Associate Cognitive CREED for Successful Grammar Learning
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Abstract
This article reports a qualitative study which investigated techniques employed by successful EFL learners in learning English grammar. The subjects were eight EFL learners from six different Asian countries: China, Indonesia, Japan, South Korea, Thailand and Vietnam. Data collection was completed by interviewing every subject individually. The findings then emphasized that the grammar learning processes described were closely linked to the framework of Associative Cognitive CREED. Also were there some contributing factors integrated in a salient combination that highly influential to the overall process. Interestingly, there was a profound finding that each subject emphasized on different aspects.

Keywords: Associative Cognitive CREED, successful EFL learners, grammar learning

Introduction

English as a foreign language (EFL) in Asian countries provides abundantly intriguing issues to discuss. The learners, who have been successful in completing the process are then expected or acknowledged to be proficient in using English for various communication purposes. In this sense, investigations on possible techniques that the successful learners used during the learning process would provide us with promising outcomes beneficial for future English language teaching.

In regard to grammar learning, Rob Batstone (1994) proposed a set of theory comprising noticing, re-noticing, structuring, restructuring and proceduralizing. This, in its turn, marked a new era in understanding grammar learning in particular. Meanwhile, in a rather much broader scope, Associative Cognitive CREED (henceforth CREED) is a new foundation in Second Language Acquisition (SLA) discussions. Contained in a chapter written by Nick C. Ellis in Van Patten & J. Williams (2006), the CREED was designed to be fit into second or foreign language learning processes. Implications of this framework have hitherto been examined further such as those in Ellis & Wulff (2015), O’Donnell, et al. (2015), Ellis & Ogden (2015), Ellis, et al. (2014), Gettys & Lech (2013) and Pütz & Sicola (2010).

In order to understand the terms English grammar learning and associative cognitive CREED it is important to take a closer look of each concept.
English Grammar Learning

Theoretically, grammar is learnt through a scheme consisting of five consecutive steps: noticing, re-noticing, structuring, restructuring and proceduralizing (Batstone, 1994). The scheme mainly suggests learners to notice, structure and proceduralize language chunks obtained from available learning materials with pinned phases of re-noticing and restructuring to get reliable language chunks collection of grammar points (linguistic knowledge). In detail, noticing is the first stage in which the learners are aware of certain facts considered to be meaningful grammar points distinctly marked by the learners’ relying on words or phrases (Park, 2013; Thornbury, 2005; Skehan, 1998; Batstone, 1994 and Schmidt, 1990). In other words, learners begin to be aware of what they are learning since the beginning of the learning process so that they are ready to notice linguistic elements of input, useful for their learning by converting them into intake to be put into their schemata.

The second phase is structuring. It is the “understanding and implementing the noticed words, phrases and/or utterances into syntactic bureaucracy—a complex of forms without any self-evident purpose” (Batstone, 1994, p.40). Syntactic bureaucracies are provisional hypotheses on sentence structures which are constructively and erratically built. It is conceptually similar to (if not the same as) the concept of associating (Ellis, 2006). In associating, the learners associate linguistic chunks into a grammatically acceptable structure as the result of their previous learning experiences.

The learners then persistently recast their provisional hypotheses of grammar through unlimited series of noticing, re-noticing—noticeing which happens continuously—and incorporating the target language (L2) in which every revised hypothesis will be an improvement on its predecessor. This whole phase is called restructuring. It is to be underlined that this phase is reliant on plentiful opportunities of renoticing during the learners’ self-learning discovery in attaining their own (personal) grammar. These phases lead us to the pinnacle phase of the process called proceduralizing. Starting from noticing to structuring, the phases employ knowledge about the language as there has been no tangible evidence achievement of the learning since the phases take place inside the learners’ mind. There is then this knowledge of actually using the language called the proceduralization stage.

