Incorporating Deductive Approach into Grammar Consciousness Raising with Translation Practice: An Educational Design Research for Non-English Major EFL

Futuh Handoyo¹, Sugeng Hariyanto², Eny Widiyowati³, Kun Mustain⁴
¹Accounting Program of Accounting Department, Politeknik Negeri Malang, East Java, Indonesia
²English for Tourism Industry Program of Business Administration Dept., Politeknik Negeri Malang, East Java, Indonesia,
³⁴Business Administration Program of Business Administration Department, Politeknik Negeri Malang, East Java, Indonesia

ABSTRACT: This article presents an educational design research study that explores the effectiveness of incorporating a deductive approach into consciousness raising activities in English as a Foreign Language (EFL) classrooms for non-English major students. The research aims to enhance students’ grammatical awareness and accuracy through a deductive instructional strategy, using translation practices and focusing on conscious rule-based learning. Adopting an educational design research framework, the study combines theory-driven design principles with empirical research to develop and evaluate a deductive consciousness raising intervention. The research methodology involves the implementation of instructional intervention to a group of students and the collection of qualitative and quantitative data to assess its impact on students’ grammatical competence and their perceptions of the learning experience. Using t-test statistical calculation, it was found that the intervention improved the students’ grammar mastery but not the response speed. The questionnaire result showed that students reacted positively to the intervention and their motivation increased.

Findings from the study support the previous research which found that conscious raising is effective to improve students’ learning mastery. This also provides insights that integrating deductive approaches into consciousness raising activities work for grammar teaching if the grammar items are selected appropriately. This also shows that the result of conscious knowledge is not converted automatically into subconscious knowledge. It may need time to practice again and again to make it automatic.

As this research is an educational design research, the hypothesis about the efficacy of this designed procedure is suggested to be proved in experimental research. More research to uncover the acquirability and learnability of English grammar features are also recommended to be studies further.

KEYWORDS: grammar conscious raising, translation, deductive approach, educational design research

I. INTRODUCTION
This document is a template. An electronic copy can be downloaded from the conference website. For questions on paper guidelines, please contact the conference publications committee as indicated on the conference website. Information about final paper submission is available from the conference website.

The grammar instruction in English as a foreign language (EFL) teaching has been a topic of debate for many years. At the early development of foreign language teaching, it was approached more deductively, but at its later development, it was approached more inductively. The latter sounds more realistic and promising as it is more natural, resembling kids acquiring their mother tongue. The learners are exposed to real English use a lot and acquire the grammar rules subconsciously.

However, grammar teaching if the grammar items are selected appropriately. This also shows that the result of conscious knowledge is not converted automatically into subconscious knowledge. It may need time to practice again and again to make it automatic.

To respond to the problem, then there came a new approach, which is called Consciousness Raising. It is basically inductive being accelerated. First, the learners are exposed to English inputs, but then teachers interfere in drawing generalization by encouraging them to notice or raise their awareness on the regularity of the input they are exposed to through conscious discovery process. With the process of generalization being encouraged should likely be more efficient than let it occur naturally.

However, EFL is in fact not of one category. At least, there are two distinct categories: EFL for English major students and EFL for non-English major students. For the former, any methods will do, but for the latter, as far as the writer concerned as an English teacher, even Consciousness Raising will confront the time allotment and students’ attention, as discovery process is
Incorporating Deductive Approach into Grammar Consciousness Raising with Translation Practice: An Educational Design Research for Non-English Major EFL

definitely time- and attention-consuming. This EFL category is, indeed, awaiting more priority for innovation, enlightenment, and research.

Since the process of raising consciousness is done inductively through discovery process, it takes long time and constitutes a problem for non-English major EFL. No research or development was done on the grammar conscious raising (GCR) in an EFL class of non-English major. To fill the gap, this present research attempts to optimize a teaching technique that incorporates deductive approach into consciousness raising using L1 to L2 translation practice that allows students to improve their grammar mastery. In addition, it also attempts to understand and describe the characteristics of successful GCR teaching technique for English as a foreign language.

II. LITERATURE REVIEW

A. Translation and EFL

After playing a very important role for a long period, translation was abandoned as a legitimate strategy in foreign language teaching along with the decline of Grammar Translation Method. The main reason was Grammar Translation Method was considered as no longer capable of serving the new purpose of foreign language learning, namely, oral communication. However, recently there has been increasing positive attitude towards translation, especially, in foreign language environment. Widdowson (1987) in his article entitled “The deep structure of discourse and the use of translation” realized that translation is potential as a legitimate option for foreign language teaching. He distinguished three kinds of equivalence in translation: structural equivalence, semantic equivalence and pragmatic equivalence. Structural equivalence involves the correlation of the surface forms of sentences by reference to some ad hoc measure of formal similarity. Semantic equivalence involves relating different surface forms to a common deep structure that represents their basic ideational and interpersonal elements. It has to do with the propositional content of sentences. Pragmatic equivalence involves relating surface forms to their communicative function as utterances. While semantic translation has to do with propositional content or locutionary effect, pragmatic translation has to do with illocutionary effects of utterances. However, as he recommended, translation for this purpose should not be made on structural level of equivalence.

