

The Effect of Using Inter-Textual Warm-Up Task on Iranian B.A. Computer Science Candidates ESP Achievement

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ABSTRACT

This study investigated the Effectiveness of using inter-textual warm-up task on Iranian B.A. computer science candidates' ESP achievement. It aimed to determine whether using inter-textual warm up task may have any effect on Iranian B.A. computer science candidates' ESP achievement. To answer this question, 60 B.A level students from Azad university of Ramsar participated in the study. The subjects were randomly assigned to two groups (experimental and control, 30 in each group). The purpose was to observe any probable progress with regard to ESP achievement ability of the student from beginning toward the end of the program. The subject took a standard OPT test to demonstrate their English proficiency. A pre-test of ESP was administrated. After 5 sessions of treatment (using inter-textual warm up task) a post-test of ESP was administrated. The data were analyzed using Independent sample t-test and One-Way ANCOVA. The results showed that the ESP achievement was improved as a result of using inter-textual warm up task, and thus, the experimental group was shown to act better than control group.

Keywords: Inter-Textual, Warm up, Task, ESP (English for specific purpose)

INTRODUCTION

The primary goal of the ESP course is to teach professional communicative competence that is the ability to communicate in English according to the situation, purpose and specific roles of the participants. The ESP course builds on and extends the foundations for accurate communication. It extends the learner's grammatical, lexical and functional skills (Chomutova, 1999).

According to Riabtseva & Arestova (2006) a very important point in ESP course is the actual words to be studied, the topics to be discussed and learnt, the thematic choice of language to be activated. The next component of ESP course is Basic Grammar. Grammar is seen as an important component of communicative competence. The Basic grammar for the ESP course must be developed on the basis of statistical research and be represented by most frequent communicative grammatical structures and units which are approached functionally (sentence structure, predicate, subject, attribute, etc.) rather than traditionally/ morphologically. However, very often grammar is taught par excellence, in its full splendor, regardless of the actual aims of teaching, of the actual skills to be acquired. Paradoxically, teachers concentrate their (and the students') efforts on those complicated and cumbersome grammar structures which are hardly ever used. The difference between seeing a difficult grammatical form in the text and actually using it is often disregarded and different grammar points are taught with equal enthusiasm. Teaching communication for special purposes must be based on the previous linguistic analysis of special texts resulting in recommendations for teaching those grammar forms and structures which are the most characteristic of these texts. Another urgent problem is a good grammar book. Most textbooks repeat the same definitions which are colourless and difficult to understand because they are "universal", i.e. written regardless of the nationality of the learner. Grammar books must take into account on the one hand the peculiarities of the ESP in question, and, on the other, the characteristic features of the grammar of the student's mother tongue. And because of satisfying the real needs of the students, teaching of grammar, vocabulary, translation, etc. must be scientifically grounded and concentrate only on those items which students actually need for the purposes specified at the beginning of the university course. This is an important statement which in theory is universally

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accepted but in practice is hardly ever followed and I think use of inter-textual warm up task can remove students ESP achievement.

Theoretical Framework

Petrucci (2001) was stated, Intertextuality has a centripetal tendency because a small group of dominant associations usually constitute the hub of its discourse and are difficult to escape. *Centripetal* texts often possess iconic/ totemic references and values; they build or depend upon consensus, and are easily converted into national or 'heritage' goods. Implicit work, though, may be termed centrifugal because it tends to fling language out into fresh processes and potential meanings. Centrifugal methods are disposed to the generation of reader-oriented texts; they offer more nodes of conflict with the dominant culture, can possess unstable linguistic encodings, or plumb textual possibilities originating outside text. It includes various centrifugal trajectories through these darker regions of Intertextuality.

A Poeclectic attitude can support ways into writing which outdo the recycling or hybridization of well-known Inter-textual techniques, however sophisticated those techniques may be. An example is my on-going experimentation with new types of 'translation': not between languages, but from one discipline into another. 'Mutations' was generated by such a route. I give this example early on because of its effectiveness in illustrating, perhaps, one of the more exciting and experimental Poeclectic modes. I applied the few simple laws of genetic transmutation to the syllables and letters of a line of familiar (ie 'Explicitly'-appropriated) verse, and obtained the poem. A centrifugal tactic like this might be expected to throw up the unexpected - but it is, quite frankly, astonishing to arrive at that point in the poem which drives one irresistibly to speak in Scots (try reading it out loud!). Audiences love to hear texts unfold under the influence of a bizarre law: they follow, chuckling, the ridiculous 'mutations' all the way to that sinister punch. Whenever I perform the poem I assist the effect by asking them to imagine me fooling around with the text in Ouija-like fashion, at 2am, lit only by the faint glow of my PC.