As a whole, the learners refer to their linguistic knowledge about grammar inside their state of mind and proceduralize the knowledge that is available to them as the result of the grammar learning. This proceduralization stage refers to the stage in which “the ability to access [and apply] knowledge efficiently, under the considerable pressure of real-time communication” is developed (Batstone, 1994, p.42). This covers the ability of both handling elaborate knowledge about the language and using it. The process is then implemented and developed through tangible practices of productive skills: namely writing and speaking. This stage also remarks one complete cycle process of grammar learning from what is unknown to be known and applied accordingly.
Associative Cognitive CREED

When an English speaker encounters a sentence in Indonesian like “saya pergi ke pasar besok pagi”, he would likely focus on every word by translating each into English: the word “saya” in Indonesian is translated into the word “I” in English, the word “pergi” into “go”, the word “ke” into “to”, and so on. After translating verbatim, he can then get the meaning of the full sentence. At this point, the process of understanding the sentence is then completed. Furthermore, in order to learn how to produce a sentence in a foreign language like Indonesian, the following framework initiated by N. Ellis (2006) is proposed.

After firstly identifying the noun “I”, which is identified as the subject of the sentence, the learner needs to put another word following the subject. The word after the subject can possibly be a verb from what the learner knows from his mother tongue (L1) that the simplest form of a sentence consists of a subject and verb with the subject to precede the verb. He can then randomly choose the word “suka” in Indonesian which is a verb: meaning ‘like’ in English. Through this step, the learner is said to be under the first two principles of associative cognitive CREED, construction-based and rational language processing. This implies that the learner employs a form-meaning mapping and predicting what is next from the previous language learning experiences; mapping by focusing on word-by-word and each of their meanings and predicting the subsequent words with reference to what has already been known.

Next, as the learner realises “saya” is an example of a subject he could now write the word “saya” to start his sentence. He may be confident to do it as shown by the available examples. This is the third principle of the CREED, exemplar-based. The learner would be able to use the words as what the examples have shown him. The more often the learner finds the word ‘saya’ in Indonesian sentences, the more likely that he understands that the word refers to the first person singular or the speaker himself (instead of directly translating the word “I”).

For example, the learner has the following set of examples:

- Saya pergi ke pasar
- Saya suka makan sate
- Sepeda saya bagus sekali

There are two occurrences of the word “saya” at the beginning of the sentences as the subject it the list above. However, in the third example there is the word ‘sepeda’ before the word “saya”. In this phase, the learner’s initial hypothesis about the word “saya” is then challenged. This is because the learner is looking at a different example with what he has previously encountered. Having previous knowledge that the word “saya” means “I” in English and the first word of the sentence is almost always a noun as the subject of the sentence and translating the word “sepeda” into “bicycle” in English, the learner may come with a construction “bicycle” + “I” to be the subject of the sentence then he would refer back to his previous knowledge in English and conclude that the intended subject means “bicycle + I” – “bicycle + my” - “my bicycle” in response.

The conversion of the word “I” into “my” occurs since the learner knows that in his native language if there is a person and a thing being put together consecutively in a sentence, this means that it be probable that the person owns the thing: possessive pronoun. This shows how regularities emerge and induce learners’ grammar structuring. In this case, the learner
experiences logical arguments between him and the materials. These are then indicated by the fourth and fifth principle of CREED: emergent and dialectical.

Methods

A pilot study was firstly conducted on 22 May 2013 with a successful EFL learner which was not the participant of this study. From this pilot study, some acknowledgements of strengths and weaknesses of the interview were identified. The strengths were that (1) all of the questions were clear to him as he said that he could understand all the questions well, (2) my ways of probing and prompting to ask him to elaborate some answers were good in a sense that they could help him elaborate the answers in a more-focused way and (3) the situation of the interview informal yet attentive so that he felt no pressure during the interview. However, there was one weakness identified. It was that my voice was sometimes too low making him hard to hear some questions clearly that was why he asked me to repeat several questions accordingly.

Data collection was then completed by interviewing the participants on one-on-one and face-to-face basis taking approximately 45 minutes to 1 hour for each interview in different time slots and places at which the candidates preferred. Overall, it took a month from 23 May to 23 July 2013 to complete the data collection. It took a while to complete it as there were difficulties in finding appropriate slots of time for the interviews agreed by the candidates and me as the interviewer. In essence, there were several steps in conducting the interviews.

