Efficacy of Explicit Teaching of Lexicographical Skills: The Case of Sudanese English Majors

Nauman Al Amin Ali

University of Khartoum, Sudan, on secondment to College of Science & Arts, Al Baha University, Kingdom of Saudi Arabia
E-mail: alnauman888@gmail.com

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Abstract

A substantial body of research has revealed that EFL students conceive of a monolingual dictionary primarily as a repository of definitions to the almost utter neglect of the other entry components. Since existing lexicographical Sudanese literature has uncovered an even more subsidiary role for monolingual dictionaries, further investigations were needed to verify whether knowledge and skills to tap the inexhaustible resources of the dictionary can be enhanced through direct teaching regiments. Hence, the aim of the current study is to empirically gauge the efficacy of integrating these reference skills within a conventional Enhancement Course. A dictionary pre-test was administered to two homogeneous groups attending a Study Skills Course at The University of Khartoum, Sudan. The performance was measured against a slightly modified version of the test following a tailor-made structured module presented to the experimental group. The results of both groups in the pre-test were unsatisfactory and generally congruent with the findings of the original study. Yet, statistically significant differences were registered in the performance of the experimental group regarding overall and individual entry components. In view of the importance and increasing sophistication of monolingual dictionaries, this study is yet one more proof of the pedagogical usefulness of equipping students with dictionary training as part of their syllabuses. Thus, entry composites such as definitions, phonetic and grammatical information, and diatonic and diaphasic labels shall constitute an integral part of teaching strategies in the phonology, syntax, semantic, and sociolinguistic domains.

Keywords: monolingual dictionary, reference skills, entry, explicit training

1. Introduction

The advent of EFL lexicography is invariably traced to the publication of Oxford Advanced Learner’s Dictionary (1948), whose successive editions kept pace with the changing fortunes of English language teaching methodologies, and whose supremacy was challenged only in 1978 with the appearance of The Longman Dictionary of Current English. The dominance of these two dictionaries received testimony from research (Atkins, 1998; Piotrowski, 1989; Scholfield, 2002; Underhill, 1989) which established the superiority of monolingual dictionaries for intermediate and advanced EFL learners compared with their bilingual rivals. That the (monolingual) dictionary is an integral part of the language learning process is an axiom of research (Hartmann, 2005; Ezza & Saadeh, 2011; Wright, 2001) and learners usually carry dictionaries, not grammar textbooks (Baxter, 1980).

However, as Stein (1991) points out, using a dictionary is not an end in itself; its importance stemming from being the ultimate authority on the various senses of the lexemes and their grammatical, morphological, and phonological characteristics (Celce-Murcia, 2005; Nation, 2001; Walker, 2010). Equally, a dictionary is a means for learning advanced vocabulary nuances such as synonymy, polysemy, idiomacy, and collocation (Cowie, 1981), together with stylistic, temporal, and regional variations of the language (Landau, 2001; Palmer; 1995; Stein, 2002) and attaining autonomy in learning, since it is one of the chief vocabulary learning strategies (Laufer, 2000; Oxford, 1990; Schmitt, 2000).

A paradigm shift in dictionary compilation was the publication in 1987 of Collins-COBUILD English Language Dictionary, which, according to Hanks (2012), used corpus-based textual evidence and co-occurrence to determine and order the frequency of the different definitions of lexemes. The days of anecdotal labor, artificial, and constructed
derable body of research there is has focused on how students retrieve resource book. Ignorance of dictionary components is.

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The second group of researchers (Atkins, 1998; Nesi, 2002) have noted the widening gap between the increasing sophistication of learner dictionaries and little evidence there is that learners have mastered these reference skills. Chi (2003) has noted that even within the user perspective, the area of the need to bridge the gulf between lexicographer’s and students' judgments about the utilization of this resource in pedagogical tasks, citing the inconclusive or statistically insignificant effects of dictionaries on reading comprehension (Bensoussan & Weiss, 1984; Nesi & Meara, 1992) and on writing performance (East, 2007). It would seem that instructing students on the value and limitations of dictionaries, and how to identify their reference needs and develop their skills (Hartmann, 2001) is an apriori for any subsequent testing of the receptive and productive use to which learners put their monolingual dictionaries.

2. The Importance of Teaching Dictionary Skills

The above studies have uncovered a disjunction between the wealth of information contained in monolingual dictionaries and the meager effort students exert to tap this resource book. Ignorance of dictionary components is compounded by the generally low linguistic proficiency of the subjects in almost all of these studies, a dictionary is equated with a book of definitions that are selected haphazardly in the order of their appearance. Moreover, it was observed that learners widely applied the “kid rule” by treating the familiar part of the entry as the meaning equivalent and disregarding the rest of the entry (Fan, 2000; Nesi & Meara, 1994). The other grammatical, morphological, phonological or collocational properties of lexemes are much less utilized. Moreover, research (Bogaards, 1998) has shown the reluctance of learners to resort to traditional dictionary aids such as verb patterns, cross-reference and illustrative examples and the guidance provided in the front matter or the various appendices at the back of the dictionary.

Stakeholders have generally responded either by improving the dictionaries themselves or empowering learners in using them. The first approach, exemplified by Atkins (1998), is rooted in learner-centered approaches and seeks to render dictionaries as user-friendly as possible. Indeed, the notion of the ideal dictionary underpins much of user-oriented research which aims at identifying the assumptions, habits, and practices involved in using dictionaries. The early fruits of this approach include Sinclair’s (1995) inclusion of self-contained definitions, defining vocabulary and authentic examples, and its latest manifestations can be seen in the 8th Edition of Oxford Advanced Learner’s Dictionary (2010). The latest edition of OALD has subsumed some of Sinclair’s ideas such as indication of word frequency based on corpus evidence, while utilizing a compatible interface to empower learners with such features assign posts (verbal cues prefacing each sense of the entry), menus (block cues above the entry, Wordlists, Vocabulary Organizer, and The Speaking and Writing Tutor).

