DESIGNING TASK COMPLEXITY IN PROMOTING LANGUAGE PERFORMANCE

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a. Problems in higher education that calls for innovation in learning and teaching

The concern over low English language proficiency and performance among Malaysian learners has been explored extensively. Among the reasons that have been highlighted for this problem are the emphasize on the teaching of grammar in comparison to the communicative use of the language, exam-oriented syllabus, lacks of English language literacy and rote learning among language learners. Moreover, Malaysian classroom teaching is greatly characterized by teacher-centered approaches in which chalk-and-talk dominates the learning and teaching context. Some English language teachers focus more on the drilling using past-year examination questions and exercise books. English language is seen as a subject, and the teaching and learning process are dominated by concentrating on language mechanics without making connections on how the language could be used in the real world. This situation calls for the innovation in English language teaching which is more practical and applies student-centered approaches. This paper therefore intends to examine the effects of task complexity on language performance using task-based instruction. Based on the empirical evidence of this study, teachers could gain more understanding on how tasks could be manipulated in learning English as a Second Language (ESL) via computer-mediated communication (CMC) to enhance language performance.

b. The theory applied in implementing the practice/ innovation to overcome the problems

Over the past decades, task-based language learning and teaching (TBLT) has received extensive attention from second language (SLA) researchers, educational practitioners, language testers and curriculum developers. TBLT has emerged since 1980s and has provided a basis for second and foreign language pedagogy (Norris, Bygate & Van den Branden, 2009). Previous studies have shown that the application of TBLT has expanded and modified according to the needs of language learners. In language teaching, task-based instruction plays an important role and has potential in pedagogic decision making, language assessment, and syllabus design (Norris, 2015). In TBLT, learners engage in meaningful and authentic use of language through tasks and the outcome is measured through tasks completion. TBLT elicits various cognitive

operations that people need to perform in order to function in real life. It allows meaningful language use as a primary mechanism and the final outcomes of an educational activity (Ellis, 2003; Van den Branden, Bygate & Norris, 2009). According to Li, Ellis and Zhu (2016), in a condition where teachers are bounded to apply structural syllabus, it is essential for teachers to design tasks that construct contexts for the communicative use of specific linguistic features. In other words, TBLT offers a great deal of opportunities in various means for teachers and learners in promoting the acquisition and learning of language.

One of the major goals in TBLT research is to identify the criteria for designing tasks. Scholars have defined tasks in various ways. For example, Ellis (2003) defined a task as a workplan in which the main emphasis is on meaning while Skehan (1998) defined tasks from a cognitive perspective. According to Skehan, a task is: (a) an activity in which meaning is primary, (b) there is some communication problem to solve, (c) there is some sort of relationship to compare real-world activities, (d) task completion has some priority, and (e) the assessment of the task is in terms of outcome (p. 95). Meanwhile, Samuda and Bygate (2008) added a holistic dimension to the definition of a task in TBLT based on their research with tasks in general education as well as in language learning,. Their definition of a task consists of five elements; a task (a) is a holistic pedagogical activity, (b) involves language use, (c) has a pragmatic, non-linguistic outcome, (d) is used in such a way as to create some challenge aimed at language development, and (e) is aimed at promoting language learning through process or product or both (p. 69). In summary, tasks can be defined as a meaning-focused language learning activity which could lead to a specific outcome at its completion. Tasks are means by which learners acquire new knowledge and learners can activate their existing knowledge of the language simultaneously. Hence, in teaching and learning environment, more attention should be devoted by language practitioners in designing tasks because there are a number of task characteristics deemed essential in designing a task. First, instructors have to ensure that meaning is the primary focus of the teaching and learning the target language. Next, the task should be related to real-world activities for learners to perform and complete. It means that the task performed reflects the way language is used in the real world. And finally, the assessment of the task is measured in terms of its specific outcomes. Hence, designing a task requires considerable amount of attention from language teachers and practitioners. This is to ensure that the learning objectives are attained at the end of the task completion.