B. L2 to L1 Translation and L1 to L2 Translation

Although translation basically involves receptive and productive processes, translating L2 into L1 (L2 to L1 translation) to foreign language learners, unlike to bilinguals, is different from that of translating L1 into L2 (L1 to L2 translation). In the former, the mechanism is mainly a process of comprehending the foreign language being learned, while in the latter it is mainly a process of producing the foreign language being learned. Therefore, it makes sense that in literature L2 to L1 translation is often related 33 with a teaching tool for receptive skill, especially Reading skill, while L1 to L2 translation is for purposes that are more productive.

Mohammed (retrieved 2008) in his article entitled Translation in FL Reading Comprehension: A Neglected Didactic Procedure supported the use of L1 in FL classroom as there was overwhelming evidence that had been presented in support of the central place occupied by interlingual transfer as a creative learning and communication strategy. Furthermore, he proposed the use of 1.2 to LL1 translation in Reading Comprehension class. He argued that this sort of translation could serve some purposes. It could be used as an assessment technique to see if the students had fully understood the text. It could also be used as a means of learning new FL words and structures, and to draw the teacher’s attention to the words and structures that need to be practiced.

On the other hand, Yagi (2000) conducted experiment to see whether L1 to L2 translation contributes positively to oral fluency. The subjects were one class of eighteen students who learned English as a foreign language, with Arabic as their native language. Nine of them were designated as control group and the other nine as experimental group.

First, all the eighteen students were sent to a language laboratory. They were told that they would listen to English passage, would participate in a discussion on its content, vocabulary, speech formulas, and structures. Then, they would be instructed to retell the passage as well as they could. Their speech was, then, recorded and used as pre-test. Next, the experimental group was asked to remain in the language laboratory, while the control group was sent to a self-access lab. Then, within a half an hour, the experimental group was drilled on retelling the passage in English, responding the Arabic version as the stimulus, while the control group was told to break into pairs to practice retelling the same passage in English without Arabic version stimulus. Finally, both the experimental group and control group were sent back to language laboratory the following day. They were asked to listen to the same passage in English a couple of time and then requested to retell the passage freely in English. Their speech was finally compared, and the result showed that the experimental group exhibited better performance significantly. They performed more fluently, with more sophisticated words and structures.

Vaezi and Mirzai (2007) also conducted an experiment to examine the effect of using translation from L1 to L2 as a teaching technique on the improvement of EFL learners’ linguistic accuracy — focus on form. The subjects were 72 pre-intermediate learners chosen by means of administering an achievement test. This test, which also functioned as the pre-test, was designed in a
Incorporating Deductive Approach into Grammar Consciousness Raising with Translation Practice: An Educational Design Research for Non-English Major EFL

way that the participants who did not have familiarity with the four targeted structures of this study, i.e., Passive voice, Indirect reported speech, Conditional type 2, and Wish+ simple past, were identified. Based on the pre-test, the experimental and control groups were established. While the experimental group underwent the treatment, i.e., translating Persian sentences into English using the newly learned structures, the control group received the placebo — grammar exercises in the course book. Both groups were post-tested through another achievement test. The results of the post-test through t-test analysis demonstrated that the experimental group outperformed the control group in terms of accuracy.

The studies reviewed above are all experimental and deductive, which claim that the finding is universal. However, such claim is questionable since what they investigate is actually the effect of translation used in a specific strategy, within specific contexts of time, setting, etc. Since social reality is always bound to contexts, objective and universal law about it is hard to discover, if not impossible. Besides that, a strategy is an unlimited variable so there is always a possibility for other studies using different strategies within different contexts to come to conflicting finding. Therefore, reviewing substantial studies on experimental studies like that tends to lead to mixed results. This is probably one of the reasons why Cunningham (2000) says: “There is no conclusive ‘evidence’ to demonstrate that translation in the classroom can aid learners in their studies, nor that the benefit of translation carries more weight than methodologies that do not use it.

With the above reasons in mind, in this study the researcher was not concerned with the question of whether translation benefits language teaching or not, but with the question of how to make it beneficial. The assumption underlying this current research was translation benefit language teaching if used appropriately. In this research the translation practice is done under the major teaching approach called grammar consciousness raising.

C. Role of grammar teaching

The role of grammar instruction has been fluctuating along the history of second and foreign language teaching, at one time being a central focus but at another time being downplayed and even considered detrimental. When Grammar Translation Method was still on its heyday, grammar instruction became a major concern in second and foreign language teaching, but then, its role declined drastically with the appearance of Communicative language teaching. In the second and foreign language classrooms, the emphasis begin to shift away from the teaching of grammar. It is said that in foreign language teaching, the role of grammar has suffered in favour of communicative approaches. The principal argument underlying the rejection of grammar instruction is that the goal of second and foreign language teaching is to help students to know how to use language as a means of communication, instead of to know about the language. On the other hand, those who were in favour of grammar teaching argued that knowledge about language form was not the end but rather as a means to an end, and the end is communication (Wilkin, 1979).