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efforts and learners’ rudimentary skill is largely and puzzlingly glossed over. Yet, no matter how much dictionaries evolve, this is of doubtful value unless accompanied by a parallel training on how to tap them. This already exists in the form of graded Workbooks (Stark, 1990; Underhill, 1985; Wright, 2001) or as a set of strategies to help learners navigate dictionaries (Nation, 2001; Scholfield, 1982) that can form part of the English language curriculum. But the value of such instructive materials is largely dismissed by researchers such as Hartmann (1999) who has noted the neglect of lexicography in major teaching reference books.

Moreover, Chi (2003) observes that teachers lack the expertise and training to keep up with the subtleties of the ever-evolving face of lexicography. A reflection of this is teachers’ apathy to dictionary instruction. In confirmation to my earlier research by Ali and Siddiek (2014), Muller (2012) found that while 94% of teachers expressed a conviction in the value of dictionaries, only 14% of them embraced lexicography in their General English courses. This part needs to be complemented by explicit and systematic teaching of dictionary skills in order to inculcate into the learner’s mind the concept of the dictionary as an indivisible and lifelong part of all aspects of the language and not merely confined to the classroom or academic regiments.

Indeed, the little body of research on effectiveness of direct dictionary instruction (Bishop, 2000; Carduner, 2003; Chi, 2003; Lew, 2007; Martinez, 2011) has generally been positively correlated with increased appreciation and success rates in look-up attempts. These studies have sought to integrate the reference skills within the English language modules, so as to determine the impact of a structured program on students’ appreciation of the function and macrostructure as well as their handling of the various components of the dictionary. The present article will endeavor to verify whether such deliberate instruction is of any value in enhancing the reference skills of a sample of Sudanese English majors.

3. Dictionary Research in Sudan

Though reference books traditionally enjoy a special place in collectivist societies which cherish me passive printed word (Hollday, 1994), interest in the lexical aspects of language was eclipsed in Sudanese universities by the emphasis on structural and syntactic patterns (Abdollah, 2005). While aspects pertaining to lexicography could be found in discrete studies such as collocation, suprasegmental phonology, syntactic agreement, semantic prototypes, and idioms, no attempt is made to relate these components to the dictionary. Exclusive dictionary studies are few and far between, and in view of the novelty of the field in Sudan, they are wholly devoted to uncovering the perceptions and habits in relation to the use of dictionaries.

The first of these studies is the M.A. thesis by Abdullah (1996) which was an attempt to investigate the Sudanese learners’ awareness of the information in a good monolingual learner’s dictionary. In so doing, the study first examines whether the sample of forty-five first-year students in the Faculty of Science, Sudan University for Science and Technology, ever uses a dictionary and then the type of that dictionary. The aspects of a lexical item look-up in the dictionary are taken as an index of the learner’s awareness. For the aspects of meaning, learner’s awareness of six strategies (in addition to using a dictionary) that can be employed so as to know the word meaning is discussed. But regarding the other aspects i.e. spelling, pronunciation, grammatical information, collection, stylistic overtones and fixed expressions, the study reports the subjects’ awareness of them in the dictionary. The findings show that 91% of the subjects use a dictionary, of whom 55% use bilingual dictionaries, while 45% use monolingual ones. The findings also show that the majority of the subjects are aware of the sources of information for meaning and the aspects of lexical items contained in the dictionary as well.

A larger study of dictionary was done by Ahmed (1994). He investigated the lexical learning strategies used by Sudanese learners of English. One of the strategies investigated was dictionary use which he classified as a macro-strategy. The types of information which his subjects reported they looked up in the dictionary were termed micro-strategies. The researcher randomly selected three hundred Sudanese learners of English language ranging from intermediate pupils to first-year university students. The occurrences of the use for each type of information were calculated. Although pronunciation seems to be one of the problems facing Sudanese learners of English, it came far behind meaning, word derivations, grammatical classes of words and examples demonstrating word usage. Ahmed (1994) puts this down to the fact that English language was not used for communication outside the classroom in Sudan.
I carried out a much more recent investigation of reference skills (Ali & Siddiek, 2015) which purported to uncover the overall perceptions and actual dictionary practices among a sample of 160 Sudanese English majors in four national universities. A questionnaire based on Bejoint’s (1981) classic study, with more recent modifications such as Hartmann (2005), was utilized. Results indicate that students are overwhelmingly aware of the crucial role of dictionaries in language learning. While most of the subjects are convinced of the superiority of advanced paper-based monolingual dictionaries, they almost as frequently refer to the more accessible electronic and bilingual zed dictionaries. Yet dictionary use is limited and is almost invariably associated with reading rather than productive language skills.

More significantly, in tandem with international studies, the subjects of the study employ the (monolingual) dictionary primarily as a decoding tool to locate definitions, to the almost utter neglect of such vital entry components as pronunciation, collocations, and level of usage. Finally, the subjects have manifested a marked lack of knowledge, both of ancillary dictionary matter such as appendices and abbreviations and the organization of definitions in the main dictionary entry. An accompanying analysis of teachers’ perceptions and attitudes towards dictionaries in an earlier study (Ali & Siddiek, 2014) has revealed a degree of apathy reflected in treatment of dictionaries as a peripheral and self-evident part of language skills that is the responsibility of the learner. An analysis of curricula in Sudanese universities indicates that the ignorance and self-reliance on the part of learners is largely due to the exclusion of lexicography from university syllabi and teaching practices. The latter research undertaken by the present author has drawn a bleak picture of students’ awareness and actual practice regarding their dictionaries.

Given this state of affairs, the current article is a sequel to the same exploration which forms the backdrop to investigating whether a direct teaching of reference skills will correlate with better understanding of dictionary skills. In other words, the above study will serve the same function covered by the preliminary part usually dealing with patterns of habits in studies (Chi, 2003; Lew, 2007; Prichard, 2008) devoted to the effectiveness of explicit teaching of reference skills.

