

## **CHAPTER II**

### **LITERATURE REVIEW**

The purpose of this chapter is to provide information and research findings as a context for this study. It is divided into five main parts, each with a number of sub-parts, as follows:

1. Idioms and Idiom Acquisition
  - 1.1 The Definition and Origin of Idioms
  - 1.2 Characteristics and Types of Idioms
  - 1.3 Acquisition of Idiomatic Expressions
  - 1.4 Language Learning and Memory
2. Authentic Tasks in Language Learning
  - 2.1 Using Movie in Learning English and the sitcom “Friends”
  - 2.2 Authentic Test Tasks in Language Teaching
  - 2.3 Authentic Test Tasks through CALL
3. Student-Centered Learning
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  - 3.2 The Use of Technology in Student-Centered Learning
  - 3.3 Integration of Technology in Language Education
4. Computer Assisted Language Learning (CALL)
  - 4.1 Theoretical Choices for Design: The Cognitive Approach
  - 4.2 Qualities of Appropriate CALL
  - 4.3 CALL and its Advantages
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5. Related Studies

#### **1. Idioms and Idioms Acquisition**

##### **1.1 The Definition and Origin of Idioms**

Linguistically, idioms are complicated bits of frozen syntax, whose meanings cannot be derived from their components (Nattinger and Decarrico, 1992).

It is generally known that if the language had been designed in a logical way, idioms would never have existed (Johnson-Laird, 1993). Idioms are set of expression that cannot be replaced by another words. Their meaning cannot be derived from each part of the word combination (Webster's New World Dictionary, 1991). According to Susane (1986), the meaning of idioms cannot be determined from its parts. They can be found in various kinds of combinations from syntactic phases to entire sentence (Disciullo and Williams, 1987). Hence, idioms are considered as one of the key ingredients of language and should be included in the reference works as well. Obviously, idioms can be very complicated and need more specific academic attention in terms of syntax, semantics, and pragmatic use (Raymond, 1993).

Larson (1984) suggested that an idiomatic expression is a group of words with a special meaning. Their meaning cannot be derived literally from word for word translation. They are all made up from fixed combinations which present the meaning as a whole and the meaning of the combination is not exactly the same as the meaning of individual word.

Mcmordie (1978) stated that there are many kinds of idiomatic expressions. He also concluded that if there are a number of words combined together presenting the meaning as a whole which is different from the individual words, we can consider them as idioms. EFL learners can find idioms difficult since they cannot get the literal meaning of the combined words. At least, they can only guess the meaning of individual words which are often incorrect.

Fernado (1996) defined idioms as "a stable combination of words with a fully or partially figurative meaning". This definition focuses on two essential aspects of idioms.

Idioms are combined with lexical and grammatical stability. It indicates that they are fixed in their form, so reordering their structure can cause confusion from its original meaning.

Furthermore, The Oxford Dictionary of Phrasal Verbs compiled by Cowie and Mackin (1993) presented a simple assumption about idioms. They stated that "idioms are a combination of two or more words which function as a unit of meaning". Idioms can be found in patterns like "article + adj + noun" for example,

“the last straw”, “article + past or present particle + noun” as in “a forgone conclusion”, or “a sitting duck” or in a “verb + particle” such as in “to run into”.

#### The origin of idioms

The following information about the origin of idioms is derived from Ziyn (2007). As we know, many idioms originate in the culture in which they are used. Each culture is unique representing traditions (such as the way their members live and work), languages, ideas, history, etc. Idioms as a part of language have been used for a long time; thus, idioms represented definite social and cultural implications.

##### 1. The experiences of common people

For many decades, daily life experiences have been passed down from one generation to the next. Subsequently, most idioms have come to reflect the issues concerning people’s lives. For example, Britain is a country surrounded by the sea and many idioms therefore concern the ocean. Fish can easily be used as the metaphors for people, like “*cold fish*” which is used for a person who is unconcerned about others. In the past, people strongly believed in the supernatural, spiritual powers and, life after death, so there are many idioms related to people’s religions and beliefs.

##### 2. Myth

Mythology exists in every country handed down from generation to generation. Thus, usually people tend to know myths well. Greek and Roman myths are particular popular in the West. For example, “*Pandora’s box*” is used to describe something that can cause a disaster. Many know Pandora as the beautiful woman who carried misfortune to the world in her box.

##### 3. Historical events

Every nation has both fortunate and unfortunate events in its history. Most people usually recognize the major events in their histories through stories. Idioms commonly originated from these memorable events and stories. To illustrate, Waterloo is where Napoleon suffered defeat, so the idiom, “*meet one’s Waterloo*” carries the meaning of losing an important contest or to being defeated.

##### 4. Classical Literary Works

Through literature, a nation expresses its hopes and fears and tells its story to the world. Literature represents both the language and the people. Literature often combines with historical and cultural aspects. Idioms can come about



through literature. The works of Shakespeare, the well-known English poet and playwright, have produced many idioms such as “*one’s pound of flesh*” derived from *The Merchant of Venice*. This is used to refer to those who cruelly demand the repayment of a debt.

#### 5. Social Customs and Habits

Social custom means the common or usual way in which people in each culture behave in their day-to-day lives. The environment surrounding people (natural conditions, cultural etiquette, etc.) takes part in shaping customs and habits. For example, in Britain, people formerly commonly wore hats. The way they took off their hats represented greeting or a way to show respect to each other. The idiom, “*take off one’s hat to somebody*”, is interpreted as to show respect.

Many idioms actually originally started from the literal utterances that occurred over time. Elena (2005) found that many idioms were originally intended literally. For example, “*barking up the wrong tree*” refers to hunting dogs barking at trees where there is no prey. Then, its meaning changed from the original to refer to actions of people.

### 1.2 Characteristics and Types of Idioms

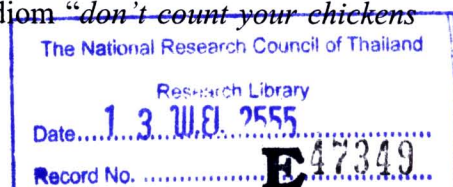
There are different types of idiom which are described as follows (Genzel, 1991):

a. Phraseological idioms – this group of idioms often comprises entire phrases such as “*to fly off the handle, to blow one’s stack, to kick the bucket, to be up to the creek without a paddle, to seize the bull by the horn.*”

b. One-word idioms - surprisingly, there are also one-word idioms. They occur when only a single word is used with a totally different meaning from the original one. Some of the examples include “*lemon*” (For example, “my car is lemon”) or “*dog*” (My match test was a dog).

c. Idioms of distress – these present how language expresses, experiences or deals with feelings such as somatization; the expression of distress through physical symptoms.

d. Proverbial idioms - settled sayings and proverbs are concluded in these types of idioms. These include the famous idiom “*don’t count your chickens*”



*before they're hatched.*” Many of these idioms originated from some famous literary source or from the Cultures of native English speakers.