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REVIEW OF THE LITERATURE

The E.S.P. literature, since its early beginnings has had three basic elements in focus: language, learner and teacher. The focus on language has considered the description of written scientific and technical English. The focus on learner has dealt with the: a) description of the learner's attitudes to learning: Rodgers, C., 1969, *Freedom to Learn*, Merrill – learners were seen to have different needs and interests which would have an important influence on their motivation to learn and, therefore, on the effectiveness of their learning. This lent support to the development of courses in which relevance to learners needs and interests was paramount. The standard way to achieve this was to take texts from the learner's specialist area. The relevance of the English course to their learner's needs would improve the learner's motivation and thereby, make learning better, faster and more efficient. b) designing of textbooks or course books intended for specific purposes: The structure and format of these course books has changes as time passed by to reveal the improvement of language teaching techniques, on the one hand and the scientific progress recorded by linguists .C. The focus on the teacher has been described so far in various article and studies, but our mention refers to a whole volume. Even if the bibliographical references in the foregoing are very scarce, as compared to what has been published so far, it is worthwhile pointing to the fact that E.S.P. theoretical and practical issues are still a matter of debate. In addition to that, it is to be noted that an impressive collection of English (language) textbooks on specific purposes has been produced both by native and non-native speakers of English.

Hutchinson and Waters (1987) indicated that the reasons for the emergence of all ESP programs were the demands of the electronic age, a revolution in linguistics, and the focus on learners. Learner needs for revolutionary linguistics was the main reason for the emergence of ESP programs. The enormous expansion in scientific, technical, and economic activities increased the demand for learning ESP courses. In comparison with the traditional linguists, revolutionary linguists focused on how languages were used in real situations. In their opinions, the English must change when the particular context was given. The effect of ESP development exerted increased pressure on language teaching professions. Ewer (1983) recognized that traditional English teachers

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were trained in literature and language. They tended to claim English for general purposes as their specialist discipline and displayed a hostile attitude to others, such as English for science and technology, and business and economics. Widdowson (1968) presented two interpretations of learner needs. One was goal-oriented definitions of needs and related to terminal behavior. The other was process-oriented definitions of needs and related to transitional behavior, (i.e., the means of learning). In comparison with traditional linguists, revolutionary linguists have focused on methods in which languages are used in real situations. Swales (1983) indicated that most studies of lexis and ESP were language centered, not pedagogy. Halliday, McIntosh, and Stevens (1964) mentioned that the course design addresses learner needs, such as English for civil servants, for policeman, and for officials of the law. Regardless of learner needs, ESP programs should focus on various learning strategies, schema, motivations, and interests. ESP materials play an integral role in developing a successful ESP program.

Nababan (1993) indicated that specific areas and learner types were the most significant elements for designing ESP teaching programs. ESP teaching materials should be based on a syllabus that covers all of the learner needs in their present studies and future professions. The content can be determined by a need analysis. Several researchers (Halliday, McIntosh, & Stevens, 1964) have mentioned that designing a course according to the learner requirements regarding the language seemed to be the priority for designing ESP materials. According to the suggestions by Munby (1978) for ESP materials, syllabus specification is directly derivable from prior identification of the communicative requirements of learners.

STATEMENT OF PROBLEM

One of the important issues in looking at the role of materials in ESP is that of authenticity. Authenticity is a key concept within the communicative approach. Whether the goals set are authentic with regard to students' real-world roles, and whether the tasks or activities that take place in the learning situation are authentic must be considered. We should be looking not for some abstract concept of "authenticity", but rather what we have to do is to see the text as part of teaching/learning process and the suitability of the text for learning purpose. In this light, factors such as time available, awareness of the students' interests and motivation, relevance and appropriacy will play a significant role in selecting ESP teaching materials (Widdowson, 1984). Educators are increasingly faced with the problem of how English teaching programs can most effectively meet the challenge created by industrialization and technological innovation. This has meant not only the planning of new type of courses and the preparation of materials suited to the particular language requirements of those engaged in science, but also a reexamination of English language teaching at all levels to ensure that language teaching programs meet the demands of society (Trimble, 1979). Educators have also recognized that the kinds of materials required in the field of science are different from those needed in other fields such as literature and general English. As McDonough (1984) suggests: "ESP (English for specific purposes), closely matching teaching content to learner requirements, seems to be the ideal answer in language teaching to the charge of educational irrelevance and inappropriacy." In this regard, attempts have been made to produce teaching materials to meet the language requirements of science students. However, it seems that most available materials are unsatisfactory since they focus principally on vocabulary and syntax and disregard the actual needs of the students; that is, the discourse of scientific writings (Trimble, 1985). Based on Wu (2014) ESP courses are the mainstream of current technical college English courses; however, most technical college students feel frustrated by ESP courses because of a limited vocabulary size. It is a challenge to motivate them to use correct spellings and accurate pronunciation regarding ESP vocabulary. ESP vocabulary learning difficulties include both semantic and phonetic problems. Designing useful and effective ESP courses for technical college students is necessary. Appropriate teaching materials, learning strategies and the interactions between learners and teachers are the essential components to solve learning difficulties. In this study, an investigation of learners' perceptions regarding ESP vocabulary learning was conducted to help language teachers and content teachers understand what learners require.