**4. The Research Problem**

As we have noted, the existing Sudanese and international research on EFL students’ utilization of dictionary features has revealed serious limitations. Nor have tailor-made innovations or dictionary manuals proved significant levels of benefits in aiding students to reap the fruits of dictionaries. Consequently, in Sudan, as elsewhere, a more confrontational approach is required. These shortcomings can only be overcome through by explicit and systematic teaching of dictionary skills in order to inculcate into the learner’s mind the concept of the dictionary as an indivisible and lifelong part of all aspects of the language and not merely confined to the classroom or academic regiments. Indeed, the little body of research on effectiveness of direct dictionary instruction (Bishop, 2001; Carduner, 2003; Chi, 2003; Lew, 2007; Martinez, 2011) has generally been positively correlated with increased appreciation and success rates in look-up attempts. These studies have sought to integrate the reference skills within the English language modules, so as to determine the impact of a structured program on students’ appreciation of the function and macrostructure as well as their handling of the various components of the dictionary. This study is a sequel to my earlier study (Ali & Siddiek, 2015) which indicated how limited use Sudanese students make of their dictionaries. It will endeavor to verify whether such deliberate instruction is of any value in enhancing the reference skills of a sample of Sudanese English majors.

**5. Methodology**

**5.1 Subjects of the Study**

This empirical study is based on two groups, one of which acted as a control and the other as an experimental group. Both groups comprised 39 male and female students majoring in English and in their second-year of study at The Department of English, Faculty of Arts, University of Khartoum. Hence, it was assumed that this population was homogeneous in terms of educational and linguistic background and reflected many of the traits in my original and larger study of perceptions and attitudes towards dictionaries among Sudanese English majors. Both the control and experimental groups were attending a Course entitled “Study Skills” during the First Semester of the 2016-2017 Academic Year. The two groups sat for an initial Dictionary Skills Test. This was followed by a second stage during which only the Experimental group received dictionary instruction. Following the advice of Hartmann (1999), the regiment formed part of the final examination and so forcing students to exert their utmost effort and attention. Minor
modifications were affected to the pre-test to produce the post-treatment test which was again administered to the two groups to determine if any significant improvement has taken place in the performance of the two groups.

5.2 Questions of the Study

1. To what extent are Sudanese English majors capable of tapping the various facets of monolingual English dictionaries to meet the needs of a quasi-experimental environment?
2. Can the level of performance during such tests be significantly enhanced through direct teaching in the form of dictionary modules?

5.3 Instruments

Building on my earlier investigation, I employed a pre-test here to tap students’ knowledge of monolingual dictionary use. Consisting of ten components of the dictionary entry, the pre-test covered the areas of determination of meaning, phonological transcription and stress placement, morphological and grammatical information, spelling, culture, etymology, idiomacy, usage labels and cultural content (see Appendix A). To validate the researcher’s intuitions and to increase the reliability of the test, partial use was made out of Chi’s (2003) similar and much acclaimed Ph.D. thesis. Students in both the control and experimental groups were requested to approach this exercise using the copies of the 8th edition of Oxford Advanced Learners’ Dictionary. Due to the perceived length and complexity of the tasks, both the pre and post-treatment tests were divided into two sessions of 45 minutes each. The layout and content of the pre-treatment test were retained in the post-test, though some re-phrasing was employed in the latter to minimize the beneficial effect of prior testing. Both tests were scored out of 100 points distributed to varying degrees among the eleven monolingual dictionary entry components (excepting graphic illustrations) identified by Atkins (1985) and Stein (2002) and dealt with in my earlier survey.

5.4 Procedures

Following the pre-test, the experimental group received overt instruction regarding the use of monolingual dictionaries. The teaching focused on Oxford Advanced Learner’s Dictionary and was integrated within The Study Skills Course geared towards developing students’ ability to appreciate general texts and to write coherent and extended assignments. Hence, dictionary training was tailored to the local context and the pedagogical purposes of the Course Dictionary training modules spanned fifteen one-hour sessions (excluding the assignments students were required to undertake in their free time) over a period of five weeks within the normal classroom schedule using the Workbook by Tono (1989) and Yorkey (1992) as well as supplementary online materials. The aim was to weld theoretical aspects to their incarnation within the monolingual dictionary. The modules covered the following topics:

1. The typology and differences among dictionaries.
2. The macro-structure of pedagogical dictionaries; the notion of the lexeme.
3. Dictionary conventions and abbreviations.
4. Phonological symbols within dictionaries.
5. Exercises on sound-word conversion.
6. The supra-segmental aspects: syllabification and levels of stress.
7. Deducing word-class and suffixation from the dictionary entry.
8. Inferring grammatical constraints on lexemes; verb patterns and inflections.
9. The order of definitions and illustrative examples. Indication of culture in a dictionary.
10. Location of appropriate meaning and the role of co-text.
11. Lexical constrains: collocations and idioms.
12. Indication of non-British spelling, etymology, and pronunciation within the dictionary.
13. Levels of formality and their representation in the dictionary.
14. General information in the dictionary.
15. Revision.
The treatment in the form of the above dictionary teaching was confined to the experimental group and upon completion of the training sessions, both groups sat for the post-test which was only formally different from the pre-test. As in the pre-test, *Oxford Advanced Learner’s Dictionary* was the primary aid in solving the exercise. Moreover, as in the pre-test, there was a double testing procedure for the test and the scoring scheme was the same for the two tests. Finally, while statistical analysis was carried out on both groups, greater sophistication regarding the mean and significance level achieved for each component was applied only to the experimental group.

6. Findings

The overall mean scores for the control and experimental groups are displayed in Table 1 below and are schematized in Figure 1. Depending on their total points, the ten subsets of the dictionary entry are assessed against a perfect mark of 100 and are deduced against that criterion for the sake of convenience. The mean pre-treatment cumulative score for the control group was 43.59 compared to that of 41.71 for their experimental peers, thus lending testimony to the homogeneity of the study samples. In a rather striking initial finding, it is the control groups which has a slight, though statistically inconsequential, advantage of barely two points or merely 4.4 percentage. Varying degrees of improvement were attained for both groups. The improvement threshold for the control group was 4.66 points or 10.6 percentage.

It might be claimed that this modest change constitutes a moderate statistical difference ($t = -2.57, p = 0.016$), but it is dwarfed by the figures in the experimental group. In the latter, the mean pre-treatment score was 41.73 compared to an average score of 79.13 marks out of 100 for the post-treatment design. This shift is equivalent to 37.4 points. The substantial nature of the improvement is reflected in both the percentage mean of 89.6 and the observable statistical difference ($t = -4.84, p = 0.000$). Equally, to verify the existence of a statistical difference between the overall average score between the control and experimental groups, a separate $t$-test was undertaken concerning the observable ultimate improvement in the two groups by calculating the deduced change for individual measures of pre-treatment and post-treatment scores. A yielded value of 6.94 for the $t$-test, $p < 0.001$ testifies to the existence of a substantial statistically significant difference between the behavior of the two groups, premised on the change affected by overt dictionary instruction that the experimental group has had the privilege of receiving.

