How Data-Driven Learning Can Help EFL Learners Improve Their Micro Level Skills of Writing

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This study was conducted to investigate the effects of Data Driven Learning (DDL) on EFL learners' writing skills development as far as their 'Micro level skills' is concerned. 'Writing skills' in the present study are confined to the formal or structural aspects of the language, the way the linguistic elements, words, phrases, clauses, and sentences form larger units of language to transfer the ideas and concepts. The objectives of the study were to compare the learning effects of DDL method with the conventional teaching method's effects on the measures of 1) learners' declarative knowledge of the taught materials, and 2) analytic scoring of their written products.

A pretest posttest control group design was employed to collect the required data. Two groups of EFL university students attending a 'Paragraph Development' course were compared as far as their micro-level writing skills are concerned. The control group consisting of 24 male and female EFL learners received instructions through conventional method of textbook usage, teacher explanations and classroom exercises.

The experimental (DDL) group including 26 male and female EFL learners received a certain number of classroom concordance-based handouts in addition to textbook usage accompanying with shorter teacher explanations and partial class activities. In order to prepare the handouts the two learner corpora of ICLE and IrCLE (particularly compiled for this study) were used as the main sources of concordancing lines. Using the two corpora and the AntConc 3.2.4w software (Anthony 2012) and based on the 'Paragraph Development' course syllabus, and the textbook analysis conducted to determine the target linguistic elements of the course, a series of DDL-based units were prepared. These handouts were used at the beginning of each class session for 20 to 30 minutes. The rest of the time in each session was allocated to work with the same textbook as used in the control (Non-DDL) group. In addition to textbook usage, both groups were asked to do similar weekly assignments, and attended the same pretest and posttest examination sessions, on the second and final term sessions respectively. Finally, their performances on the pre- and posttest were analyzed quantitatively in order to answer the research questions:

1) Do Iranian EFL learners achieve higher improvements in their declarative writing scores after being taught through the DDL method than those who were taught through a Non- DDL method?
2) Do Iranian EFL learners achieve higher improvements in their analytic writing scores after being taught through the DDL method than those who were taught through a Non-DDL method?

Statistical analyses conducted on different parts of the pre- and post-test showed that there was a significant difference between the two groups in terms of declarative knowledge, the 'knowledge stored as facts' (Ellis, 1994, p32) or as defined by Anderson (1983) the 'knowledge that consists of factual information about the L2 that has not yet been integrated or automatized'. This declarative knowledge was tested through the first 5 parts of the pre- and post-tests in which the learners were asked to show their familiarity with linguistic structures, connectors, and phrases frequently used in developing a paragraph. The results showed that class attendance with the DDL-based materials has had more positive effects on the learners' improvement than a conventional one with typical textbook.

As for the procedural knowledge of the learners' language development, an 'Analytic Scoring' framework was used to compare the written products of the two groups. The Analytic Scoring scale, developed by Jacobs et al. (1981), was revised in a way in which different aspects of writing (Content, Organization, Vocabulary, and Language Use) were rated. 'Content' deals with the extent to which the writer is knowledgeable about the subject matter and the topic of the task. 'Organization' refers to how clearly the ideas are sequenced, supported and developed in a piece of writing. 'Vocabulary' indicates the proficiency level of the writer in word knowledge, range of idiom choice and usage as well as appropriate word form. And finally 'Language use' relates to the ability of the writer in making use of grammatical structures, agreement, tense, number and word order/function, articles, pronouns and prepositions at the sentence level. In order to find a reasonable answer to the second question appropriate statistical analyses were conducted.

The results showed that both groups have improved an overall extent of the features of this measuring scale. Since no significant difference between groups' improvements was observed in regard to the Analytic scoring as a whole (at the macro-level comparison), it can be concluded that the observed improvements in the total Analytic scores in both groups might not be attributed to any particular method of teaching, although instructional activities in both groups have been effective. Detailed analyses revealed that there was no statistically significant difference between the two groups in terms of 'Content', 'Vocabulary', and 'Organisation'. However, the DDL group demonstrated more improvement in 'Language use' indicating that the DDL-based units have given the learners an advantage in learning and applying the target grammar patterns. In other words, the DDL-based units can be seen to act as supportive instructional materials in developing the components of the 'language use' feature.

The implications of the study have been examined on the two areas of theoretical and practical. As for theoretical implications, some underlying ideas of DDL such as authenticity of materials, discovery learning, and the noticing hypothesis have gone under further scrutiny. Using corpora in language instruction, and applying concordancing in preparing language teaching materials are not the only but among the practical implications of the study.

References

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