Correli (2004) suggested that idioms can make conversation more lively and colorful. English is a language filled with idiomatic expressions; this can make its learning difficult for second language learners. However, idioms can make conversations more interesting and idioms can be seen in both speaking and written communication. Thus, this aspect of language should not be ignored. There are about 4,000 idioms regularly used in American English. Idioms come from cultural and daily life conversations. Idioms carry special meaning and show the meaningful character of their meaning. Also, some idioms could effectively reflect the local customs lifestyles, and performances of various regions.

These aspects of idioms can help EFL learners learn about different English cultures, and access the customs and lifestyle of English-speaking people. Also, learning idioms provides a deeper insight into English history. Idioms take both roles as carriers of a culture’s structure and as essential parts of the inheritance of culture (Ziyu, 2007). Owing to their clear and lively characters and intense implications, idioms are frequently found in both spoken and written forms of communication.

According to Gibbs (1987) idioms can be classified into four categories:

1. Syntactically frozen idioms cannot be syntactically transformed into the passive voice and still retain their figurative meaning.
2. Syntactically flexible idioms retain their meaning even if transformed into the passive voice.
3. Transparent idioms have a close relationship between literal and figurative meanings.
4. Opaque idioms obscure the relationship between their literal and figurative meanings.

According to Flavell (2000), idioms are classified into three categories:

1. Pure, such as “*kick the bucket*”, “*pull someone’s leg*”, and “*make off with*”

2. Semiliteral, such as “*fat chance*”, “*use something as stepping stone*”, “*go through*”

3. Literal, such as “*according to*”, “*in sum*”, and “*throw away.*”

Cowie and Mackin also introduced two criteria to test whether a verb + particle expression behaves like a semantic unit and possesses an idiomatic meaning:

a) The substitution of a single words of equivalent meaning. For example, “*step up*” as used in the sentence, *His promotion has stepped their social status up*, is evidently idiomatic because it can be replaced by the words, “improve” or “enhance”.

b) The deletion of a particle. Cowie and Mackin also note that breaking the unity of a verb + particle combination by removing the particle component should not be possible and make nonsense of the meaning. From the previous example, the deletion of particle will result in nonsense: *His promotion has stepped their social status.*

The nature of idioms suggests that idiomatic expressions are fixed and used in non-literal or metaphorical ways.

1. For example, “*I’m up to my eyes in work at the moment.*” means you are very busy.

2. “*At the meeting I felt a bit out of my depth.*” means you are more likely in a situation in which you do not understand many things for some reasons.

3. “*I was over the moon when I heard she’d had twins.*” means you are extremely happy about something.

The above examples show that idioms as whole expressions. However, this is quite likely to be only the traditional view of idioms. There is a lot more language which is idiomatic. For example, there are lots of individual words with idiomatic uses. Here is a comparison of the use of language in literal and idiomatic ways.

## Literal use

1. The river flooded several villages
2. Piles of rubbish lay everywhere.
3. I love roast potatoes.

## Idiomatic use

1. The crowd flooded on the pitch.
  - Crowds are often described as water and the same word flood is used.
2. He's got piles of money.
  - Piles of money can simply mean lots of money.
3. Euthanasia. Now, that's a very hot potato.
  - A hot potato means a controversial issue.

Obviously, all the meanings of each sentence can not be derived from the literal meaning, so idiomatic knowledge is required.

### 1.3 Acquisition of Idiomatic Expressions

Wolfgang (1979) suggests that there are three interaction levels happening in communication: verbal, non-verbal, and cultural. In order to communicate verbally in an effective way, people must have the physical skills to produce the intricate sounds and sound patterns needed to make the words of which language is composed. They must understand semantics, the meaning of the words singly and in combination and know that a group of words can have literal and non-literal meanings (as with metaphors and idioms) (Stubbs, 2001).

Wodinsky and Nation (1998) note that ten repetitions are adequate amount for students to memorize the words. Beck and Mckeown (1991) suggest that the minimum number of repetitions should be about ten so that it will positively affect students' learning.

Cooper (1998) employed the research on processing of idioms among L2 learner of English. He found that the strategies used were as follows: 1) guessing from context, 2) discussing and analyzing the idioms, 3) using the literal meaning, 4) repeating and paraphrasing idioms, 5) using background knowledge, and 6) referring to L1 idioms.

Iroju (1993) states that there are some factors that make idioms difficult for L2 learners: salience, frequency of exposure and ease of production. Charkova's study (2007) revealed that the main methods that high school students use in learning new slang or expressions are as follows:

1. intuition and guessing from the context,
2. guessing through L1 subtitles of English movies,
3. by discussing the meaning found in dictionaries

For university students, only two aspects were relevant: by intuition and guessing through the L1 subtitles of English movies. Using dictionaries was chosen by 11 participants, whereas the discussing it with friends or peers was chosen by 4 participants. Idioms acquisition possibly depends on the ability to understand the information from the context in which the expression is used or from the idea contained in the words of the idioms. When people encounter unknown idioms, they tend to encode the literal meanings in order to figure out the overall meaning.

#### **1.4 Language Learning and Memory**

There are many language researchers who believe that the cognitive process can be reflected by the language. According to Chomsky, whose theory focuses on the productive side of language, language requires repetition. Humans store plenty of information about characteristics of words in our mental lexicon. The information is retrieved when we comprehend or produce the language. Connection theory claims, that once the readers find the connection between spelling units and sound units, then they can generate the pronunciation of written words (McClelland, 1986). Both spoken and written form of communication are important parts of the language. It is accepted that spoken language is the mean of communication first used by humans.

Anderson (1990) divides the comprehension process into three phases based on the first language acquisition: perception, parsing, and utilization. First, listeners pay attention to the sound and try to decode the message. Second, words are transformed to a mental representation. Finally, listeners utilize the input which comprised the mental representation of the message and existing knowledge.