<table>
<thead>
<tr>
<th>Sample</th>
<th>N.</th>
<th>Pre-test</th>
<th>Post-test</th>
<th>T-Test</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control group</td>
<td>39</td>
<td>43.59</td>
<td>48.25</td>
<td>-2.57</td>
<td>0.016</td>
</tr>
<tr>
<td>Experimental group</td>
<td>39</td>
<td>41.73</td>
<td>79.13</td>
<td>-4.84</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Table 1. Mean scores of the control and experimental groups

Figure 1. Mean pre-test and post test scores for control and experimental groups

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Once the efficacy of explicit dictionary tuition is confirmed at the global level of the mean scores for the control and experimental groups, it is pertinent to investigate how this positive change is reflected in the ten entry components of the study. Understandably, our focus in Table 2 will be on the detailed scores of the experimental rather than the control group. The data is further elucidated through graphic representation in the form of bar charts embodying percentage rates of improvement as they relate to the dictionary sub-skills.

Table 2. Improvement by sub-skill for the experimental group

<table>
<thead>
<tr>
<th>N.</th>
<th>Dictionary components</th>
<th>Pre-test</th>
<th>Post-test</th>
<th>T-Test</th>
<th>P.value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Maximum.</td>
<td>Mean</td>
<td>Maximum.</td>
<td>Mean</td>
</tr>
<tr>
<td>1</td>
<td>Pronunciation symbols</td>
<td>20</td>
<td>6.77</td>
<td>20</td>
<td>14.46</td>
</tr>
<tr>
<td>2</td>
<td>Grammatical information</td>
<td>20</td>
<td>9.15</td>
<td>20</td>
<td>16.83</td>
</tr>
<tr>
<td>3</td>
<td>Alphabet ordering</td>
<td>11</td>
<td>7.33</td>
<td>11</td>
<td>10.41</td>
</tr>
<tr>
<td>4</td>
<td>Definition determination</td>
<td>10</td>
<td>2.79</td>
<td>10</td>
<td>6.78</td>
</tr>
<tr>
<td>5</td>
<td>Idioms</td>
<td>8</td>
<td>2.64</td>
<td>8</td>
<td>5.96</td>
</tr>
<tr>
<td>6</td>
<td>Diatonic information</td>
<td>8</td>
<td>3.48</td>
<td>8</td>
<td>6.65</td>
</tr>
<tr>
<td>7</td>
<td>Diaphasic information</td>
<td>8</td>
<td>3.21</td>
<td>8</td>
<td>5.18</td>
</tr>
<tr>
<td>8</td>
<td>Spelling</td>
<td>5</td>
<td>2.74</td>
<td>5</td>
<td>4.29</td>
</tr>
<tr>
<td>9</td>
<td>Language and culture</td>
<td>5</td>
<td>2.10</td>
<td>5</td>
<td>3.92</td>
</tr>
<tr>
<td>10</td>
<td>Etymology of lexemes</td>
<td>5</td>
<td>1.98</td>
<td>5</td>
<td>4.55</td>
</tr>
</tbody>
</table>

Figure 2. Percentage of improvement for individual dictionary skills in the experimental group
The presentation of the comparative figures of pre-treatment and post-treatment means for the ten dictionary sub-skills reveals a meaningful positive amelioration. This consistent enhancement is reflected in the t-tests and p.value of scores. To take instances, the overall mean scores on the part of the test assigned to interpretation of phonetic information are changed from the dismal performance 6.77 out of a total of 20 to the much more reasonable mean of 14.46. This embodies 114 points in percentage terms and is further corroborated by the figure of 8.46 of the t-test which is equivalent to 0.00 significance value of the p. value. Taking the more daunting task of matching the senses of lexemes to their appropriate co-textual definition, it is covered by ten points in the test. The success rate is 2.79 which is wide below the pass margin. Once more, overt dictionary training is proved as a worthwhile endeavor. The overall mean scores for this part are 6.78, which exceeds the average mark, as indicated by the t-test value of 3.62 (p=0.00) and as replicated by the substantial 143 percentage of improvement. Other definition-related features include cultural content and idiomatic expression, though the range of the sought information is far more restricted.

A glimpse at the figures would show both students’ poor initial performance and the ameliorating effect of extended training, as clarified by the 126 and 87 percentage of change respectively. Even transparent information provided at the outset of the definition such as indication of plurals or conjugation of verbs or dialectical variations have puzzled the students (9.15 out of 20 and 3.21 out of 10 for the pre-treatment as compared for the enhanced performance of 16.83 and 5.18 respectively). Indeed, students’ difficulties extend to the very question of location of lexemes (i.e. alphabetization system). Inexplicably enough, students’ performance widely falls short of the perfect mark (7.33 out of 11) and explicit training is effectual in rectifying students’ behavior so much so that their scores are strengthened by a substantial rate of 42% to culminate in f 10.41 out of 11, which approximates the perfect scores for this regiment.

7. Discussion

This study is an extension of an earlier investigation by Ali and Siddiek (2015) which delved into the perceptions and practices of Sudanese English majors regarding their use of dictionaries. Many of the findings borne out by that study have been corroborated here. The high esteem in which dictionaries are held is consistent with Sudanese conservationist tradition, but is counteracted by the restrictive perception of the dictionary as a receptacle of senses of lexemes. The almost utter exclusion of other entry components such as pronunciation, collocation, etymology and regional or stylistic variations, for example, is a corollary of that view and can be strongly correlated with the poor pre-treatment scores (including the control group whose details are not included). This fact only too clearly proves how misguided the sense of self-sufficiency in dictionary purchase and use by these students.