This controversy, however, did not last long. Canale (1983 in Omagio 1986) realized the importance of grammatical competence within the whole construct of communicative competence, and incorporated grammatical competence as one of its elements. He defined communicative competence as consisted of grammatical competence, sociolinguistic competence, discourse competence, and strategic competence. Many other authors support the inclusion of grammar as an important part of competence. Thornbury (2001) argues that grammatical competence can have potential contribution to improve the students’ productive skills as grammar constitutes a description of the regularities in language that can provide the learners with the means to generate a potentially enormous number of original sentences. Grammar is kind of ‘sentence-making machine’. He further writes that some studies suggest that learners who receive no grammar instruction seem to be at risk of fossilizing sooner than those who do receive instruction. Richard and Renandya (2002) state that, in recent years, grammar teaching has regained its rightful place in the language curriculum. People now agree that grammar is too important to be ignored and that without a good grammar knowledge, learners’ language development will severely constrained. The issue now is no longer about the necessity of grammar knowledge but rather about how to master it. Nunan (1991) says, “No one seriously interested in the development of second and foreign language teaching has ever suggested that learners do not need to master the grammatical system of the target language: the debate has been over how learners can best acquire the target grammar.”

D. Explicit and implicit grammar

Due to the increasing number of people studying second language, the need for proper grammar instruction has become more prevalent. There is no guarantee that the learning of a language’s grammatical rules will automatically produce one’s ability to write or communicate correctly in terms of grammar. However, to communicate effectively, one must first know the rules of grammar and how they are used in communication (Richards and Renandya, 2002).

Regarding grammar knowledge, writers classify it into two types, i.e., know-about and know-how knowledge. Similar concepts are referred to differently as declarative-procedural (Anderson, in O’Malley, retrieved 2008), static-dynamic (Freeman, in Llantada, 2007), conscious-subconscious or learning-acquisition, (Krashen, 1981), controlled-automatic processing (Mclaughin in Brown, 1987), and explicit-implicit (Ellis, 2001, 2005, 2006). Among the terms explicit and implicit knowledge is the most frequently discussed by language teachers.
Grammar knowledge can be acquired through two distinct ways: implicit and explicit (Basturkmen, 2018; Ko, 2022). Implicit knowledge is acquired unconsciously, without the learner even realizing that they are learning (Buczowski, 2009). It is acquired through exposure to the language in context, and it is primarily learned in this way. Implicit knowledge is procedural, meaning that it is activated quickly and automatically during fluent performance. On the other hand, explicit knowledge is acquired consciously, through the explanation of rules and fragments (Buczowski, 2009). It is metalinguistic knowledge, meaning that it is knowledge about the language (Ko, 2022).

The debate on whether to teach grammar implicitly or explicitly has been ongoing for decades. Some argue that grammar teaching should be implicit, as it was advocated by Jespersen in the early 20th century (Lynch, 2022). By providing grammar in context, in an implicit manner, students can be exposed to substantial doses of grammar study without being alienated to the subject. Others argue that explicit grammar teaching is necessary for learners to develop accurate forms of language and to monitor their own language use. Teaching grammar explicitly means giving detailed explanation of grammar rules. We are of the opinion that implicit and explicit grammar instruction can both be beneficial and have been found to be beneficial for learning (Basturkmen, 2018).

According to Ellis (2006), implicit and explicit knowledge are two types of knowledge that are easily accessed and used in communication. The former is procedural and can be used in rapid communication, while the latter is conscious and declarative, which can be accessed through controlled processing when a learner experiences some difficulties with second or foreign language (L2). He further states that the ability to communicate effectively in L2 is affirmed on implicit knowledge. This type of knowledge should be the focus of any language learning program. The language learning program should also provide activities that are designed to help students develop their communicative skills.

Ellis (2006) states that there are three different interface positions between explicit and implicit knowledge of grammar: non-interface, interface, and weak interface positions. The non-interface position states that explicit and implicit knowledge are distinct and do not convert into one another. This is supported by Krashen’s (1981) learning acquisition hypothesis and neurological research suggesting that both are separated. According to Krashen (1981), learning is distinct from acquisition. He states that acquisition is focused on the meaning and subconscious, while learning is conscious, and form focused. He claims that only acquired grammar knowledge can contribute to productive ability, while learned grammar knowledge is only used as a monitoring agent. This concept leads to a zero-grammar strategy, where the emphasis is not on the teaching of grammar. Instead, activities are focused on the meaning of words (Ellis, 2005). However, the non-interface position’s hypothesis was heavily criticized. The concept of natural order and the separation between acquisition and learning also became controversial (Nunan, 1991).

The second, the interface position, is regarded as a rival to the non-interface position. According to the proponents, conscious-unconscious processes are continuums, they are not dichotomies. Therefore, they are related. Brown (1987), for example, believes that it is not possible to properly define the constructs of sub and conscious consciousness. He prefers a continuum of consciousness, ranging from acute awareness to total lack of awareness of the ongoing process. Therefore, explicit knowledge can become implicit if students can practice communication (Ellis 2005).

According to Ellis (2005), the interface position supports the PPP (present, practice, produce) method, which is a deductive approach to teaching grammar. This method involves first presenting the grammatical structure and practicing it until it is completely proceduralised. Thornburry (2001) defined PPP as a model of instruction leading to accuracy-to-fluency pattern.