### **Two store memory model**

The human brain stores memory in two distinctive ways- short term and long term memory. Once we hear or see something, the input is almost immediately transferred to short term memory (working memory). Short term memory often stores sounds like some recalled words, common expression, numbers or images. This type of memory holds modest amounts of information for only a limited period of time; the memory is rapidly lost if the subject is not constantly reviewed (seven items plus or minus two items). The information can be retrieved from active memory when we are successful in scanning items (Gairns and Redman, 1990). Long term memory is intended for information storage over a long time. Frequency and contiguity are keys in knowledge performance in long term memory. The information is stored on the basis of meaning and importance. In addition, long term memory can store information gained from short term memory through practice after getting the initial input (Human Memory, 1997). Thus, it is suggested that students should practice words they have studied more than once in order to retain them. *Words will remain in students' long term memory after they are remembered.* Furthermore, Bahrick and Phelps (1987, cited in Nation, 1990) pointed out that items which were introduced in a motivating way to the students and which were given more space for practice were most likely to be retained over the years.

There are two types of long term memory: episodic memory and semantic memory. Episodic memory presents the memory of events or our experiences in an ongoing form. Because of this memory, we can rebuild the events that happened at one time in our lives. However, semantic memory is a set record of facts, skills and concepts that we have learned. Thus, we can learn new facts or concepts from our experiences. There can be a transferring process from short term memory to long term memory, which involves the encoding of information. Also, the process of organization and the meaningfulness or emotional content of a memory plays a great role in its retention into long term memory. Thus, it is recommended that teachers find ways to make learning relevant and meaningful enough so that learners successfully transfer information to their long term memories.

*Language retention* refers to the preservation or improvement of competence in language after its acquisition. There are three main factors that

influence and promote long-term retention: 1) positive attitude, 2) motivation, and 3) rehearsal (Ducharme, Wasche and Bourdages, 1993). Harley's (1994) interviews of adult Canadians showed that the media can play a crucial role in retention of French especially in terms of listening and speaking skills. The more learners are exposed to situations in which they have to listen or speak in a target language, the more they feel like their skills have improved.

Although idioms have been categorized according to different perspectives, purposes and research, it can be concluded there are three main criteria in defining idioms: 1) idioms are usually non-literal or semi-literal, i.e., the meaning can not be derived from its components; 2) they are inflexible in structure; and 3) multiword expressions containing at least two words should be considered as idiom (Liu, 2008). L2 idioms comprehension is quite difficult and requires many strategies. Also, adequate cognitive and linguistic skills are necessary for students to comprehend idioms accurately.

## **2. Authentic Tasks in Language Learning**

As Canale and Swain (1980) proposed, curricula should involve tasks which combine grammar, socio-linguistic situation, and strategic competence. In order to enhance students' language competency, meaningful and realistic interactions in authentic situations are necessary. Moreover, the learners' native language skills should be promoted. Finally, the task should focus on both the second language's culture and the second language itself. Long (1999) also suggests that task-based language teaching should begin with real world tasks in accordance with situations that learners can relate to.

In the last few years the number of teachers using CALL has greatly increased. Hanson-Smith (2000) suggests that since computers are popular among students, they are associated with fun and games. Computer activities make students feel more independent and increase their motivation to learn especially if a range of activities are provided for them. Egbert, Chao and Hanson-Smith (1999) state that language teachers should provide students with a learning environment which includes these conditions:

1. Learners have a chance to explore the language themselves.
2. Learners collaborate in the target language with authentic material.
3. Learners are engaged with authentic tasks.
4. Attitude environment is provided for the students. They are comfortable with learning from their mistakes.
5. Learners can use time efficiently and get immediate feedback.
6. Learners are directed to concentrate on the learning task.
7. Learners make an effort under adequate stress.
8. Teachers help them build self-instruction strategies and promote their self-confidence.

### **2.1 Using Movies in Learning English**

It is widely known that foreign language (FL) classroom offers only a little input in the learning of idioms, and that learners have to rely on sources outside the classroom, such as movies, song lyrics, TV. programs, the internet, books, dictionaries, and contact with native speakers, and so on to learn real world language. The growing role of English as a global language exposes EFL learners to more formal and informal English in a variety of ways (Charkova, 2007). Feature films are one of the most motivating tools in language teaching for both adult and young learners (Gareis, 1997). Students generally find films an interesting way to practice both their speaking and listening skills (Noowongsri, 2004).

Learners can gain knowledge while they are enjoying the movies. Movies are also recommended as a good tool since learners like watching them especially action and entertainment movies (Canning-Wilson, 2000). It has been found that movies can create a positive atmosphere and motivation to learn better outside the classroom. Moreover, movie can strengthen learners' attitude toward language itself and lessen their anxiety. According to a theory of second language acquisition, learners will acquire a new language in nearly the same way as they acquired their first language. Meaningful interaction is required and should be presented in natural ways. Movies offer students a meaningful context.

With a richness of authentic daily life language used, films provide a good background for language acquisition. The language used is presented in conversational form which relates interactive events. It has been seen that people

acquire language in the form of social interactions in which they convey their ideas, expressions, information etc., and these qualities can be found in movies.

At present, some linguists are convinced that social interaction happens earlier in life than syntactic structures. But, social interaction creates the foundation for syntactic structures (Nattinger and Decarrico, 1992). Obviously, using movies in teaching English offers many great advantages.

The American situation comedy or sitcom is mostly based on families or groups of people that act as a family. The typical sitcom episode can usually be divided into six (Taflinger, 1996):

1. The exposition: characters are presented in the opening credits
2. The problem: which is usually a misunderstanding, a mistake or an unexpected situation.
3. The complication: which is the result of efforts to solve the problems, and constitutes a source of humor.
4. The crisis: the decision of which action should be taken.
5. The climax: the high point of the episode.
6. The denouement: illustrates that the status quo has been restored.

Since the entire plot from problem to denouement generally takes place in less than thirty minutes, the problem is likely to be solved easily with a focus on action.

**The sitcom series “Friends”:** the series “Friends” is a sitcom series, which ran for ten seasons and was broadcasted in the United States and other countries from 1994 to 2004. The series is based in New York City and is about six young friends struggling to survive in the real world and looking for companionship. The different characters in the series all live together somewhat harmoniously and rely on each others for support. Each season is separated into about 17 episodes.