More significantly, this narrow conception of the role of the dictionary is reflected in both the scores of the individual parts of the test and in students’ overall mastery of the sound, sociolinguistic and lexical levels of English. As indicated by an even earlier study into the attitudes of teachers of General English concerning the place of lexicography (Ali & Siddiek, 2014), the latter study revealed an overwhelmingly passive attitude towards instilling a love of dictionaries in students’ hearts as an accompaniment of language learning, nor have the majority of these teachers strived to integrate dictionary use into decoding and encoding activities within the classroom.

A third possible explanation for the unsatisfactory results in the pre-treatment test is the syllabuses taught in Sudanese universities. In their analysis of the courses taught at the same universities in which the students’ questionnaire was distributed (and with which the present sample is homogeneous), Ali and Siddiek (2014) have unveiled a gross neglect of vocabulary, nor is lexicography assigned a separate course in any of these universities. Even courses with potential lexicographical components such as Semantics, Lexical Studies or Study Skills are left to the interpretation of teachers who are only too often not abreast with recent developments in language acquisition which stress the crucial part of the lexis in the four skills and the impetus given to lexicography as a manifestation of the traditional syntagmatic linguistic relations and the more recent corpus-driven paradigmatic ones.

The most basic aspect of dictionary macro-structure is the alphabetical organization, which is covered in the lexeme-ordering question. Considering the nature of this seemingly mechanical and mnemonical task, it is surprising that the students should fall short of the perfect mark (a success rate of roughly two thirds compared the incomprehensibly low rate of 39.7% in Chi (2003) on the same question). However, the difficulty could be explained through either memory lapses regarding alphabetization or the organization of the headwords dictated by the editors’ discretion. Hence, both foxhole and foxtrot are given full treatment, fox terrier is perfunctorily dealt with and no pronunciation is indicated. Also, while four-stroke is subsumed under the headword four (though assigned an unmistakable position),
The question of organizing lexemes is a basic issue which is also related to locating every headword in the test. From the scores on the alphabetization question, it seems that the students generally have no problems in identifying the right entry. Indeed, our students could easily appreciate the conventions of the 8th edition of OALD in nestling together all inflectional and morphological forms deriving from the basic semantic polysemous (e.g. square as a noun, adjective and verbs as semantic extensions) as subentries. On the same footing, cases of semantic non-correspondence, represented by homonymy (e.g. the different senses of spring) are grouped together. Considering space constraints, separate entries are only allocated to single, compound, and hyphenated lexemes. A yet one related aspect to alphabetization is spelling.

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All the material in an EFL dictionary is of no value if the users are unable to locate the headword. The problem is how to find the spelling (s) of the lexical items if one has no idea where to begin the search. Thus, the first task of the dictionary editor is to decide on the spelling of the entry words. The terms "spelling" and "orthography" commonly refer to the sequence of letters within words (Battenburg, 1992, p.29). It is the reference in Western lexicography to use the infinitive form for the main entry (Jackson, 1988). Usually a modern dictionary presents no difficulty as usage has fixed a single spelling.

For Landau (2001, p.78), the entry indicates the normal or preferred spelling, the usual printed form of the lexical unit (whether capitalized or whether considered foreign and italicized or naturalized). Yet there are variant forms such as "medieval" and "mediaeval", "fetal" and "foetal", "inquire" and "enquire", "judgement" and "judgment." Jackson (1988) adds that despite these distinctions, spelling is usually fixed for a particular national variety of English (British English and the American variant form) given as the main entry. Our question devoted to spelling simply required students to record instances of alternative British spelling in OALD. This sets it apart from both basic infinite form (discussed in derivational morphology below) and the divergences in cases of distinct American orthography (covered by the question on diatonic variations). The initial moderate performance of 54.8% success rate is a testimony to students’ ignorance of spelling variations rather than the difficulty of the task. Indeed, upon repetition of the exercise in the post-test, students easily attained a success percentage of 95.8%. But the question remains here, as elsewhere, regarding entry components, of equipping students with the knowledge about the potentials of the dictionary.

A general purpose of EFL dictionary is to describe the vocabulary stock of a language. This consists of primary and secondary elements. Primary elements, according to Stein (2002), are linguistic signs in the Saussurean sense of the term which cannot be analyzed further into smaller linguistic signs but which serve as a basis for the secondary items. They typically occur as either free morphemes. Bound morphemes are generally regarded as being either inflectional or derivational in function. The former is part of lexicology, while the latter belongs to the field of word-formation. Derivation includes the linguistic elements used in the processes of word-formation and can include suffixes and prefixes.

There are traditionally nine parts of speech: verbs, nouns, adverbs, adjectives, pronouns, conjunctions, prepositions, interjections, and articles. EFL dictionaries also provide morphological information about a word, for example, whether it is a noun, whether it is a verb, noun, adjective or having multiple word classes. Derivational morphology is covered by two sub-questions. The first of these is the straightforward, namely the identification of the part of speech of the lexeme (impugn being a verb as opposed to insular as being an adjective or deferral as a noun, for example). The second sub-question is the rather complex and concerns noun-formation using the dictionary (ubiquity from the adjectival ubiquitous in contrast to reverence as deriving from the verb revere, for instance).

It is conceivable that a good portion of the initial 46% success percentage in the pre-treatment test and of the convincing 85% in the post-test can be traced to these two parts. Yet, grammatical information extend beyond this. Indeed, Stein (2002) argues that modern EFL dictionaries became more “grammaticalized.” So EFL dictionaries provide considerable treatment of it and information about verb transitivity or intransitivity or whether the lexeme is followed by a countable or mass noun (destruction as a singular noun). Other syntactic selectional restrictions include the obligatory passivization of verbs (e.g. befriend) and sequencing of nouns after a certain adjective and the famous extensive verb patterns first introduced by Hornby (1975) and exemplified in this text by the verb replenish. The initial
poor performance on these complex codes entailed close attention to the memorization of dictionary abbreviations and integration of many of these categories within the preliminary Course on Syntax the students were being taught. This socio-stylistic aspect of English vocabulary is not only difficult to acquire but also too elusive to describe adequately (Stein, 2002). EFL learners have to acquire a good command of the attitudinal differences of language needs. By choosing the wrong word, the EFL learner may not only give offence but be misjudged as to his or her own education, social background, and communicative intentions. The better and near native-like his/her command, the more severe the sanctions for stylistic blunders. The different stylistic levels presuppose, according to Battenburg (1992), a reference point as labels such as "formal", "informal," depending on discourse situation and relation between discourse partners. The possible situations are endless and can include being in a doctor’s office, within a family environment, at a restaurant, among peers or with close friends, and hence usage level will accordingly be different.