Other people believe that between explicit and implicit knowledge are related, but the relation is weak. This position is known as weak interface position. The weak interface position is represented by Ellis (2001, 2005). According to Ellis, explicit knowledge is associated with various key acquisitional processes. This includes the "noticing gap" and "noticing shift." It makes it more likely for students to attend to grammatical structures in their input and compare their mental grammar with what they observe.

After failing to convince himself that explicit knowledge can be acquired through controlled practice, Ellis (2005) suggested the use of consciousness raising as an alternative method to teach grammar. According to his study, the assumption that the acquisition of knowledge involves a gradual process of production was not supported by the data. The concept of explicit knowledge has been used to develop a consciousness raising task that requires students to derive their own grammatical knowledge from the input they've been exposed to.

According to Thornburry (2001), the emergence of consciousness raising as a theoretical concept has highlighted the grammar revival. It is believed that the non-interface position and interface hypothesis were synthesized in consciousness raising (Furaidah and Mukminatien, 2008). According to Ellis (2002), the concept of CR is not related to the goal of achieving fluency or linguistic competence. Instead, it is the process of acquisition that leads to this objective. He claims that the subconscious process is the most important factor that influences the acquisition of knowledge.
E. What is GCR?

In the previous parts we have noted the suggestion for the use of grammar conscious raising (GCR) to help students acquire grammar knowledge and ability to use it. GCR is an approach to teaching grammar. Instead of being taught through rules, grammar is taught through series of activities to help students develop their mental grammar by exposing them to language data. This method challenges them to rethink their existing grammar and create an explicit rule that describes the features of this language (Fatemipour & Hemmati, 2015). The goal of GCR is to help students develop their grammatical awareness and avoid making fossilized mistakes in a second language (Fatemipour & Hemmati, 2015). It highlights the various features of a language that they should be aware of. This is beneficial for teachers as it helps improve their students' communication skills (Tilahun, Simegn, & Emiru, 2022).

A study revealed that GCR tasks are more effective at improving students' grammar competence than the conventional method (Tilahun, Simegn, & Emiru, 2022). The results also indicated that those who participated in the experiment had positive views of the tasks. The concept of consciousness-raising tasks has been proposed as a tool that can help students and teachers become more aware of their target grammar feature (Miranda, et al., 2018).

A conscious raising technique is a technique that allows students to understand grammatical rules on their own (Miranda, et al., 2018). In 2006, Widodo created a set of steps that help students become more aware of their grammar usage and achieve conscious raising (Miranda, et al., 2018). These five steps, presenting the target structure, providing examples, asking questions, providing feedback, and providing practice, were designed to help students practice their skills and develop their knowledge (Miranda, et al., 2018). It is also believed that formal instruction is very important in helping students develop their knowledge of grammatical structures (Fotos, 1993).

The concept of GCR is very effective at improving students' grammar skills and helping them acquire the necessary grammar rules to use in a second language. Through conscious raising teaching, teachers can help students become more aware of the various features of a language. Instead of simply teaching students rules, with various tasks grammar consciousness-raising aims to raise awareness of the various grammatical structures (Ellis, 2010). Some of these tasks include analysing the language's authentic use and identifying patterns (Tilahun, Simegn, & Emiru, 2022). Basically, this method differs from traditional instruction, which typically involves having learners practice applying rules through drills and exercises (Ellis, 2010).

F. Effectiveness of conscious raising

According to studies, grammar consciousness raising is more effective than just memorizing rules (Tilahun, Simegn, & Emiru, 2022; Suter, 2001). It is also more effective than traditional pattern drill practice (Amirian & Sadeghi, 2012). It can also help students develop a deeper comprehension of the language they are using (Tilahun, Simegn, & Emiru, 2022). In addition, these tasks can be more motivating and engaging for learners as they involve reflecting on their own language and analysing the authentic use of the language (Tilahun, Simegn, & Emiru, 2022).

According to a study, tasks that are focused on grammar consciousness-raising are more effective than those that are traditional methods when it comes to improving the students' ability to use target features (Tilahun, Simegn, & Emiru, 2022; Iskandar & Heriyawati, 2015; Yarahmadzehi, Ghalaee, & Sani, 2015). Data collected from structured interviews revealed that the participants in an experimental group highly regarded the tasks that were focused on grammar consciousness-raising (Tilahun, Simegn, & Emiru, 2022). In another study, it was found that the practice significantly improved the students' grammatical and lexical knowledge (Roza, 2014). A third study revealed that the subjects who were taught about the importance of grammar awareness-raising performed better in their grammatical skills and were more motivated to learn (Iskandar, 2022). In conclusion, the findings support the assertion that these kinds of tasks are more beneficial than the traditional methods of teaching grammar.

In order to help students to become more aware of the grammatical patterns in their language, conscious-raising activities can be carried out (Iskandar & Heriyawati, 2015). These activities can provide them with an engaging and fun learning experience (Iskandar & Heriyawati, 2015). These activities usually involve a variety of tasks that are very simple and controlled (Roza, 2014). The goal of these activities is to help students develop an idea of how certain grammatical forms work (Roza, 2014).

One of the most common activities that can be carried out is the discovery activity, where students are asked to come up with a grammar rule based on a language example. This type of activity can stimulate their interest in language and help them explore its various aspects (Roza, 2014). Although they may initially notice content words, they may not pay attention to the function words, such as endings and prepositions, that are used in conjunction with them (Roza, 2014). These activities can help students develop their awareness of the grammatical patterns in their language, particularly in the present tense (Iskandar, 2022).