This series first launched in Thailand through the UBC network. It has become popular among Thai people. Currently, it is available in most general DVD shops. The reasons for selecting the “Friends” series to show students who are learning English idioms are as follows:

1. It is a very popular series in both American and Thailand.
2. Episodes are presented in the way in which situations truly happen in American daily lives. The humor is universal and this can motivate the students.

3. The language used in this sitcom is simple and related to students' lives.

4. This series gives us insight into useful idiomatic expressions. During its ten year run, the show won seven Emmy Awards, a golden Globe award, two SAG awards, and 56 other awards. It was nominated for 156 total awards. Moreover, the "Friends" series finale, "The last one," was the second highest rated show in 2004, drawing 52.2 million viewers (43% of all viewers) (Friendscafe, n.d.).

Friends has influenced some aspects of popular American culture, particularly fashion. The series has been mentioned for its influence on day to day fashion and hair styles. Also, Joey's catchy phrase "How you doin'?" is widely used as pick-up line or among circle of friends. The phrase "Ross and Rachel" has been used as a joke in many sitcoms such as Scrubs and Family Guy (Petchsuwan, 2007).

## **2.2 Authentic Test Tasks in Language Teaching**

Language testing is a crucial part of language teaching. Authentic test tasks have been defined by many specialists. Oller (1979) views it as "pragmatic test". However, Wesche (1985) calls it "a performance test". Canale and Swain (1980) used "communicative test". All these test tasks' definitions are related in the way in which they present real-life language use. Bachman (1990) suggests that language proficiency is the process for evaluating the learners' performance through various activities or tasks that symbolize a classroom's aims, and what is stated in the curriculum. Students' motivation, achievement and attitudes toward classroom activities should be reflected through the forms of assessments. Authentic assessments also focus on the importance of teachers' professional decisions and responsibilities to improve students' learning. The use of self-assessments promotes the learners' direct involvement in learning and the integration of cognitive abilities with effective learning (Harris, 1997). Authentic assessments comprise communicative performance assessment, language portfolios and a variety self assessments by learners. These are some examples of authentic assessments in language learning: oral interviews by teachers, story or text retelling (via listening and reading inputs), and teacher observations (O'Malley and Valdez, 1996).

In conclusion, authentic assessments can enhance the learning atmosphere by centering education on learners. It also creates bonds between teachers and learners, and can increase learners' responsibility and self-esteem (O'Malley, and Valdez, 1996).

### **2.3 Authentic Test Tasks through CALL**

In regard to CALL, students are independent and able to select their own learning contents. If they can take part in creating their own learning experience, they will be motivated to complete the tasks. CALL activities can be adapted to a variety of levels and language skills.

In judging the authenticity of learning tasks, Chapelle (2001) proposes five criteria: 1) goal, 2) process, 3) topic, 4) location and 5) duration. The task's goal is the communicative goal that learners would like to achieve. The process is the method that learners use in order to complete their tasks. The topic refers to the subject matter beyond the grammatical form. Location and duration relate to where the task takes place, and for how long. Skehan (1996) also suggests that the criteria of accuracy, complexity and fluency should be considered in evaluation the task as well.

Warschauer (2000) recommends that language teachers design appropriate comprehensible input for learners through CALL-based tasks. He introduces five main features of online interaction: text-based and computer-mediated interactions, many-to-many communication, time and place independent communication, long distance exchanges, and hypermedia links. The five distinguishing features will be briefly explained as follows:

1. Text-based and computer-mediated interactions are easily transmitted, stored, edited and rewritten. They also allow students to practice fast interaction and pause anytime they need to.

2. Many-to-many communication is another interesting feature of online learning. Any member of a community can interact with any others.

3. Time and place-independent communication allows students to exchange information at any time and place with an internet connection. In this way, students can communicate with each other or with teachers outside the classroom.

4. Long distance exchange is when materials are exchanged across the world.

5. Hypermedia links can allow multimedia documents to be published and shared through links between computers around the world.

Obviously, these strategies can facilitate the learning process cognitively and effectively.

In conclusion, authentic tasks have a great effect on language learning and provide real communicative situations for learners, which allows them to develop real world communicative skills. It will undoubtedly help the learners approach life-long learning goals.

### **3. Student-Centered Learning**

Student-centered learning is a model in which students assume the most important role in the learning process. Students' needs, opinions, backgrounds, and goals are valued and incorporated in the learning environment. In this model, teachers are directed by the learning strategies that suit the students most while helping them to learn. This concept was developed from the constructivist learning theory which indicates that knowledge is constructed uniquely and individually in various ways. It also based on the experiential model in which teaching is regarded as a transformation of former knowledge (Moore, 1992).

The Thai Ministry of Education has conducted a major reform of the national education system, shifting from the traditional teacher centered to a student-centered approach in order to produce competent, independent and lifelong learners. In fact, the term "student-centered learning" was not acknowledged much in Thailand until the 2002 Education Act made clear that there would be a revolution in Thai education. It is hoped that this reform will enhance the potential of Thai people to deal with the expanding knowledge-based economy and the world of information.

#### **3.1 Characteristics of Student-Centered Learning**

The term *student-centered learning* is broadly used in teaching and learning. The model has changed the emphasis from teaching to learning, so students play a crucial role.

More comprehensive aspects of student-centered learning are described as follows:

1. Active learning is at the center of model, by applying an integrated approach in order to combine the existing knowledge with new knowledge. Teachers try to encourage students to find answers and relate lessons to their real lives. Providing a supportive environment is also important (Sturtridge, 1992).

2. Knowledge is built through authentic learning. It joins real life experiences to the lessons, and students see the usefulness of each lesson.

3. The role of students is to be active participants in the learning process. They have a chance to increase their responsibility and direct their own learning needs and learning resources. Thus, they are capable of constructing their own knowledge.

4. As we know, students have different capabilities, so students should have the opportunity to select the types of class activities and project work that they feel are interesting. Therefore, teachers need to provide a wide range of class activities and project work which, students will be able to select based on their preferences.

5. Students should have a learning environment in which learning can take place at any time, using a variety of methods. The course should enable students to learn anywhere (Moore, 1992).

6. Students should be self-motivated, not motivated from outside. For example, students should be able to look for the information critically because they are so interested in a field, not because of the marks they will get.

It is clear that student-centered learning concerns the constructivist concepts of learning in terms of activities, discovery and independent learning. It can be concluded that student-centered learning is the concept of student having choices in their studies.