Landau (2001) sums up the most common kinds of usage information normally given by EFL dictionaries:

1. Stylistic / attitudinal: formal, informal, colloquial, standard, literary, poetic, humorous, etc.
2. Temporality: archaic, obsolete.
3. Regional or geographical: U.S., British, Canadian, etc.
4. Technical or specialized register: astronomy, chemistry, physics.

Of these variational parameters, the register distinctions such as whether the word falls within the domain of astronomy, physiology, philosophy, Geology (angina pectoris, precipitation, velocity and alluvium, to take a few examples based on my knowledge of some fields), was treated as surpassing students’ horizons and was excluded from the test. On the other hand, the divergence of the American dialect in terms of lexicon, spelling, and phonology compared to British English (the unmarked usage in OALD) is allotted a diatonic part of the test, but is discussed only under the respective headings. Another section deals with the nuances of social meaning in Landau’s (ibid) taxonomy was our choice. Students were required to choose between the two options appropriate to the context, but, unlike Chi’s (2003) similar exercise, the subjects were exempted from providing reason for their decision.

As in the pre-treatment test, the follow-up assignment included a question on conception of formality (represented by commence as more appropriate to official meetings than kicked off). The opposite argument could be made for choosing the colloquial say again in a friendly conversation rather than the distant reiterate. Euphemistic language is embodied by pass away as opposed to the direct die. Another question deals with connotative meaning in the sense that slim is desirably thin in a sense that skinny is not. Socio-linguistic stratification is wide-ranging and includes taboos, generational differences, and political overtones (e.g. shades of the word terrorism). It was deemed that these four questions give an insight into students’ understanding. Like many other dictionary aspects, the results of the post-test have indicated a positive transformation in students; appreciation of social dialectology following an integrated content course.

We will next concentrate on students’ performance regarding another aspect of the dictionary entry, namely encrypting and decoding of phonetic symbols. This part has the worst performance with only a third of correct answers in the pre-treatment test. Yet, it is pronunciation that is the sole most distinct marker of the non-native learner, and since it is an instantaneous interactive act, it has an urgency not found in vocabulary where contextual guessing can come to aid. The neglect of pronunciation is blamed by Derwing (2009) on the rise of the communicative approach emphasizing fluent communication in authentic contexts, with pronunciation labeled among the discredited accuracy features.

A parallel feature of the communicative approach is, according to Mompean (2015), is the top-bottom approach which highlighted prosodic aspects such as rhythm, sentence stress, and intonation at the expense of segmental phonology. Moreover, with the rise of global English, the non-native teacher has increasingly been envisaged as a sufficient model providing intelligibility rather than an interlingual agent with deeply-grained pronunciation errors. But the fact remains that English is notoriously difficult to pronounce. This stems from the fact that there is no simple symbol-sound correspondence, that is, the letter of the alphabet does not represent the same sound all the time, nor does a specific sound find its representation in one letter (Celeca-Murcia, 2005).
Attempts (Gimson, 1989) have been made to resolve this using conventional symbols. According to Mompean (2015), phonetic notation refers to the use of special written symbols to refer to the sounds or sound features of one or several languages. Related to this, is phonetic transcription which refers to recording words and utterances using phonetic notation based on Received Pronunciation and are used as models both in EFL dictionaries and variant American pronunciation. Using differentiating values of vowel and consonant phoneme, these broad notations can capture the exact pronunciation of words at the segmental level and includes the basic suprasegmental aspects such as syllabification and stress placement, using a small superscript immediately before the stressed syllable. The de-emphasis on pronunciation characteristic of the communicative approach is even more marked within dictionary research and Chi (2003) could hardly name a study devoted to how students interpret the phonetic transcription in a learner’s dictionary.

The exceptionally poor performance in our samples on this area is yet one more proof of the difficulty noted by researchers (Battenburg, 1992; Gilbert, 2010) in interpretation of the transcription symbols. Regarding Sudan, while these sound patterns receive a great deal of attention in EFL classrooms and renowned pedagogical textbooks such as Roach (2005), researchers such as Ezza and Saadeh (2011) criticize this approach since it provides students with an excess of technical jargon about acoustic rules, sound segmentations, and features and far too little on actual pronunciation and transcription practice. I concur with their views that phonetic courses should be centered on pedagogical dictionaries, and I believe that since pronunciation is a recurrent problem bedeviling English learning, students must be trained in the phonetic transcription and nuances of stress placement and shift. Furnished with these tools, they will be able to pronounce an infinite number of words in the lexicon with reasonable degree of accuracy. Though digital pronunciation aids are increasingly available, learner autonomy cannot be attained with these tools, which condemns learners into becoming passive parrots. On the other hand, the positive results following the dictionary module are encouraging indicators of the possibility of demystifying and reducing these phonetic intricacies to bare practical essentials.

Another aspect of the definition concerns the cultural meanings and allusions of words. The cultural component of the language is increasingly seen as an inextricable part of the learning process in our globalized world. Wei (2005) and Tomalin (2008) goes so far as to term it the fifth language skill. It is doubtful whether dictionaries are normally associated with extra-linguistic content, but it is important to disseminate such encyclopedic coverage in EFL dictionaries. Care was taken in our test to include only words with cultural resonance such as Rambo and Robin Hood, in the hope that students have come across these allusions in popular culture.

It was equally hoped that the academic specialization will have familiarized students with the famous literary character of Scrooge and the term Cockney accent. However, students were not expected to have that prior knowledge, but, rather, to be capable of locating the cultural reference and appreciate its significance to answer the question. The task proved rather challenge, as evidenced by the 42% initial success rate. Only after instructing students on the existence and merits of such universal cultural symbols have the scores reached the satisfactory levels of 78%.

