Matthew, B. Mile and A. Huberman (1994). This model includes four different interconnected processes including data collection, data reduction, data display, and conclusion drawing and verification. First, the data collected in the pre-test were noted. Second, the data collected in the post-test were noted. Next, the means of each process were calculated according to the formulas above. Then, the tables and charts were established to show the differences between two processes. Finally, there were discussions on the results and achievements.

## 4. Findings and discussions

### 4.1. Students' difficulties in speaking English.

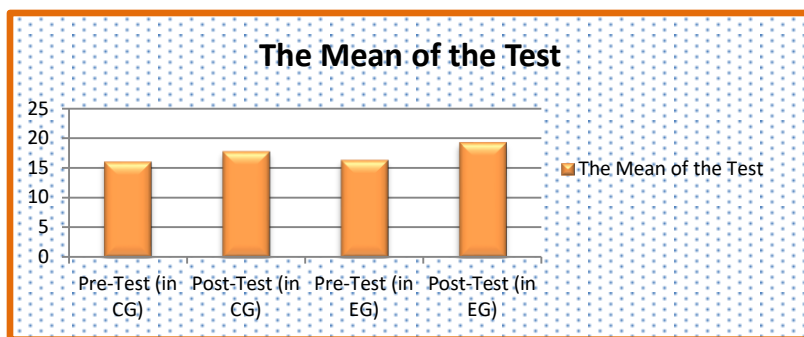
There are a lot of reasons leading to students' difficulties in speaking English. One of them is the lack in giving right expression of their thoughts in communication. Engineering students find it difficult to express their feelings because they are unable to comprehend vivid experience, they do not have enough vocabulary to express their feelings. Therefore, this leads to the lacks of using long sentences and connected speech, they become afraid of making mistakes while speaking English.

### 4.2. The improvement of students' knowledge

The conceptual framework on vocabulary building is a useful tool for students to imagine an abstract word net. They learn word meanings as concepts, and when they understand the links between concepts, they can access to the world of words. This means

students get new chances to improve their knowledge drastically. When students have more knowledge, they will be more objective when evaluating multiple angles of an issue. Finally, other thinking skills like logical thinking, critical thinking... will be formed on a solid basis.

#### 4.3. The improvement of students' speaking competencies



**Table 1.** *The mean scores of the test.*

Test	Mean Score
Pre-Test (in CG)	16.06
Post-Test (in CG)	17.81
Pre-Test (in EG)	16.34
Post-Test (in EG)	19.31

**Figure 2.** *The mean scores of the test.*

The students' mean score in CG takes up from 16.06 in the pre-test to 17.81 in the post-test, and the mean score increases by 10.89%. The students' mean score in EG takes up from 16.34 in the pre-test to 19.31 in the post-test, and the mean score increases by 18.16%. These numbers showed that there was a big improvement of students' speaking result in the EG (in comparison with the result in the CG) after the application of the conceptual framework on vocabulary building.

## 5. Conclusion

The conceptual framework on vocabulary building can be the solid basis for HUMG students to learn English better. Learning word meanings as concepts enables students to access to the world of words. The abstract word net helps them remember new words more easily, which also promotes their thinking competency. When students can symbolize abstract things, they may find this approach interesting. Finally, playing with words is not difficult anymore.

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