### **3.2 The Use of Technology in Student-Centered Learning**

As the use of technology has gained more popularity, it has affected ways of living and communication, and even the ways we teach and learn. Tsang-Kosma (2003) stated that global business requires prepared graduates who are good at working in teams, and are skilled in processing and applying information, and



effectively find solutions. More importantly, graduates should be able to use technology effectively. All kinds of technological tools like audio, dynamic visual formats, computers and the internet, help enhance the learning environment.

Technology can help in changing the learning context from teacher-centered to student-centered. It can also give students more authority to control and design their own learning. Many interactive programs like Moodle and EuroTalk interactive software can successfully lead them to learner-centered instructional approaches (Thamraksa, 2003).

In addition, technology provides hands on and mentally stimulating activities. These activities can improve students' proficiency, and promote their basic skills. The use of software programs can change boring activities into exciting, interactive experiences.

The internet tools are suitable for students-centered learning. They provide a perfect learning environment that easily accessible. Students can get feedback, understand new concept more completely, and attain new knowledge (Graus, 1999).

#### The Use of Moodle

Moodle has been used in the Thai educational system since 1999. Moodle is a free software e-learning platform (also known as a Course Management System (CMS), a Learning Management System (LMS), or a Virtual Learning Environment (VLE)). It is currently used by more than ten thousand institutions worldwide for online learning. Moodle is similar to commercial resources like Blackboard and Angel. However, the big difference is it is open source. Moodle is an online course which consists of registers with names, student scores, forums, chatrooms, quizzes, supplementary materials, audio cassettes, videos etc. (Students can try out those materials and keep detailed records of their activities). Moodle not only allows teachers to organize a variety of resources and activities in one place but it also allows learners to track their development. It is one kind of e-learning tool that can provide simple and safe education solutions to any institution. Moodle facilitates online collaborations between teachers and students, teachers and teachers, or students and students (Stanford, 2008).

Teachers can create learning spaces called “course”. Each course has its own set of resources and activities called moodle and can be adjusted according to instructor preference in appearance and organization. We can also restrict the online users. Thus, only enrolled students or teachers can access their information (Suppasetsee, 2008)

You can attach audio and video to all the activities. This minimizes the need for a lot of printed materials like photocopies or CD copies.

Teachers can enlarge their teaching with online supplementary activities. Teachers can provide students links to websites that relate to the course. Teachers can upload a series of learning activities created by authoring software such as “Hot potatoes”.

When teachers cannot attend class or when students need advice, they can use online chat programs with students. The built-in chat function is a tool for group work to enable discussion in project work. The conversation history is saved so the teachers can review it at any time. Teachers can set up a list of tasks for students to do before attending class. Students can upload assignments for teachers to mark. Teachers will get an automatic alert when a new assignment arrives, and all marked materials can be stored in Moodle. Teachers can easily conduct a survey using the build-in questionnaire program as well

Moodle also supports the theory of autonomous learning in terms of the choices it give to students to suggest what topics they want to study or voice their thoughts on the course (Warschauer, 2002).

Moodle has been widely used in Thai universities as a key component of its courses. At present, it is getting more popular since the platform allowing the storage of online work is easy to access by the users. Every university is now encouraged to use the e-learning course. Mostly, the process of opening e-learning courses is simple and convenient. Khon Kaen University lunched an e-learning online course some years back, and usually provides Moodle training and workshops for its lecturers.

In summary, technology allows students to control their learning style in terms of time, speed of learning, autonomy, and topic choice. Through technology,

students can learn in resourceful environments, interact with the multicultural world, and enhance their language skills and confidence.

### 3.3 Integration of Technology in Language Education

Through the technological developments, immersion of instruction into technology and has been utilized in education. Many useful contributions have been made in teaching with a wide range of subjects, including language. The term “technology” inclusively covers both the design and the learning environment. At present, the use of technology is not limited only to movies, television, or projectors. It can be used as the foundation of the course, the backup, for revision, reinforcement, video games etc.

#### 3.3.1 Function of Technology

Computers play a crucial role in technology. Yet, many teachers continually show reluctance to approach this new technology. Thus, computer literacy should be the focus of learners and teachers. Computer literacy can be defined as the ability to operate a computer and understand the language used in working with a specific computer system. The scale of computer literacy skill can be divided into seven levels as follows (Baird, 1984 cited in Hoch, 1985):

1. *Orientation* refers to the ability to boot up the computer, load a program or pre-packaged program by following the instructions on the screen.
2. *Evaluation* refers to the ability to select the suitable software for the classroom.
3. *Application* refers to the use of computers for instant language drills and practice, CAI and, games or simulations.
4. *Programming in the small* refers to the ability to read, write and adjust a short computer program, not over 300 lines, in a single language like BASIC or LOGO.
5. *Programming in the large* refers to the use and writing of a larger program.
6. *Computer science concept* refers to the ability to utilize sound to the selection of the appropriate data.

Braid (1984 cited in Hoch, 1985) suggests that many teachers will be between level 1 to 3. However, they can still use computers as an effective tool in the classroom.

Computer can be used in these main roles: as tutors, tools, testers, data sources, and communication facilitators. Technology as a tutor shows the material used in the classroom that students need to learn. The video tapes, word processing programs, slides, and televisions represent computers as tools. Questions and feedback materials are presented to students as drills and practice. Computers can take a tester role in providing these activities. The internet is the most obvious example for computer in a data source role. Students can find many useful sources in searching for information on the internet.

Internet can also work as a medium which allows students to communicate with each other while in different locations. Also, learners can participate in discussion forums and discussions via e-mail. This aspect of the computer presents its role as a communication facilitator (Ahmad et al., 1985).

Teachers and learners can make the most of computers when they motivate and support learning or knowledge building. It is important for students to learn to interpret new information on their own. In computer-used classrooms, low proficiency students are expected to become more engaged in class as class interaction is not limited (Beatty, 2003). Moreover, shy students can feel more comfortable while learning in student-centered setting. Their knowledge and self-confidence is improved as a result.