RESEARCH QUESTIONS

The following research questions can be formulated for the following study:

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RQ: Does using Inter-textual Warm-up Task affect on Iranian B.A level computer science candidates' ESP achievement?

HYPOTHESES

Based on the above-mentioned research questions, the hypotheses of the study are as follows:

H0: Using Inter-Textual Warm-up Task doesn't affect Iranian B.A computer science candidates' ESP achievement.

METHODOLOGY

Participants

The participants of the current study were 60 Iranian ESP computer science learners with the age range of 20 to 30 and no control of sex, who were selected randomly from among 100 trainees of Iranian adult B.A computer science candidates in the Azad University at Ramsar based on result of an OPT administered. In order to control the participants' proficiency level, an OPT was administered. In this study, the 60 participants were divided into two groups (30 in each, N=30), and were randomly assigned to the experimental group as well as control (existing-method) group. The treatment of the study consisted of 5 sessions during which treating the experimental group of the study with the 'inter-textual warm up tasks' and control group with the existing of method of textbook teaching.

Materials and Procedure

The materials of the current study consisted of the Oxford Placement Test (OPT), the pretest of vocabulary, the material for the treatment of the study, and the posttest of vocabulary.

The OPT test used in this study consisted of several sections including vocabulary, grammar and sentence recognition and writing. For each section, the participants were asked to answer the questions in the specified answer sheets. The answers were then collected and scored by the researcher. The OPT was paper and pencil in form and all items were multiple-choice except for the writing item which included a sentence completion exercise. The time allowed was 70 minutes as had been determined in the OPT test.

Material for the Pretest of the Study consisted of a test including three parts: Part One (9 Questions) of definition and vocabulary in form of multiple choice question, Part Two (9 Questions) of Replacing English terminology with its Persian equivalent, and Part Three (3 Questions) of Translating sentences the same test was administered in both the experimental and control group. The time allowed was 20 minutes. Since the study here aimed at including the degree of progress from the pretest to the posttest in the experimental group of the study in which using inter-textual warm up task pretest were being applied.

The material used for the treatment of the study included 5 lessons divided different part and 90 minutes session for each lesson from the book English for computer science at B.A level for computer science candidates of Azad University of Ramsar, written by Charles brown and Norman D. Mullen, last edit on 1990. For the experimental group the warm-up task of "Question Time" was used before the each lesson to begin. The teacher asked some questions about the topic to activate learners' prior knowledge. In the control group, the lessons were taught with no warm-up task of the kind.

The posttest of speaking consisted of the test used in the pretest of the study and resembled to it in terms of time allocation and test characteristics and was used to check the effectiveness of the treatment.

RESULTS

Descriptive Analysis of the Data

Table 4.1. Descriptive analysis of the groups of the study

	ITWT	N	Mean	Std. Deviation	Std. Error Mean
ESP Achievement	+ITWT	30	17.1667	1.26173	.23036
	-ITWT	30	14.9333	.98027	.17897

As table (4.1) indicates, the number of participants has been 30 in each groups (N experimental = 30; N control=30), and there has been no missing value (Missing Value=0.00) which means that all selected participants participated in the experiments of the study. The mean for posttest of experimental group of description inter-textual warm up task score was shown to be 17.1667 ($\bar{X}_{po\ ex} = 17.1667$), as compared to the mean for the posttest of control group of descriptions inter-textual warm up task scores which was 14.9333 ($\bar{X}_{po\ co} = 14.9333$). As for the standard deviations obtained for the experimental group, there be more variability among the posttest scores of the experimental group than the scores in the posttest of control group. This may give an image of the participants' control group posttest scores being more homogenous.