Firstly, I asked the participants to carefully read and sign a letter of consent showing that they agreed to be the participants of the study. I also told them that the interviews would be recorded and later be transcribed for the sake of data analysis. Then, I ensured them that the data source would be put into pseudonym. I also remarked that I would show them results of the transcriptions and analyses so that they could clarify or revise their answers, if any.

Secondly, starting the interviews, I asked one general question about their experiences in learning written EG both at their previous educational institutions and home. The subsequent questions were then developed based on the responses given. In order that the interviews be in line with the investigations, I kept the interviews to be on-track by always referring back to the sub research questions of this study when the responses began to move away from the focus of the questions with careful considerations.

Thirdly, I picked some relevant points and asked the participants to elaborate further or provide examples on the relevant points that I was not sure of through probing and prompting techniques. After getting through the questions and ensuring the participants that there was nothing else that they would add regarding their previous experiences in learning EG, I ended the interviews and thanked the participants.
Findings

The questions covered in the interview were largely designed to identify the ways successful English learners learned EG (1) in their previous schools, (2) independently, and (3) what kinds of practices that they consider to be effective for their grammar learning. The results of the interview are then compared and contrasted in order to have a united learning concept and to have a deep understanding about each learning process of each participant.

Successful EFL Learners and Their Previous Schools

From the responses in general, all the participants remarked that they used to learn the principles of written EG from the explanations given by their teacher then they used to do the practices following the explanations as well as correct their mistakes made after being given some feedback by the teacher. This kind of general teaching learning scenario was mostly repeated when they encountered new EG topics. In particular, there were some differences noted from the participants’ learning experiences. First, 5 out of the 8 participants said that they used to learn from the explanations given and do the practices assigned by the teacher with little or no opportunity of producing their own sentences using the EG taught through writing a paragraph for example. This being so, they learned EG through the PPP (present-practice-produce) teaching method with less or no opportunity on the production stage. Second, 2 other participants remarked that they learn EG at schools through drilling practices. Drilling practices are the practices initiated by exemplifying short grammatical points or sentences and asking the students to repeat and recast some examples of sentences in a series of rapid-fire exercises (Johnson, 2008). For instance, the English teacher writes down “I go to school” on the blackboard then asks the learners to produce different sentences by changing a part or two of the sentence. If the teacher says ‘he!’ then the learners should say “he goes to school”. If the teacher says ‘yesterday’ then the learners should say “I went to school yesterday”. Interestingly, in completing these drilling practices, one participant emphasized that his teacher assigned him to memorize a 300-word-essay every week.

The drilling practices meant here was that he was asked to change a part or two of the essay through adjusting with the topic of the given tasks. It can be said that this kind of practice is a kind of expanded drilling practice in a broader sense than drilling practice using sentences. Third, there was one participant remarked that he learned EG through some literature reading by his teacher. Once, after his teacher explained some grammar rules deductively about Past Tenses for example, the teacher asked him to read aloud a short story titled “Winnie the Pooh” in front of the class. The teacher then discussed the EG points that could be drawn from the text. In this sense, he learned EG principles inductively. Deductive teaching is conducted through writing down and/or explaining grammar points explicitly and teaching the students how to use them. On the other hand, inductive teaching is completed using discourses of various literature genres then the teacher and the students draw the grammar rules used upon the discourses. In addition to it, the participant explained that
his teacher then gave practices such as gap-fillings, multiple choices and error analyses. Surprisingly, the 8 participants inclusively explained that the practices that given were those similar to the practices available in *Grammar in Use* by Murphy (2004) or *Understanding and Using English Grammar* by Azar (2000).

The CREED induced from the activities mentioned comprise the construction-based, rational language processing, exemplar-based and emergent. The last element of the CREED seemed to be very limited in the teaching techniques employed by the EFL teachers of the participants. The following table describes how each technique matches with the CREED. Table 1 summarizes the comparison drawn from the explanations given by the participants.