Indirectly related to the question of culture is the etymology of words. Makiel (2000) believes that etymology proper best applies to the objective elucidation of word origin. Such information may range from a single word indicating a historical linguistic form to a lengthy paragraph tracing the origin of a word. Etymological information normally includes the source language or language family, date or period of entry in English, semantic development, and other English words derived from the base. However, only large desk dictionaries such as Oxford English Dictionary can cover all of these aspects. EFL dictionaries, on the other hand, are concerned with the indication of words borrowed into English from other languages as loanwords or cognates.

Indeed, English has extensively naturalized words from Greek, Latin, French, German, Arabic, among other languages and is still doing so. Our test included five words: vis-a-vis (French); spuntik (Russian); Veld (Afrikaans), per se (Latin), and nada (Spanish). In view of the importance of indication of the origins of words to a familiarity with English native lexicon, the students performed disappointingly (a mere 39% success rate). Overt instruction into the alignment of etymological information within the definition resulted in the most palpable improvement in the whole Course to a rate of over 90%.

A broader lexicographical task involves the selection of the appropriate dictionary definition to match the lexeme the meat of the lexicographical profession, according to Kiefer (1984). This component receives the same significance
from the statistics in Ali and Siddiek’s (2015) study where meanings of words were by far the most sought-after information. However, this begs the question of whether such searches have high success rates. Lexemes have figurative and literal meanings. Determination of the metaphorical meaning is covered by a question on idioms. Idioms are fossilized opaque expressions which have a total meaning different from their constituents (Boer, 2000).

Indeed, the infinite number of expressions such as raining cats and dogs ensures the fluency of native speakers who have a repository of such prefabricated lexical chunks (Lewis, 2006) as opposed to non-native speakers who lack what Fow (1998) has termed figurative competence. Due to their productiveness and role in communication, OALD, among others, has increasingly taken care to include the idiomatic combinatorial nature of words. In fact, idioms are given a prominent place under that heading within the definition, though the question remains: under which constituent to include the string. Conventionally, idioms are subsumed under the most important or idiomatic word. Once students understand the conceptual nature of these expression and have the ability to find them, they should provide no problems, as indicated by the reasonably high performance in the post-test.

Performance on literal rendition of meaning is unsatisfactory and even worse than that on pronunciation (a success rate of 27.9%), while the effects of dictionary practice only score moderate success percentages of 67.8%. This part was inspired by a long tradition of studies investigating the effect of dictionary use on reading comprehension and vocabulary acquisition. However, an important divergence was that I could not utilize a whole text due to time constraints of the test as well as the fact that students were required to give the meaning of one underlined word, unlike previous studies where count was made of all successful and unsuccessful searches. Yet, in having the meaning of the sentence hinge on one lexical item, our method favors the use of dictionaries more than previous studies which dealt with reading comprehension in all its textual and schematic dimensions. All the five words were deemed too difficult for contextual guessing for our pre-intermediate Second-year students (e.g. the use of still as an adverbial contrast; the polysemous use of refuse as indication of waste left over by humans; the metaphorical sense of play and finally the deceptively simple meanings of pretty as an intensifying adverb, while the co-text is again meant to lead the student to the familiar nominal meaning of novel as a book of fiction, rather than the intended adjectival meaning of newness).

The poor performance in the pre-treatment test by both groups confirms the study by Benousson and Weiss (1984) where the one group having the aid of the dictionary did not significantly outstrip their non-dictionary counterparts. To account for this, the above authors propose a number of explanations, the most important of which is students’ incompetence in using their dictionaries, since location of the appropriate definition is a complex and multi-faceted process. This task entails, according to Luppescu and Day (1993), looking for a suitable headword, comprehending the entry, locating the appropriate part of the definition, connecting the right sense to the part of the definition, and putting the word within the context of difficult or unknown word.

All these steps require individual skills, such as recognizing word classes and inflected forms, alphabetizing, and understanding the symbols and lay-out conventions of the dictionary and checking hypotheses against the co-textual clues. In fact, two major difficulties accounted for most of the errors in our test. Given that four out of the five words had more than one part of speech, the success of the consultation depended on correctly deciding on these word classes using the syntactic rules of English. When successful, the crucial challenge is of which definition to choose. The majority of the students were content with the first definition in their inability to use determination vocabulary learning strategies, in the belief it is the most important and glossing over all the rest (the kid rule evident in the studies by Harvey and Yuill (1997) and Wingate (2004)).

That the Sudanese students have so egregiously failed in their uninstructed dictionary consultation is symptomatic of deficient reference skills. Some studies (Knight, 1994; Luppescu & Day, 1997) have indicated the positive role of dictionaries in vocabulary tests and so contradicting the results of the original research. But investigations comparing free and guided dictionary consultation is more relevant to our purpose here. There is the study by Tono (1998) where, like our case, two groups employing the dictionary performed differently. The group receiving prior dictionary training scoring significantly higher than the unaided one. The present improvement rate from 27.9% to 67.8% can be compared to an almost identical study by Nesi and Haill (2002) where 89 international students at a British university were asked to write down the exact equivalents of five unknown words within sentences after receiving dictionary instruction. They had look-up success rates of 83%, which is a slightly better than a similar experiment by Gonzalez (1999) where 79% of aided searches were successful. It is a fact that the improvement ratio in the Sudanese study is
less than either of these but it is an undeniably positive indicator of the fruitfulness of intervention in helping students utilize their monolingual dictionaries.

8. Conclusion

There is an extensive literature world-wide on the attitudes EFL students hold concerning their monolingual dictionaries (Battenburg, 1992; Bejoint, 1981; Hartmann, 2005). There is evidence to believe that the esteem these students have for their dictionaries is not matched by adequate referencing skills to utilize the various aspects of lexicographical information to accomplish their pedagogical tasks. Hence, there is already a shift in research (Chi, 2003; Lew; 2007; Martinez, 2011) in the direction of bridging this gap through bringing the fruits of an ever aloof lexicographical industry to ordinary students. The basis of this study is an earlier investigation into the perceptions of Sudanese English majors with view to their dictionaries. That endeavor is complemented by this experimental two-stage design to analyze the effects of overt teaching on acquisition of dictionary skills among two groups. A comparison of the results of the pre-treatment and post-treatment tests unequivocally show the beneficial effects of explicit teaching of monolingual dictionary skills in terms of increased overall scores and performance on each of the ten dictionary entry components.