Another type of activity that is commonly carried out is the consciousness-raising task, which is designed to help students become completely aware of the target grammatical feature (Miranda, et al., 2018). This activity is conducted in a way that allows students to understand the rules themselves (Miranda, et al., 2018). In 2006, a series of steps was developed by Widodo to help students raise their consciousness about grammar (Miranda, et al., 2018).
Incorporating Deductive Approach into Grammar Consciousness Raising with Translation Practice: An Educational Design Research for Non-English Major EFL

One challenge in teaching teenagers about grammar is making sure that they take responsibility for their actions. With consciousness-raising tasks, students can improve their proficiency in the language and develop their awareness about its grammatical patterns (Fatemipour & Hemmati, 2015). These activities can be effective for both proficient and non-proficient learners (Fatemipour & Hemmati, 2015). They can also develop their knowledge of such patterns in a more explicit manner (Fatemipour & Hemmati, 2015).

G. Example of GCR activities

There are several examples of grammar consciousness-raising activities that can be used in language teaching. In addition to being fun, these activities can also help raise awareness about the importance of grammar. For instance, learners can develop a rule based on a certain language example through discovery activities (Roza, 2014). Another example is fun activities that encourage students to enjoy learning grammar, such as games and puzzles (Iskandar, Grammar Consciousness-Raising Activities and Their Impact on Students’ Grammatical Competence, 2022).

CRTs are also being suggested as a tool that can help teachers and students become more aware of the importance of grammar. These activities are designed to help students understand the rules and structures of grammar (Miranda, et al., 2018). Teachers can also use examples in class to help pupils develop their knowledge of grammatical topics. This can be done by asking them to identify the types of grammatical topics that they should be aware of. In addition, students can develop their own rules through activities that involve identifying past and present simple tense forms (Suter, 2001). These types of activities can be engaging and diverse, and they can help students become more acquainted with the grammar rules of a language.

According to Widodo (2006), the five-step procedure for teaching grammar incorporates the notions of practice and consciousness-raising, explicit and implicit knowledge, and deductive and inductive approaches. The procedure involves a combination of explicit instruction, where teachers provide rules and explanations, and implicit instruction, where learners are exposed to language use in context. The procedure also includes activities that raise learners' awareness of language use through reflection and analysis. Finally, the procedure uses both deductive (rule-driven) and inductive (example-driven) approaches to teach grammar. By combining these different approaches, the procedure aims to provide a comprehensive approach to teaching grammar that is engaging and effective for learners.

Widodo's (2006) procedure for teaching grammar involves five steps. The five steps are: (1) presentation of the target structure, (2) Consciousness-raising activities, (3) Practice activities, (4) Written production activities, and (5) oral production activities. These steps aim to provide a comprehensive approach to teaching grammar that incorporates both explicit and implicit instruction, as well as deductive and inductive approaches. By following these steps, teachers can help learners develop a deeper understanding of grammar and improve their ability to use language effectively.

According to Widodo (2006), this procedure is an alternative pathway for English teachers to teach grammar because it incorporates innovative techniques and approaches that are different from traditional grammar teaching methods. The procedure aims to engage learners in communicative tasks and encourage their involvement in the learning process. It also emphasizes rule discovery, which can enhance learning autonomy and self-reliance. Additionally, the procedure provides opportunities for learners to apply their cognitive depth and develop a deeper understanding of grammar. This procedure can be applied in the classroom by following the five steps outlined by Widodo (2006). Teachers can present the target structure, use consciousness-raising activities to help learners become aware of language use, provide practice activities to reinforce learning, and encourage written and oral production activities to help learners apply what they have learned. By using this approach, teachers can create a more engaging and effective learning environment that helps learners develop a deeper understanding of grammar and improve their ability to use language effectively.

Consciousness-raising activities are designed to raise learners' language awareness by making them aware of something they may not have noticed on their own. These activities involve identifying and understanding the grammatical point in context and requiring learners to solve problems interactively to formulate both explicit and implicit knowledge. Consciousness-raising activities can help learners build their conscious knowledge and understanding of how the language works grammatically, which can be beneficial in learning grammar (Roza, 2014).

III. RESEARCH METHODS

A. Research Design

From the literature review it was known that consciousness raising was an effective tool to teach grammar. Given the situation in the research setting, the researcher has design a prototype of a teaching technique and this research is to optimize the technique. Based on the purpose, the suitable research design was educational design research (see McKenney & Reeves, 2020). This research follows the generic model of educational design research (EDR) (McKenney & Reeves, 2013). See Figure 1 below.
The research consisted of an analysis and exploration, design, and construction as well as evaluation and reflection phases. During the analysis and exploration phase, the characteristics of the subjects under study were analysed and the instructional materials were selected. In the design and construction phase, the researcher planned the steps in the intervention. Since the research was mainly concerned with the integration of deductive grammar instruction and consciousness raising, the intervention was twofold. Out of the six hours allotted a week, three hours were used for deductive grammar instruction and the other three for consciousness raising.