### Table 1.
**How the participants learnt EG in their primary to secondary schools**

<table>
<thead>
<tr>
<th>No.</th>
<th>Number of participants</th>
<th>Learning resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>5 participants</td>
<td>Presentation and practice stages of PPP (the first 2 Ps)</td>
</tr>
<tr>
<td>2.</td>
<td>2 participants</td>
<td>Drilling method</td>
</tr>
<tr>
<td>3.</td>
<td>1 participant</td>
<td>Deductive teaching + Reading + Inductive teaching</td>
</tr>
<tr>
<td>4.</td>
<td>8 participants</td>
<td>Assigning EG practices similar to the ones in Murphy (2004) or Azar (2000)</td>
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</table>

#### Successful EFL Learners and EG independent Learning

All of the participants confirmed that independent learning comprises complex types of practices. In regard to this, there were practices that one participant considered to be useful while another found them to be less useful. Nonetheless, there were some joint principles in the ways the participants learned EG independently.

First, without any attempt to direct the participants’ answers on the interviews, I found out that all the participants learnt EG through reading examples of proper discourses with different degrees of emphasis on various kinds of discourse. They tried to copy, imitate, reproduce, pick-up or extract the ideas, words, phrases, sentence structures and expressions like chunks that were ‘interesting’ to them.

Second, they further defined ‘interesting chunks’ as the ones which were not common to them or the ones which sounded academically complex, sophisticated or native-like. Four participants remarked that they practiced EG through reading good examples of answers of a writing test such as those in IELTS, Business English Certificate (BEC) from Cambridge, and TOEFL iBT while the other four participants integrated the other skills (listening, speaking, reading and writing) to learn EG. They all picked up or copied the phrases, sentences or sentence structures written or spoken to be used later in their own pieces of IELTS writing test or academic writing for university assignments. Interestingly, two participants remarked that
they practice EG independently through listening to English native speaking radio and TV channels such as BBC then wrote down what they heard from the audio as a dictation activity. Meanwhile, the other two participants learned EG through listening to English songs, watching English films, reading English literature and speaking to English native speakers to practice their EG. The latter group emphasized on practicing activities that may improve their language skills in attempt to learn English in general and EG in particular. They said they attempted to extract the EG points from the activities and proceduralized them through speaking.

Third, four participants addressed the importance of having someone to provide feedback on their writing. They found that it was essential to have feedback as they could be helped to point out and fix their EG mistakes. Lastly, all of the participants had various EG practices to produce grammatically well-structured sentences. In this case, one participant pointed out that learning EG fits a saying that “Rome was not built in one day”.

Next, in respect to the concept of CREED, the learners preferred to have independent EG practices that promote all the elements of CREED starting from Construction-based, Rational language processing, Exemplar-based, Emergent, and Dialectical. It is described by as many as four participants that they preferred activities that enable them to produce their own writing and obtain constructive feedback from either their peers or English tutor. The following table then summarizes how the participants preferred to learn EG independently and how the activities match with the concept of the CREED. Table 2 then summarizes the classifications of the responses.

<table>
<thead>
<tr>
<th>No.</th>
<th>Number of participants</th>
<th>Ways of independent learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>8 participants</td>
<td>reading examples of various discourses</td>
</tr>
<tr>
<td>2.</td>
<td>8 participants:</td>
<td>finding “interesting chunks”:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>a. From the samples of answers of a writing test (4 participants)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b. From English native speaking radio and TV channels then writing down what they heard like dictation (2 participants)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>c. From English songs, English films, English literature as well as English native speakers integratively (2 participants)</td>
</tr>
<tr>
<td>3.</td>
<td>4 participants</td>
<td>writing practices with feedback</td>
</tr>
</tbody>
</table>
Successful EFL Learners’ Practices

Reflecting from the previous two research sub-questions, it was revealed that all the participants improved their EG competence through conducting EG practices. In attempt to investigate further about the specific kinds of practices that they regarded as the most effective ones, this research sub-question was then asked. Seven out of the eight participants remarked that there were practices thought to be the most effective for their learning while one participant argued that there was no single practice that was more effective than others for his learning.