### 3.3.2 Technological Application

Technology has always been an important resource for language learning. It is generally accepted that it is a good tool in creating an environment conducive to language learning. Also, technology can make language learning faster, easier, and more engaging. Some of examples of technological approaches to teaching and learning are provided as follows:

#### 3.3.2.1 CD-ROM and DVD-ROM

CDs are also known as compact disc-read-only memory, containing accessible data. CD-ROMs are popularly used in computer software including games and multimedia applications. CDs have the capacity to

handle large quantities of text, visual and audio material. As CD-ROM discs can store many kinds of digital information including text, graphics, animation, photographic images, they are popular in classroom settings. They are also widely used in both in-class and out-of-class learning as they are quite convenient. DVD-ROMs or Digital Versatile Disc-Read-Only Memory are digital storage formats like CD-ROMs, but with a larger storage capacity. DVD-ROMs are perfect tools for combining text, visuals, animation, and motion video that requires a large amount storage space. Another advantage of DVDs is the use of video formats which the students can use to decide how to interact by choosing from the menus (Smaldino et al., 2005).

#### 3.3.2.2 Simulation and Games

Simulation provides a way of creating a rich communicative environment. This can make students actively involved in a real world-like system. These resources serve student's need for realism, which they desire in order to relate to life beyond the classroom. Furthermore, it can increase the motivation for both students and teacher. Students can control the pace of learning since stimulation and games can provide more attractive content for language learning.

#### 3.3.2.3 Programming

It has been recommended that programming can enhance students' ability in terms of thinking, problem-solving, and creativity. Evidence has also shown that programming promotes students collaborative efforts.

#### 3.3.2.4 Multimedia and Hypermedia

Multimedia can be defined as the combination of various media, for example, movie, sound, video, music, text etc. It can help enhance students' abilities especially for ones who have some background in that field. Multimedia can be a greater benefit because it is easily adjusted to students with different competencies.

#### 3.3.2.5 E-learning

E-learning is a term for web-based distance education, without face-to-face interactions. It may include all types of technology-enhancing learning processes. There are three main benefits as follows:

1) Improved performance: it is proved that students who use online learning technology generally perform better than in face-to-face interaction.

2) Convenience and flexibility: it is obvious that students will not be restricted by time, so they can attend courses on their own time.

3) Increased access: instructors can share knowledge across the world. This factor enables students to access educational courses at a distance (Mayson & Rennie, 2006).

Finally, computers and technology are a powerful motivation for effective learning. However, they are powerless without cooperation between teachers and students. It is actually teachers who decide how much control students should have over their computer technologies.

#### **4. Computer Assisted Language Learning**

##### The Definition of CALL

At present, computers are being used worldwide. In computerized education, two frequently used words come to mind: CAI (Computer Assisted Instruction) and CALL. It will be beneficial to clarify the definitions of CAI and CALL as follows:

CAI generally focuses on instruction, so computers are used as instructors. A CAI is a computerized lesson program which instructs students through interaction and provides suitable assessments. Lessons and activities are provided as tools in language learning (Heinich, Molenda, & Russell, 1993). CAI is designed for a specific instructional purpose (drill, problem solving, practice). On the other hand, CALL focuses on the learners as the program users. The learners are presented with the context or explanations in the lessons. Also, the learners are required to do a series of tests. They have a chance to be self-independent learners since they can access the programs at any time. In addition, graphics, animated pictures, and sounds are included to motivate the students (Sukamolson, 1998).

In conclusion, CALL enables a learning style that can help students learn or review lessons. This supports student life-long learning. Computerized lesson

programs can provide for different learning styles. So, students can choose the best programs that suit their learning style.

#### **4.1 Theoretical Choices for Designs: The Cognitive Approach**

It is essential to design the programs according to pedagogical and theoretical grounds in order to meet learners' needs. Thus, the design of CALL as a tool is also important. The following criteria should be included in the CALL courseware program (Chapelle, 2003, p. 91):

1. Offer the learners a chance to create comprehensible input. The CALL courseware program should provide native speech models so that learners will be able to compare these to their own productions.

2. Provide opportunities which enable learners to figure out their own errors. This can be completed in two ways: through the program itself pointing out what the errors are, and through the learners' understanding the errors themselves by comparing their production with the model.

3. Offer the learners a chance to correct their output. The program should allow learners to undo their exercises or re-record their scores until they are satisfied with their scores.

4. Provide learning tasks which capture learners' interest. It is suggested that tasks should meet the learners' needs and should be comfortable for them.

This CALL program in this study tried to include all these criteria mentioned above in the design of the CALL program.

#### **Cognitive Approach and Multimedia CALL Software Design**

Chapelle's model (2003) of SLA (Second Language Acquisition) combines both linguistic (input and output) and the learner's knowledge acquisition process (apprehension, comprehension, intake, integration and linguistic system). To benefit SLA, she suggested seven helpful hypotheses for developing multimedia CALL software: (Chapelle, 2003 p.68)

1. The target language should be inputted.
2. Help comprehending semantic and syntactic aspects of linguistic input is recommended.
3. It is necessary for the learners to produce target language output.

4. Learners' errors should be noticed by the learners themselves.
5. Learners should be able to correct their errors themselves.
6. Structure can be modified in a variety of ways.
7. Learners should have a chance to get involved in L2 tasks designed to increase the opportunities for better interactions.

CALL based on cognitive theory allows students to select or create their own cognitive strategies. It encourages interactions between students. However, there are other learning theories concerning CALL software design which involve constructivist and behaviorist theory and social psychology. Some aspects of these learning theories include focusing on students and giving students a chance to experiment on their own. Also, the learning approaches tend to emphasize fluency more than accuracy in order to encourage students to take risks.

## **4.2 Qualities of Appropriate CALL**

Several factors should be taking into consideration in designing a CALL task. The following qualities of appropriate CALL are suggested by Chapelle (2001).

### **4.2.1 Language learning potential**

Language learning potential focuses on how CALL benefits learners. Language learning is more likely to occur when learners undergo three types of processes: first, the linguistic features should be focused through input. Second, learners should interrupt the normal interaction if they don't understand the language in order to correct the input; in other words, interactional modifications should be shown in CALL program when simplification, repetition, or definitions are required by students using the program (Larsen-Freeman & Long, 1991). Third, learners should have a chance to discover and correct mistakes either by themselves or with help from the computer program (Cameron, 1999).

### **4.2.2 Learner fit**

Every learners has their own intelligence and need to find out which learning style suits them best. CALL can provide more learning styles to learners (Chapelle, 2003). Skehan (1996) suggests that teachers should select the tasks that will provide more opportunities for the learners to work within their level. Also, learner characteristics like age, learning style, and eagerness to communicate should

come into consideration. CALL should not present language tasks that learners already know since they will not challenge them to develop their language abilities (Kelly & Ma, 2006).