The evaluation and reflection phase contains the following. Monitoring and evaluation were done throughout the process using observation and test in every end of the teaching session. Before the teaching using GCR, a pre-test was administered to score the students’ mastery of the topics to be taught. The topics themselves were basic in nature and should have been taught in high school level. As there were five topics, the scoring was done five times, in which the later topic included the previous one. Therefore, the scoring for the last topic includes all the previous four topics.

Subconscious grammar is the underlying rules of grammar that speakers use automatically without thinking about them. Because subconscious grammar competence is related to the speed of constructing sentences from several words, the mastery of the grammar was also measured by the speed to translate the source sentence correctly. This speed was measured in words per minutes. A post-test was also conducted in addition to the students’ feedback collection with a questionnaire. After all the intervention steps, a reflection was done to get better insight on the teaching examined.

Finally, in the intervention is matured and theoretical understanding was gained. In this phase the teaching procedure that had been implemented and proved successful was formulated and understanding on the topic was explained.

B. Research instruments
As has been mentioned above, the instruments were tests and questionnaire. The tests were pre-test and post-test containing the same items. The questionnaire was to explore the learners’ feeling and attitude on the use of the translation practice and the GCR technique in general.

C. Subjects of the research
The subjects were one class out of six classes of the first-year students of Accounting Department of State Polytechnic of Malang, Indonesia.

D. Limitation of the research
The research was a mixed method. In the quantitative part, a kind of pre-experimental research with one group pretest-post-test design was conducted to see the effect of the intervention. The result of the effect of the intervention can only be ‘generalised’ to the class setting similar to this research setting only.

IV. FINDINGS AND DISCUSSION
The findings are in the form of the process and result of the implementation of the designed procedures and the result of the questionnaire.

A. Findings of the research phases
The report and result of the research phases was as follows. The subjects were the first semester students of accounting major. English is only a supporting subject, instead of their main subject. At one period, they had to study a lot of subject matters, one of which was English. They had to study approximately 38 hours a week, out of which only 6 hours were allotted for English, which was only 15 percent of all hours. Under such circumstances, EFL class often faced problems of limited time, attention, and
Incorporating Deductive Approach into Grammar Consciousness Raising with Translation Practice: An Educational Design Research for Non-English Major EFL

motivation. Based on these limitations, then, the materials were selected. In general, there were three bases commonly used for material selection, namely, contrastive analysis, markedness, and error analysis. This research chooses markedness as, through this way, the materials could be selected to pick features which were more basic, but with higher learnability and lower acquirability. With one-semester-durated research, the intervention was done to teach ‘verb be vs full verb’, ‘positive sentences’, ‘negative sentences’, ‘yes-no and wh- question sentences’ and ‘modal auxiliaries.’ All of these topics should have been taught in the high school time.

The second phase included deductive grammar instruction and conscious raising activities. In the deductive grammar instruction, the teacher presented or explained the English grammar rules and showed some possible expressions in the learners’ first language which were equivalent. The learners were supposed to notice in what way they were similar and different. This step was to reinforce their conscious understanding by giving a context in the form of comparation. For example, the sentence, “May I borrow your pen?” were equivalent to some expressions in Indonesian like, “Boleh aku pinjam pulpennya?” atau “Saya pinjam ya pulpennya?”, “Pinjam pulpennya, dong” and other possible expressions that they often use in daily communication. The next step was the crucial one, which was intended for the learners to internalize what they had just learnt. They spent most of the allotted time for this part. The learners were given L1 sentences of different structure and formality styles and were supposed to translate them into standard English in accordance with the rule they just learnt. Various styles of L1 expression were given to prevent them from do word for word translation strategy and to ensure meaning and form connection.

In conscious raising activities, the learners are exposed to English podcast equipped with bilingual transcription. First, they are supposed to read the L2 text while listening to the podcast. Then, they practice reading the L2 text aloud. After that, the teacher raised their awareness on the grammar features they have just learned during the deductive process and appear in the text. Then, as the main activities, they are told to come individually to the teacher with L1 text and they orally translate into L2, after given enough time for practice on their own.

The third phase, evaluation and reflection phase, was done with testing, feedback collection and reflection. From the learners’ feedback were collected to explore the underlying affective factors, such as their attitude and motivation. Before the intervention, a pre-test covering all the topics were administered. The result showed the average score of 63.91667 from the score range of 0 - 100. At the end of the cycles, the students did a post-test covering all the topics. The score mean was 72.625. They worked individually and recorded their spoken responses. The speed of the responses shows the fluency of the respective grammar rules application. The speed is calculated in words per minute (wpm). The t-test calculation for the grammar score means and speed score mean result can be seen in the tables below. Table 1 shows the t-test result for the grammar scores means and Table 2 shows the t-test for response speed means.