A large body of research within the SLA discipline has provided empirical evidences of how task-based instruction could be employed to enhance language

teaching and learning (e.g., Bygate, Skehan & Swain, 2001; Ellis, 2003; Samuda & Bygate, 2008). In addition, studies have shown that language performance could be promoted when the tasks are designed at a certain degree of complexity, or also known as task complexity. Robinson (2001, 2009, 2015) identified various elements of task complexity which he argues should be the sole basis for tasks sequencing in task-based syllabus design. According to Robinson (2009), task complexity is represented as dimensions or continuums. Task complexity is a series of options which can be manipulated progressively to increase or decrease the cognitive demand of pedagogic tasks. It deals with the intrinsic, cognitive complexity of task features. Robinson in his Triadic Componential Framework (2001, 2003, 2005, 2007a, 2007b) lists two main factors influencing task complexity which are resource-directing (i.e. here-and-now, number of elements, reasoning demand and perspective taking) and resource-dispersing (i.e. planning time, prior knowledge, task structure and independency of steps) dimensions. The resource-directing dimension creates increased conceptual demands. On the other hand, the resource-dispersing dimension creates an increase in procedural demands on learners' attentional and memory resources. In general, task complexity is the inherent characteristics of a task that may affect learner cognitive ability in performing the task. As a result, the quality and quantity of language production and language performance may increase or decrease. Although there are studies on task complexity, there is little empirical evidence on how tasks can be manipulated on different dimensions of task complexity (resource-directing and resource-dispersing dimensions) and the extent to which task complexity influence language performance. As such, the current study is interested to explore how task complexity affects learners' language performance.

c. Using TBLT improves the higher education system

From the pedagogical aspect, the findings of this study offer further understandings into the use of pedagogic tasks within TBLT environment. The results demonstrated that certain degree of task complexity may lead to a higher language performance. Therefore, when teachers intend to concentrate on learners producing more linguistic features in TBLT environment, teachers may consider designing tasks by manipulating the complexity of the tasks.

In Malaysia, English language is taught and learnt in the context of ESL. Malaysian learners have learnt English language since their primary schools and for some students, they have been exposed to the language since they were a child. However, English language skill and proficiency of Malaysian learners particularly at tertiary institutions are still questionable. Some learners are facing difficulties to write and speak fluently in English language although they have gained exposure and learnt the

language in their formal education since young. In due course, there is a need to examine and analyse the potential of TBLT to be part of the English language curriculum particularly at tertiary institutions so that students would have greater opportunity to practice and learn the language in certain context. Consequently, the innovation of teaching and learning using task-based at tertiary institutions is hoped to stimulate and support Malaysian learners into reaching their language learning goals.

d. Implementation stage

Task-based instruction have been implemented and tested in one of the public technical university in Malaysia, Universiti Malaysia Pahang particularly in the teaching and learning of English language. For the purpose of the study reported, eighty-eight engineering and technical undergraduate students were selected as participants. The participants enrolled in one of the language and communication courses which is a compulsory course for all students at the university. The participants were divided into one of the four groups and instructed to write an essay for sixty minutes. The topic of the writing task was on miscommunication issues at workplace. The task complexity in this study was manipulated using two variables; causal reasoning demand and task structure as described in Cognition Hypothesis (2001, 2003, 2005, 2007a, 2007b).

The written data of each participant was measured in terms of the complexity of language production. The data was coded and analysed to examine the trend of the language produced by each group. Data analysis involved several measures which are T-unit complexity ratio (clauses per T-unit), dependent clause ratio (dependent clauses per clause), dependent clause per T-unit, sentence complexity ratio (clauses per sentence), the percentage of sophisticated words, Guiraud Index and word type ratio.

Findings show that learners produced more complex language in the condition in which task structure was not provided. In other words, the language production produced by the groups which received task structure was less complex than those produced by the groups which were not given the task structure. In this sense, the task structure may not direct learners to produce more complex language production. In addition, results also demonstrated that manipulating the variables: causal reasoning demand and task structure had a significant effect on the complexity of language production.

e. Impact of the practice/ innovation in improving the higher education system

It has been a few years since the TBLT approach is implemented in the English language classes in which the study took place. Throughout the durations, several changes have been made in designing tasks appropriate to

the need of the students' learning. For instance, the differences in task complexity as defined in Robinson's Triadic Componental Framework described earlier may work in certain part of language learning but not in others. Having this knowledge enables the language educators to adapt the tasks accordingly as to suit learning outcomes specified.

Majority of the students are engineering and technical tertiary students, and hence, their English language learning style is geared to the hands-on and communicative approach rather than lecture type and grammatical approach. The students' participations were higher when they were required to engage in the task completion. Their ability to complete the task is a success by itself.

f. Educational references that support the practice/ use of the innovation in language classes

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