#### 4.2.3 Meaning focus

Generally, learners will first pay attention the meaning of language. The task should include work that requires meaning understanding to complete the assignment. This kind of focus will be presented obviously in communication tasks. This will help learners understand language and will enable the learners to build and use structures to communicate successfully.

#### 4.2.4 Authenticity

This quality refers to the connection between the language tasks in the classroom and the language tasks that students usually find out-side the classroom. This can help motivate students to learn since language use in the classroom would then match language use in real life. It is generally accepted that there are three crucial conditions for communicative competence. First, in order to practice language effectively, authentic meaningful life situations are needed. Second, motivation is required to help the learners express themselves. Third, if they can use or create language in a relaxing atmosphere, this helps them learn more effectively (Acar, 2005)

#### 4.2.5 The positive impact of CALL tasks

CALL tasks focus on assessments and learning tasks equally. This helps learners develop their metacognitive skills. Metacognitive strategies can lead the learners in the right direction in their learning. These should be concerned with learner's interests in a way that will help learners find opportunities to communicate (Oxford, 1990).

#### 4.2.6 Practicality

The last section refers to the need for CALL program to be accessible to all learners. Even if a learner can use a computer, it does not mean that they can use them without guidance. An appropriate software and hardware assistance programs should be available to the students.

### 4.3 The Advantages of CALL

There has been a lot of academic research on CALL program. It has revealed many advantages in using CALL for both students and teachers. Many researchers have shown that computer use enhances language learning over traditional learning (Mckey & Robinson, 1996). Students eagerly interact with computers as clues and appropriate feedback are provided to them. Students have to manage their time in learning, which leads them to be self-directed learners.(Waschauer, 1998).

Computer use also allows students to know how well they are doing and what they have learned (Kaewphaitoon, 2006). In addition, computer use promotes student-centered learning in regard to the learners' differences. Computerized lesson programs provide the comprehensible information which is arranged from the most easy tasks to the difficult ones (Barron & Orwing, 1997). Students can select the most appropriate learning styles, unlike in conventional classrooms (Namphadon, 2007). A CALL program helps promote students' responsibility in learning since it does not force, but motivates them to learn. Mckay and Robinson (1996) state that CALL program boost students' motivation in language learning because CALL programs create a positive language learning environments. Additionally, more interesting language lessons can be created through CALL program by adding sound, animation, graphics and video. In the general classroom, students with different ability level are merged, possibly annoying talented students. In contrast, learning through CALL programs can meet the needs of students who have different intelligences. Students can select their most appropriate learning style (Barron & Owing, 1997).

#### CALL Autonomy in Language Learning

In the view of educational technology specialists, the role of CALL in L2 teaching has shifted from a tutoring tool to one which contains more stimulation, electronic communication and, multimedia production than basic drill practice. Also, language learning theory has highlighted focusing on other forms of communicative competence in order to empower language use for meaningful interaction and student agency (Fernandez, 2001). The use of technology in language learning concerns autonomous learning, collaborative learning, and the development and practice of

language learning strategies because this leads students to pursue their own learning and communicative innovation outside the classroom.

#### CALL and Autonomous Learner

Warschauer (1998) points out that autonomous concepts are important from the start of communicative language teaching. They later contribute to flexible learning and autonomous lifelong learning, which are important keys to success in the age of information.

The term “Autonomy” can be defined as the capacity to be responsible for or to take charge of one’s own learning (Benson, 2001). Autonomy in language learning can be defined as the capacity to take control of one’s own language learning.

Benson (2001, p.110) classifies approaches to the development of autonomy into six categories:

1. Resource-based approaches which emphasized independent interaction with learning materials, including self-access, self-instruction and distance learning.
2. Technology-based approaches emphasizing independent interactions with educational technologies, consisting of CALL and the internet.
3. Learner-based approaches with emphases on the direct production of behavioral and psychological changes in the learner.
4. Classroom-based approaches that emphasize controlling the learners planning and evaluation of classroom learning.
5. Curriculum-based approaches which extend learner’s control of work to the curriculum as a whole.
6. Teacher-based approaches which stress the teacher’s role in fostering learner’s autonomy.

All of these approaches are equally important and generate the ability of learners to take control over their learning. These approaches show that autonomy can be demonstrated in different ways and at different levels according to the characteristics of each learner.

This study focuses on CALL which is categorized as a technology-based approach. McKay and Robinson (1996) point out that new technologies in

learning have a long association with autonomy. Learning in the classroom is not enough and cannot expand the knowledge of students. Self-access learning is easily accessible for students, and can guide students in managing themselves and learning about their own interests (San, 2007). Thus, CALL is one of the most effective tools that can direct students to learn by themselves according to their interests and abilities.

As for autonomous learning, Warschauer (1998) views it as the valuable first step of communicative language teaching which fosters flexible, autonomous lifelong learning. These are the important keys to success in the age of information. Autonomous learners are able to create questions and manage to get answers by themselves through learning tools and resources online and offline. Furthermore, autonomous learners are also independent learners; they are responsible for their work both individually and in group settings. The following are some aspects which contribute to the success of autonomous learners. (Little, 1994 p. 128):

1. Autonomous learners have a clear concept of their learning styles and strategies.
2. When it comes to learning tasks, active approaches are preferred by autonomous learners.
3. Autonomous learners are risk takers in language learning and have the willingness to convey ideas with the target language.
4. Autonomous learners are good thinkers.
5. They can find the balance between form and content, so they can focus on the accuracy and appropriateness of language.
6. They are independent learners. This means they can judge what the best solutions for them are.
7. They can balance both form and content, so they can focus on correctness and proper usage of language.

Cotterall (2005) expresses her opinion on learner autonomy in language learning as a revolution of education which focuses on the learner. The learner needs to make a decision on how to perform and be responsible for each task. However, there are some obstacles in establishing learner autonomy. The learner's attitude toward themselves as a learner, language learning, the timetable, and the

curriculum are the potential problems in this field. All these problems can be solved by SALC since this can help them manage their own learning. Moreover, learners should be well-introduced to SALC through instruction into its use SALC, and the availability of the resources in SALC should be suitable for learners. Success in autonomous learning requires effort not only from students but also from teachers. Cooperation between students and teachers is clearly necessary. Language professionals who have access to the internet in the classroom can teach students lifelong learning skills. It would be beneficial if teachers are able to use today's CALL software and have effective strategies in evaluating and adapting to upcoming versions of the software.