Having different emphasis on the details of the practices that worked best for them, the seven participants remarked that there was one single united principle; it was the kind of practices that enabled them to memorize and copy linguistic chunks such as words, phrases and sentence structures. In focus, one participant remarked that reading literature from different genres and memorizing or copying a piece of writing tied into essay-writing activity was one useful practice that he considered to be the most effective. Meanwhile another participant stated that writing a list of colloquial vocabularies or phrases and passing the list in front of his eyes every day was his best practice. Next, another participant stated that analyzing good and bad points of previous writing exam papers, producing his own piece of writing and being given some feedback from his writing was the most useful set of practices. This set was restated by the other four participants with one participant assuming that peer-feedback was more preferable to him while the other participants preferred teachers’ feedback to peer-feedback.

Moreover, with varying degrees of emphasis, all of the 8 participants remarked that learning by exposing themselves with language-skill-based activities covering listening, speaking, reading and writing could boost their EG learning achievement. In regard to this, a participant remarked that by having that kind of learning environment he could think in English, making him easier to proceduralize his EG knowledge.

Nevertheless, the participant who remarked that there was no such kind of the most effective practice explained that he relied heavily on his memory. He memorized all grammar rules by heart and he assumed that only by doing different kinds of practices could his memory of EG rules be enhanced. He further remarked that being emotionally prepared was one essential factor in doing this.

Regarding the concept of CREED that were reflected in the activities, Table 3 below explains how the practices are complied with the theoretical framework of Associative Cognitive CREED.
Discussions

Since the interviews were developed based on the participants’ responses, there was an eclectic mix of ideas emerged. In this section, I shall synthesize the findings from each interview and provide some direct citations of the responses to be discussed further using the scope of Associative Cognitive CREED theoretical framework.

**P1 (South Korean):**  “I think there was an important factor that affected my writing. It was my L1 writing skill. I worked as an educational journal editor in my school district and edited lots of educational reports and leaflets there. My first language writing is good because I am good at cohesion and coherence in my first language...”

Highly correlated with the concept of EG learning proposed by Batstone (1994), P1 constructs his EG learning through noticing and re-noticing English grammatical structures and rationally process the learning intake to be structured and restructured based on the emergent writing samples (both in L1 and L2) through produce his own unique pieces of writing and, in other words, dialectical. Next, P2 explains how he understands learning as a process that needs both intensive and extensive efforts.

**P2 (Vietnamese):**  “Learning is like a life. If you want to be successful in something, you should do it intensively and then you want to do it, I mean emotionally prepared and then you need to get the appropriate method to do the right thing. I become successful because I want to be successful and I practice appropriately...”

He emphasizes that in learning EG there is an inextricable need of motivation and appropriate methods which are set to achieve certain learning goals. He emphasized on two elements of CREED: construction-based and exemplar-based learning. By selecting carefully appropriate methods including reading materials as

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**Table 3**
The most effective EG practices according to the participants’ views

<table>
<thead>
<tr>
<th>No.</th>
<th>Number of participants</th>
<th>Practices considered to be effective</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>7 participants</td>
<td>practices that enabled them to copy and memorize chunks such as words, phrases and sentence structures</td>
</tr>
<tr>
<td>2.</td>
<td>1 participant</td>
<td>reading different kinds of genres and memorizing or copying a piece of writing tied into essay-writing</td>
</tr>
<tr>
<td>3.</td>
<td>1 participant</td>
<td>writing a list of colloquial vocabularies or phrases and passing the list in front of his eyes every day</td>
</tr>
<tr>
<td>4.</td>
<td>5 participants</td>
<td>analyzing the good and bad points of previous writing exam papers, producing their own pieces of writing and being given some feedback</td>
</tr>
<tr>
<td>5.</td>
<td>8 participants</td>
<td>exposing themselves with language-skill-based activities covering listening, speaking, reading and writing.</td>
</tr>
<tr>
<td>6.</td>
<td>1 participant</td>
<td>Any grammar practice (with no prominent practice excelling the others in effectiveness)</td>
</tr>
</tbody>
</table>
examples, the learners construct his EG learning through selecting chunks and the construction process intended is not completed in one go but rather in a trial and error mode. Meanwhile, P3 posits that having abundant sources of learning may help EFL learners to learn EG.