It is evident that without such instruction, even this group of advanced students cannot cope with these dictionaries. This argument is in tandem with the convictions of the renowned lexicographer Hartmann (1991, p.9) when he writes "dictionary reference is a complicated business.” Hence, it is not enough merely to recommend monolingual dictionaries to students; they need to be taught explicitly how to use them. Skills in mobilizing dictionaries is still an area that requires further exploitation. It should be emphasized that although dictionary skills are an urgency at the tertiary level, there is no reason why they are not taught in Secondary Schools to meet the needs of students at different phases of L2 learning, on the premise borne out by some researchers that dictionary competence does not hinge on language ability (Atkins, 1985; Stein, 2002).

The dictionary is unquestionably one of the most valuable sources of input for learning aspects of English and the teaching of such a resource is an imperative. The primary objective of such teaching is to implant into the minds of the students the idea of word knowledge. As Nation (2001) proposes, knowing a word requires knowing not merely the denotative dimension of that word as suggested by structural and transformational theorists, but more its multiple characteristics such as its pronunciation, spelling, syntactic value, its stylistic register, cultural associations and its collocations. Consequently, the view of meaning of the word held by students in the absence of any dictionary instruction should be discarded and replaced by the conception that words are not isolated units of language but fit into many interlocking systems. Equally, each of these levels is enriched through the courses students receive and that the monolingual dictionary has a central place in the practical appreciation of all aspects of language components and skills. Indeed, evoking its original Latin etymology (dictionarium, a book of words), knowledge of a dictionary is knowledge about words; it is the language in its entirety. The question of dictionary teaching is implicated with larger factors not dealt with here for space constraints. There is the question of teachers’ convictions and training as well as materials designed to demystify dictionaries. On the other hand, the subsidiary position of lexicography within English curricula is inextricably bound with beliefs about the order of importance of language skills and the nature of language acquisition itself. These and related issues can be pursued at length in future studies.

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Appendix A

Dictionary Skills Post Test

Part One (Time: 45 minutes)

Instruction: Using your copy of Oxford Advanced Learners’ Dictionary, answer the following questions.

Q1: 1. Write the words represented by the following English sounds.
   1. /ɔlto/ ……………………………………………………………….
   2. /klauʒə/ …………………………………………………………….
   3. /θʌrənis/ ………………………………………………………….
   4. /dʌmwaːtə/ ………………………………………………………….
   5. /z: nɪŋz/ …………………………………………………………

2. Using the phonetic symbols, syllable and stress marks, transcribe the following words.
   1. Unity …………………………………………………………………
   2. Analyze ……………………………………………………………..
   3. Strategic ……………………………………………………………
   4. Exhibition …………………………………………………………
   5. Distribute …………………………………………………………

Q2: 1. What are the parts of speech for the following nouns?
   1. espouse ………………………………………………………….
   2. deferral ………………………………………………………….
   3. inherent …………………………………………………………
   4. impugn …………………………………………………………
   5. insular …………………………………………………………

2. What are the noun forms for the following words?
   1. Submit …………………………………………………………….
   2. Acquit …………………………………………………………….
   3. estranged ………………………………………………………
   4. revere ……………………………………………………………
   5. ubiquitous ……………………………………………………..

3. Underline the grammatical choice which is more appropriate in the following sentences:
   1. The fire caused mass destructions of many buildings.
      The fire caused mass destruction of many buildings.
   2. He has a strong stance on the war.
He has a strong stance on his workmates.
3. We replenished our friends with hamburger sandwiches.
We replenished our supplies with more hamburgers.
4. He befriended the head of the company.
He was befriended by the head of the company.
5. I have no inklings of what he wants.
I have no inkling of what he wants.

Q3: Arrange the following words according to alphabetical order (use numbers).

Q4: What are the appropriate meaning of the underlined words as they are used in the following sentences?
1. Sudan has many resources. Still, it is an underdeveloped

2. Our refuse mainly consists of discarded personal belongings.

3. She was pretty close to winning the beauty show.

4. The fire-fighters played the hose on the flames.

5. Reading printed stories was novel practice to people in the late 18th century.
Dictionary Skills Post Test
Part Two (Time: 45 minutes)

Instruction: Using your copy of Oxford Advanced Learners’ Dictionary, answer the following questions.

Q1: What is the meaning of the following idioms?
1. The officer said that the accused man was still at large.
2. The western flank of the army bore the brunt of the attack.
3. He did not take heed of our advice and married the hated woman.
4. It was strange to see it raining cats and dogs in Dongola.
5. The two compositions are, to all intents and purposes, identical as I see.

Q2: Decide which word of the pair is more suitable depending on the variety of English used.
1. An apartment/flat is to let in London with reasonable rent.
2. Trump told reporters that he is having a tight daily /ˈʃedjuːl/ , /ˈskedʒuːl/.
3. The New York subway/underground is the largest in the world.
4. A Whitehouse spokesman man expressed anger at North Korea for launching medium /ˈmɪsəl/ , /ˌmɪsl/ into space.

Q3: Circle the word in the pair that is more appropriate in each sentence.
1. When Peter saw the boss, he was said that he was sorry the boss’s father died/passed away.
2. The Director commenced/kicked off the meeting by announcing new measures to enhance productivity.
3. During this age many women try hard to be slim/thin.
4. William was chatting away with John in a café. John couldn’t hear and asked him to repeat/ reiterate a funny joke.

Q4: What variant spelling does each of the following lexemes have?
1. banister……………………………………………………………..
2. Inquire ………………………………………………………………
3. laargesse ………………………………………………………………
4. amoeba ………………………………………………………………
5. sizeable……………………………………………………………..

Q5: Answer the following questions.
1. Mohammed wants to be like Rambo when he grows up. What kind of person does Mohammed want to be?

2. He is as bad as Scrooge. No one wants to work for him. Why did people not like him?

3. Even now some people act as the Robin Hoods of society. How do these people act?

4. At an early age Elizabeth became the Lolita of the town. What kind of woman was Elizabeth like?

5. I could understand Mr. Walker perfectly though he is a Cockney. Where did Mr. Walker live?

Q6: From which languages do the following words come from?

- per se
- vis-a-avis
- sputnik
- veld
- nada