According to Krashen's comprehensible input theory (1982), classroom activities should be focused on the unconscious acquisition of language. So, language acquisition can occur best if we provide our students with adequate effective comprehensible input. The principles of CALL can easily accommodate the above theory. The purpose of communicative CALL is acquisition practice, but all aspect of language can be equally focused on. Acquisition cannot occur without interaction with the target language, nor with exposure to input, alone.

To conclude, CALL programs are not only beneficial to students but also to the teachers. The CALL programs enable teachers to create different types of activities such as exercises, games, and other content to serve the students' preferences. It is therefore worthwhile to create CALL as a tool in language learning to promote students' language proficiency.

#### **4.4 The Limitations of CALL**

As multimedia programs have been increasingly introduced into EFL classrooms, there have been some problems. The role of teachers and students should change, but this does not always occur smoothly or effectively. What is also important is the setting of the classroom. Although CALL is designed to occupy role of an instructional tool or a tutor, the presence of teachers as facilitators is still required (Fernandez, 2001).

A team of researchers at the University of Vigo studied the effect of a multimedia English vocabulary learning program for children aged 6-11 years old. It revealed that the students preferred more traditional approaches because of their

young age. This implied that they still need close learner contact. In addition, most teachers still lack computer competence (Fernandez, 2001). We should not overestimate the role of computers or expect unrealistic outcomes from them. According to Cummings (1995), there are six barriers that discourage academic staff from using educational technology:

1. Incentives - they are afraid of being replaced by technology.
2. The insight of educational technology
3. Model of teaching - Multimedia technology is frequently concerned with motivation and autonomy (the teachers' role consequently will be changed as well).
4. The lack of access to resources.
5. Technological challenges (viruses, reliability, constant changes of systems etc.)
6. Institutional traditions (curriculum, staff overload etc.)

Learner autonomy, therefore, is highly promoted in multimedia technology. We need to analyze how teachers are trained (Little, 1995). Furthermore, Eastment (1998) suggests that teachers need to be trained in these important skills: searching for information on various resources, comparing which materials are suitable or not for the classroom, and incorporating technology into teaching in the classroom. In addition, economic influences should be remembered also. The number of suitable computers is not always adequate to for the number of students.

According to the Asia Internet Usage Survey of 2007, only 12.5 % of the Thai population uses the internet. The number of learners who can use the internet is also quite low (MacroArt, 2007). Likewise, another point that should be taken into consideration is the cost of CALL software; the multimedia computer equipment and the program combining sound, animation, movies, and pictures are rather expensive. Yet, its academic value makes it worthwhile. Sometimes teachers need to create software themselves to suit the curriculum or the course. However, the software is usually simple. Students may also feel bored and lose their interest in the lessons (Thongpoon, 2001).

Although there are some limitations to using CALL, the benefits of CALL are still important for language learning. The above disadvantages can be solved in some ways. Besides, there is no clear evidence showing that CALL has a

negative influence on learners. It is expected that all the problems can be limited as much as possible in this study.

## **5. Related Studies**

Computers have been widely used as tools and tutors in language learning for many years. Thus, there have been many studies involving courseware programs. The studies will be classified into two groups according to the place where the studies were conducted; studies conducted in the Thai context and in the foreign context. The results of the studies are discussed below.

### **5.1 Studies in Thai context**

According to Tongpoon (2001), who conducted a research project entitled “The development of grammar CALL courseware on phrasal verbs for first year English major students, Khon Kaen University” the developed courseware was efficient in enhancing language learning. Moreover, the students demonstrated positive attitudes toward the CALL courseware program. Likewise, Wongrak (2006) investigated the effectiveness of Multimedia Computer-assisted language learning (MCALL) for job interviews in helping students’ listening and speaking skills. The results showed that the program was effective in promoting students’ listening and speaking skills. Furthermore, the use of CALL in “reading comprehension in English”, for first year Geotechnology majors and Production Technology majors students in 2004, found that the CALL courseware was efficient in enhancing students’ reading comprehension. Similarly, Namphadon (2007) tried to enhance students’ strategies for reading comprehension through a CALL program. He found that the CALL program enhanced students’ strategies for reading comprehension and also strengthened students’ reading abilities. Noowonsri (2004) has proved that using soundtrack movie enhanced Thai students’ listening skills and attitude toward English.

### **5.2 Studies in foreign contexts**

In 2006, Johnson and Heffernan conducted a study on “The short Readings Project: A CALL reading activity utilizing vocabulary recycling”. The study showed that students’ scores significantly increased after using CALL. Also, there have been studies conducted concerning the ways in which software programs

enhance students' idiomatic knowledge. Liontas (2006), investigated the effectiveness of Artificial Intelligence in enhancing students' idiomatic competence. They suggested that AI technology knowledge systems can aid the development of idiomatic competence, and should be incorporated into the design of multimedia programs for first and second/foreign language learners. In Japan, Akahori and Yang (1999) conducted a study on the comparison of CALL programs between S and T systems: T system enabled learners to key freely in Japanese sentences and display the appropriate feedback message according to learners' typed in sentence. However, S system enabled students to select the answer from multiple-choice options, and displayed the correct answer regardless of their response. The result showed that the T system was more preferable than the S system. This implies that the CALL system was interesting, even among learners with no experience in its use. In addition, it shows that learners preferred the freely input method and the feedback message according to the learners' typed-in-sentence. Hsu (2005) completed a study on building language learning environments to help technological university students develop English independent learning skills. Her results support the hypothesis; technology-based environments can be useful for developing independent learning outside the language classroom. After all, students had a positive towards independent learning in a technology-based environment. It is found that this method encourages students to learn and use English after class.

Another study on internet technology was done by Pinkman (2005), on using blogs in foreign language classrooms. The project focused on encouraging learners to make use of authentic environments outside the classroom. The results suggest that using blogs to enhance language skills is effective and motivating as well. In addition, using entertainment media is getting more popular these days. Chan (2006) conducted a research project on the Movie Studio's project at the National University of Singapore, aimed at enhancing students' communication ability. Students found this program very authentic and motivating. Sheehan and Johnson (2006) created a software program using the movie "Shrek" to enhance students' listening skills. Students found this software entertaining and encouraging.

Generally, studies involving courseware programs are beneficial to language learning. It has been shown that CALL programs can help enhance students' competency and attitudes towards the language. However, only a few studies have been done on the effects of CALL programs on learning idiomatic expressions.