### Table 1. T-Test result of subjects’ pre-test and post test scores (paired two sample for means)

<table>
<thead>
<tr>
<th></th>
<th>Post-test</th>
<th>Pre-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>72.625</td>
<td>63.91667</td>
</tr>
<tr>
<td>Variance</td>
<td>470.0707</td>
<td>428.0797</td>
</tr>
<tr>
<td>Observations</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>0.785685</td>
<td></td>
</tr>
<tr>
<td>Hypothesized Mean Difference</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>df</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>t Stat</td>
<td>3.068815</td>
<td></td>
</tr>
<tr>
<td>P(T&lt;=t) one-tail</td>
<td>0.002717</td>
<td></td>
</tr>
<tr>
<td>t Critical one-tail</td>
<td>1.713872</td>
<td></td>
</tr>
<tr>
<td>P(T&lt;=t) two-tail</td>
<td>0.005434</td>
<td></td>
</tr>
<tr>
<td>t Critical two-tail</td>
<td>2.068658</td>
<td></td>
</tr>
</tbody>
</table>

Table 1 shows that the pre-test mean is 63.91667 and the post-test mean is 72.625. In this calculation, two-tail test is used. The p-value for two tail test (0.005434) is less than the standard significance level of 0.05. Therefore, the null hypothesis is rejected. In other words, the difference between score means is statistically significant.

### Table 2. T-test result for response speeds (paired two sample for means)

<table>
<thead>
<tr>
<th></th>
<th>Post-test</th>
<th>Pre-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>49.13125</td>
<td>39.34</td>
</tr>
<tr>
<td>Variance</td>
<td>148.4974027</td>
<td>116.3497</td>
</tr>
<tr>
<td>Observations</td>
<td>24</td>
<td>24</td>
</tr>
</tbody>
</table>
Incorporating Deductive Approach into Grammar Consciousness Raising with Translation Practice: An Educational Design Research for Non-English Major EFL

<table>
<thead>
<tr>
<th>Pearson Correlation</th>
<th>0.791031032</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesized Mean Difference</td>
<td>0</td>
</tr>
<tr>
<td>Df</td>
<td>23</td>
</tr>
<tr>
<td>t Stat</td>
<td>6.359322468</td>
</tr>
<tr>
<td>P(T&lt;=t) one-tail</td>
<td>8.63587E-07</td>
</tr>
<tr>
<td>t Critical one-tail</td>
<td>1.713871528</td>
</tr>
<tr>
<td>P(T&lt;=t) two-tail</td>
<td>1.72717E-06</td>
</tr>
<tr>
<td>t Critical two-tail</td>
<td>2.06865761</td>
</tr>
</tbody>
</table>

Table 2 shows that the response speed mean in the pre-test is 39.34 word per minute and the speed mean in the post-test is 49.13125 words per minutes. Two-tail test is used in this calculation. The p-value for two tail test is 1.7272 which is higher than the standard significance level of 0.05. Therefore, the null hypothesis cannot be rejected. In other words, there is no significant difference between the response speed in the pre-test and post-test. It means that the use of GCR technique does not improve the students’ speed in producing the expected correct sentence.

From the questionnaire it was found the following. Only one student thought that the teaching procedure should be changed in the coming meetings. All students agreed that all the topics have been discussed in their previous level of education. Some learners even reported to have learned English since the fourth grade of elementary school. Next, twenty-three students reported that they got improvement and only one said that he got no improvement. From the learners reporting the learning progress, it was known that mostly they got confidence boost. This all shows that students had positive attitude towards this teaching technique.

With all the steps that have been taken, it was reflected that using translation as a means for practising grammar rules and improving grammar conscious raising could improve students’ grammar mastery and produced positive response from the students. The choice of the grammar rules to teach was critical. Choosing them based on contrastive analysis and markedness of the grammar items was an important step. Although the mastery of the grammar increased, the response speed did not increase.

B. Findings from the questionnaires

The questionnaire result revealed that most of the students (23 out of 24) stated that the practice should continue for the upcoming semester, and all of them said there was no topic they hadn’t talked about before in the previous level of education. It revealed that most students started learning English in fourth grade, while some began learning grammar in seventh grade. Additionally, 23 students reported progress from the activities, with some claiming improved confidence with their sentences and vocabulary. One student mentioned that the technique helped them avoid studying for tests. The questionnaire also revealed that most students had a positive view of the translation practice technique, noting that it improved their subconscious grammar and helped them develop their vocabulary effortlessly. The technique also allowed them to ask questions to the teacher about difficult words they encountered while practicing.

C. Matured intervention and theoretical understanding

Through all the previous phases, the maturing of intervention and theoretical understanding were finally reached.

The optimal GCR technique using translation technique (the intervention) was finally achieved with the following procedure and characteristics. See Figure 2 below. Translation technique is a method of language learning that involves translating words or phrases from one language to another.

![Figure 2. Stages and actions in GCR technique using translation practice.](image-url)
Incorporating Deductive Approach into Grammar Consciousness Raising with Translation Practice: An Educational Design Research for Non-English Major EFL

grammars and testing grammar accuracy and response speed. The first step contains two main actions, namely presenting the selected grammar rules and asking students to practice translating sentences from L1 into L2 in writing using the grammar rules just presented. In the second step, the teacher trains the students to translate L1 sentences orally, and the response speed is gradually increased. The teacher guides the students until they produce correct grammar.

Likewise, the second stage also contains three steps, namely, exposure, noticing, and production. In exposure step, students are exposed to English podcast accompanied by bilingual transcript. Then, during the noticing step, teacher elicits the students’ awareness on the grammar features which show up in the transcript by retrieving what they have learned in deductive stage. Finally, in productive step, students take sufficient time to practice reproducing the language they have just been exposed to.