**P3 (Chinese):** “Tell anyone learning English grammar or those who want to be successful in English that you have to read and listen a lot because I believe that observing native speakers or any learning source is good for you to collect some data. Successful English learners are the ones who have confidence to use English. You should have interest or enthusiasm in learning or using English and applying it when you meet English teachers or foreigners.”

Through repeating the process of noticing, re-noticing, structuring, and restructuring again and again will an EFL learner be successful. In regard to the CREED, his suggestion of having abundant learning materials to enhance EG learning represents the overarching concept of construction-based, rational, exemplar-based, emergent and dialectical. Through having various sources of learning, the learner can initially construct, and provide rational structure of English grammar points that can be restructured and later proceduralized. In particular, the emerging grammatical points from available reading sources may be examples for the learner to proceduralize the grammar points learned. By then, the writing product will be different from one another (dialectical).

Meanwhile, for another participant, the phase of noticing EG in Christian Bible (English version) provides him with a new outlook for his EG learning. He gets more interested in English in general and EG in particular as the way messages presented in the Bible are beautiful.

**P4 (Chinese):** “I realized that before that [reading Christian Bible in English version] I only thought that English was merely about translating from L1 to English and using some tenses. You know that this particular writing is written from someone from this country. But in Bible, when I first learned English through Bible, it was very different from the pieces of writing I read...since then I realized English beauty. The language used in Bible is simple but it represents deep meanings behind. Ya, it’s like magic. When you use simple words to represent very big meanings, I never thought that English can be used in that way. Then I realized that English is not about translation.”

P4 remarks that his interest in English became increased as he noticed a new way of delivering message in a magical way. Again, this represents the whole concept of CREED. Enchanted by the beauty of English words in Christian Bible, the participant learns to construct messages in a way that his writing may be similar to that in the Bible in essence that “the words are simple but represent very big meanings” as he puts it. Through a rational learning process, he then begins to learn EG points from reading the Bible. The words and structural patterns learned from the Bible emerge erratically and he notices them as learning intake useful for his learning. The emerged verses on the Bible are used as available examples which can be considered as learning sources. Eventually, he can construct grammatically correct sentences as he intends to have as the result of his learning from the Bible. In general, this is indeed dialectical considering the fact that
it is not a common thing to use Bible as a learning source while in particular he selects expressions that are stated in the verses that interest him.

Conclusions & Suggestions

All in all, stemming from the theory of grammar learning process suggested by Batstone (1994) seems to be very simple but moving from each stage to another is indeed not as simple as it seems. Learning happens rather erratically among the phase of noticing, re-noticing, structuring, restructuring and proceduralizing. We might repeat the process in an irregular way emphasizing on re-noticing and restructuring until we could proceduralize appropriately and acceptably.

The eight participants have been through the English learning process in general and EG learning process in particular for a certain period of time. This is, of course, not a trivial process. Lots of things happen during the learning process: demotivating experiences, stress, fatigue and disappointment on learning results, limited learning sources and so on. Referring back to the main question of this study: “how could EG be learned by EFL learners in order that they can be successful?” could be answered through various perspectives and some ways to answer them are through answering the research sub-questions hitherto:

1. What were the teaching techniques used by the teachers of the successful EFL learners in this study when they were studying English grammar (EG) in their previous schools?

2. What were the learning techniques used by the successful EFL learners themselves to learn EG?

3. What practices did they consider to be highly effective for their EG learning?

This study thus suggests that, in attempt to have further understanding on EG learning, it is essential to have more thorough investigations about the degrees of influences of several factors such as motivation, feedback, language transfer and intensive as well as extensive listening and reading activities since these factors have been indicated to be influential through the findings of this study both discretely and cooperatively one another. I encourage future researchers to conduct correlation analyses among these factors into EG learning achievement.

More importantly, this study concluded that the theoretical framework of Associative Cognitive CREED proposed by Ellis (2006) has successfully identified the learning guidance of the eight successful EFL learners.
References