Inferential Analysis of the Data

Table 4.2. T-Test results of the study

	t-test for Equality of Means		
ESP Achievement	t	Df	Sig. (2-tailed)
Equal variances assumed	7.656	58	0.000
Equal variances not assumed	7.656	54.660	0.000

Table (4.2) indicates the t-value calculated between the posttest scores of the groups of the study. The observed t value was calculated as to be 7.656 ($t_{obs} = 7.656$), and the degree of freedom was 58 ($df = 58$). The reason why the degree of freedom here was not calculated based on the common formula of ($df = N - 1$) was that the SPSS calculated the degree of freedom while considering the variances of the participants. The level of significance was also the data for the rejection or support of the hypothesis of the study.

Table 4.3. One-Way ANCOVA for the experimental group of the study

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	28.032 ^a	1	28.032	68.642	0.000
Intercept	0.498	1	0.498	1.220	0.279
PreEX/PosEX	28.032	1	28.032	68.642	0.000
Error	11.435	28	0.408		
Total	7216.000	30			
Total	7216.000	30			

As the table (4.3) indicates, the One-Way ANCOVA between two set of pretest and posttest scores in the experimental group is 68.642 ($F_{\text{preEX/posEX}} = 68.642$) which is significantly higher than 1. Thus, there is significance difference between the pretest scores and posttest scores of the experimental group. The level of significance is 0.000 ($p = 0.000$) which is lower than 0.05.

Table 4.4. One-Way ANCOVA for the control group of the study

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	0.144 ^a	1	0.144	0.253	0.619
Intercept	28.268	1	28.268	49.917	0.000
PreCON/PosCON	0.144	1	0.144	0.253	0.619
Error	15.856	28	0.566		
Total	5896.000	30			
Corrected Total	16.000	29			

As the table (4.4) shows that the One-Way ANCOVA between the two sets of pretest and posttest scores in the control group is 0.253 ($F_{\text{preCON/posCON}} = 0.253$) which is lower than 1, and the level of significant is 0.619.

DISCUSSION

The finding of the current study indicated that using inter-textual warm up task could result in a better performance of language learners in a test of ESP achievement. These findings seem to be compatible with the findings of Iwashita, 2003 and Mackey, 1999 who believed that these pedagogic features have also made tasks effective treatments for encouraging learners to engage in goal-oriented social interaction during which they exchange information and negotiate to achieve its comprehensibility. As they do so, they modify their messages and signal their difficulties. These interaction moves enable learners (and teachers) to provide each other with modified, comprehensible input and corrective feedback, and to respond to each other with their own modified output. These linguistic manipulations shed light on cognitive processes such as noticing, attention, and awareness. Together, the modifications and processes serve as a source of data for researchers as they study language development and outcomes.

Allwright (1984) considers that warm up activities are designed to attract students' attention, to help them put aside distracting thoughts, and to get them ready to focus individually and as groups on whatever activities that follow. They will cause people to stop whatever they are doing or thinking and refocus their attention. We could say a warming up activity is a motivating starting point that will lead students to become animated to work efficiently in the language class. For the purpose of our study, it was the activity used to encourage students' involvement and permeate the development of the whole lesson, so we avoided looking at them as isolated activities. Thus, the result of the current study can have contributions towards establishing a relationship between using inter-textual warm up task and having better performance on ESP achievement.

Research to date has revealed the ways in which tasks can be designed to activate linguistic and cognitive processes that are needed for successful language learning. However, achieving learning outcomes is ultimately what students, teachers, and researchers want and deserve. Longitudinal studies of sustained task-based coursework can reveal the extent to which successful outcomes are possible in the foreign language classroom, and whether tasks can play a defining role.

Brown (2006) defines, "prior knowledge is generalized mental representations of our experience that are available to help us understand new experiences" (p.2). In the introductory session of a lesson, it is essential to activate students' existing knowledge and relate them to the new information they are going to learn (Joshi, 2006). García and Martín (2004) mention that one of the objectives of using warm up activity is to activate students' background knowledge (p.17). Teachers need to understand what students already know about the topic they are going to teach and they need to connect the topic with the students' present understanding. Teachers should start teaching from the point about which students have knowledge or they are familiar with (Cheung, 2001). Rumelhart (1980) states, "we comprehend something only when we can relate it to something we already know-only when we can relate the new experience to an existing knowledge structure" (as cited in Carrell, 1983, p.82). Cheung (1998) describes two types of background knowledge; subject knowledge and encountered knowledge. Subject knowledge is students' prior knowledge acquired from educational institutes and whatever students learn through interaction with the world is encountered knowledge.

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