In addition to the matured intervention, the theoretical understanding was also gained. It is presented in the following paragraphs.

The fact that the mastery of the grammar increased and the speed of producing correct sentences did not improve can be discussed as follows. The increase of the score can mean that subconscious grammar competence can be developed deductively using semantic-syntactic translation practice combined with consciousness raising. This finding supports Interface Hypothesis, which argues that conscious and subconscious process constitutes a continuum process, instead of a dichotomy. Consequently, conscious declarative knowledge resulting from conscious learning process can be internalized and turned into subconscious procedural knowledge through appropriate practice. In other words, explicit grammar knowledge can turn into implicit knowledge. The reverse is also true, procedural knowledge acquired subconsciously can also be generalized through noticing process and become conscious declarative knowledge. Thus, internalization process in deductive stage and generalization process in consciousness raising stage are likely to be mutually strengthening. Besides that, the use of semantic L1 to syntactic L2 translation also contributed to the achievement as it is in line with the instinct of beginner learners and provides form-meaning connection practice, which is basically the essence of communication. Their feedback given at the end of the treatment showed that their attitude and motivation increased favourably. In spite of the hard work, most of them did not consider the tasks a burden. They also see grammar as a very hard and boring subject. They can join the class with less anxiety and tension. The activity of translating Indonesian text into English became the favourite activity for most of them. Their achievement cannot be separated from these affective factors.

On the other hand, the fact that the response speed was not improved indicates that the learners were taking time to activate their newly acquired grammar and, at the same time, deactivate their idiosyncratic grammar. The willingness to activate the newly learned grammar in productive process is indeed something for non-English major students. During my career as an English teacher for non-English major students, I have observed their strong tendency to use their idiosyncratic grammar, which is largely interlingual, despite formal instruction or even exposure.

This has been a subject of controversy until to date. Krashen (1982) hypothesizes that is not consciously learned grammar that can lead to productive competence but subconsciously acquired grammar through direct exposure to language input. However, Schmidt (2010) argues that exposure alone does not become intake in language learning until it is noticed or consciously registered. He, as evidenced, pointed to a case of a good learner who had been through several years of exposure, but he still continued to produce sentences such as Yesterday I am go beach or Tomorrow I am go beach (Schmidt, 2010). He believes that only children can directly acquire language through exposure and do not necessitate an act of noticing, and adult learners have lost this mysterious capability.

However, we have a bit different view. This phenomenon is largely related to which language features which are going to be acquired. There are language features that are easy to acquire and there are ones that are hard. Likewise, there are language features that are easy to understand and the ones that are hard. In other words, there is a continuum degree of acquirability and learnability in language features. The features with very high acquirability can be acquired through sufficient exposure to input and do not necessitate noticing act. The lower the degree of acquirability is, the more noticing act is needed. I, hereby, propose a hypothesis that the degree of acquirability is to a great extent, negatively related with the degree of learnability and this has something to do with the markedness of language features.

The finding of positive response forms the students about the use of translation practice supports Brown’s (1987) claim that the first stages of learning a new language are often affected by interlingual transfer, the use of translation practice does not violate their instinct or strategy. This finding supports a study conducted by Liao (2006), which looked into the beliefs of EFL learners on the use of translation. The study revealed that non-foreign learners and those who are less proficient in a language reported more positive views about the practice.

Regarding the types of EFL, it is of two broad categories: EFL for English major students and EFL for non-English students. Any approach which works for the former category does not always work for the latter. Consequently, any thought, research, and innovation in EFL should also be specified accordingly. Second, deductive and inductive approach for grammar instruction do not constitute two separate poles, but rather a continuum ranging from more conscious to more subconscious. Therefore, a different
point in between or an integration of several points in between need to be identified to serve different characteristics of EFL and other relevant contexts. This research shows the procedure for non-English students.

V. CONCLUSION AND SUGGESTION
The following conclusions can be drawn based on the findings. A teaching technique that incorporates deductive approach into consciousness raising using translation practice is optimal to improve students’ English grammar mastery if it has the following procedure:

• Teacher presents grammar rules.
• Students practice translating L1 sentences (in writing) into L2 (with the target of applying the grammar rules) in normal speed.
• Teacher trains the students to translate L1 sentences orally with gradually increased speed and correct grammar production.
• Students are exposed to English podcast accompanied by the bilingual transcript.
• Teacher elicits the students’ awareness on the grammar features they have learned in deductive stage which show up in the transcript.
• Students take sufficient time to practice reproducing the language they have just been exposed to.

This procedure facilitates the grammar conscious raising and the practice to achieve automaticity. A careful selection of the grammar rules is the key to the students’ progress.

Finally, as this research is an educational design research, the hypothesis about the efficacy of this designed procedure is suggested to be proved in experimental research. Additionally, more research to uncover the acquirability and learnability of English grammar features are worth conducting. Last but not least, translation practice is very potential instrument for, especially, non-English major EFL as it provides meaning-form connection, which is basically the essence of communication, unlike mechanical drill, which only focuses on form. This point also needs further research.

REFERENCES
Incorporating Deductive Approach into Grammar Consciousness Raising Activities: An Educational Design Research for Non-English Major EFL


