

**Öğretim Yönetim Sisteminde Çevrimiçi Okumayla İngilizce
Deyim Öğrenimi: Etimolojik Açıklamalarla Görsel Desteğin
Karşılaştırılması**

**Learning English Idioms through Reading in an LMS: Etymological
Notes versus Pictorial Support¹**

DOI= [10.17556/jef.88778](https://doi.org/10.17556/jef.88778)

Arif BAKLA*, Ahmet ÇEKİÇ**, Hakan DEMİRÖZ***

Özet

Bu çalışma tanım + etimolojik açıklamalara karşın tanım + görsel desteğin İngilizcede deyim öğrenimine etkisini karşılaştırmayı amaçlamaktadır. Anadili Türkçe olan 121 İngiliz dili öğrencisi iki farklı çevrimiçi derse kaydedilmiştir. Uygulama öncesi verilen sözcük bilgisi ölçeği, her iki gruptaki öğrencilerin deyimlerin neredeyse tamamını bilmediğini ortaya çıkarmıştır. Her iki gruptaki öğrenciler 18 deyim içeren 17 parça okumuşlardır. Birinci deney grubunda katılımcılara köprülenmiş açıklama şeklinde deyim tanımıyla birlikte etimolojik bilgi verilirken, ikinci deney grubunda köprülenmiş açıklama şeklinde verilen tanıma ek olarak deyimle ilgili görseller metin üzerinde verilmiştir. Son-test puanlarının Mann Whitney U testi ile karşılaştırılması sonucunda gruplar arasında anlamlı bir fark olmadığı görülmüştür, ($U = 1786.000$, $p = .819$).

Anahtar Sözcükler: Yabancı dil öğrenimi, deyimler, köprülenmiş açıklama, Moodle, etimolojik açıklama

Abstract

This study aims to compare the effectiveness of definition + etymological notes versus definition + pictorial support on the learning of English idioms through reading online texts with hyperlinks to definitions. 121 Turkish learners of English as a foreign language assigned to two different courses were given a vocabulary knowledge scale,

¹ An earlier version of this paper was delivered as an oral presentation at 4th International Conference on Foreign Language Teaching and Applied Linguistics, International Burch University, Sarajevo, Bosnia and Herzegovina, on May 9-10, 2014.

* Dr., Cumhuriyet Üniversitesi, e-posta: arifbakla@cumhuriyet.edu.tr

** Dr., Cumhuriyet Üniversitesi, e-posta: acekic@cumhuriyet.edu.tr

*** Dr., Cumhuriyet Üniversitesi, e-posta: hdemiroz@cumhuriyet.edu.tr

revealing that the idioms were unfamiliar to the learners. Participants in both groups read 17 passages with definitions as hyperlink annotations for 18 idioms in a scorm package built via an authoring tool. In addition to the definitions of idioms in both groups, the visuals were given above the text in the first experimental group, while the etymological notes were provided as hyperlink annotation in the second. A comparison of the groups' post-test scores using Mann Whitney U test indicated that there was no statistically significant difference between the groups' median scores, ($U= 1786.000, p = .819$).

Keywords: EFL, idioms, etymological notes, hyperlinks, Moodle

Introduction

Having a good command of idioms in an L2 is of great importance for learners to be able to communicate effectively not only in native-to-non-native interaction but also in English as a lingua franca settings. As for native-to-non-native interaction, deficiency in knowledge of idioms can be source of communication breakdowns or misunderstanding as native speakers frequently use idioms. The same goes with ELF settings, as it is argued that idioms are also used by lingua franca interlocutors because they decrease the processing load and have strong framing power (Kecskes, 2010). In addition, as idioms are semantically opaque, it is hard for learners to guess their meaning from context or pick up them incidentally. Thus, we cannot expect non-native speakers to learn idiomatic language without explicit instruction. Besides, the benefits of a good command of idioms are twofold: They can help L2 learners develop their pragmatic competence by increasing the smoothness of interaction and facilitate their psycholinguistic processing of L2 by decreasing the cognitive load during L2 processing.

In addition, as the term idiom is not well-defined in literature, it is also challenging to decide what and how to teach. Seeing this relative difficulty in acquiring and teaching the idioms, some researchers have attempted to investigate problems related with the nature of idioms (Fernando, 1996; Golaghaei & Kakolian, 2015; Grant & Bauer, 2004; Liu, 2003; Simpson & Mendis, 2003) and effective strategies that could be used to teach them (Bagheri & Fazel, 2010; Boers, Eyckmans & Stengers, 2007; Szczepaniak & Lew, 2011; Vasiljevic, 2015). Some of these researchers focused on etymological background of idioms, either by giving learners notes on etymology of idioms or by asking them to

hypothesize about their origin. While the former is limited with presenting etymological information to learners to consolidate meaning in their minds and is mostly related to retention, the latter, which is often referred to as “etymological elaboration” (Boers, Demecheleer & Eyckmans, 2004) or “etymological elucidation” (Vasiljevic, 2015) is used to help learners comprehend the meaning of figurative idioms, usually by asking them to guess their source domains.

Building upon the basic tenets of dual coding theory (Paivio, 1991), the impact of etymological elaboration on comprehension and retention of idioms has extensively been studied (e.g., Bagheri & Fazel, 2010; Boers et al., 2007), usually with results in favor of this technique. Very few studies have been carried out to compare the impact of etymological notes and pictorial support on the retention of idioms (Szczepaniak & Lew, 2011; Vasiljevic, 2015). Furthermore, research findings from already limited number of studies are contradictory and inconclusive on this issue. Therefore, this paper compared the use of hyperlinked annotations containing information about etymological origins of idioms and definition with definition plus visual data that support the definition of the idioms. In addition to its addressing this gap in the literature, the present study is unique in two aspects that complement previous studies. First, unlike previous studies, we provided etymological notes in an online environment in electronic glosses because language learners are increasingly becoming digitally more competent and thus spend quite a lot of time in online environments. Second, in Vasiljevic’s (2015) study, etymological notes were presented in L1, while they were presented in L2 in our study as our participants were intermediate learners of English.

In line with our research aim, three null hypotheses were created: H1₀: There is not a statistically significant difference between the use of etymological notes and pictorial support in teaching idioms. H2₀: The scores of the visual support group and etymological information group do not differ with regard to the retention levels of pure idioms. H3₀: The scores of the visual support group and etymological information group do not differ with regard to the retention levels of semi-literal idioms.

Literature Review

Definition of idioms

The word idiom originates from the Greek word “idios”, meaning “one’s own, strange”. However, given its multidimensional and eccentric nature, the term idiom defies an easy definition. It is claimed that there is no specific definition for idioms on which scholars unanimously agree (Bagheri & Fazel 2010; Simpson & Mendis, 2003). Besides, Liu (2003) states that “the definition of idiom varies considerably from scholar to scholar and may also depend on context” (p. 672). Some scholars even argued that they are so elusive that it is useless to try to define them (Dascal, 1987, Fernando, 1978 cited in Tabossi & Zardon, 1993). However, gains of making a working definition of the term idiom are twofold: it provides a consistent framework for research into idioms and idiomaticity; second it has pedagogical implications for ESL materials developers. With regard to pedagogical problems caused by the lack of an agreed-upon definition, Grant and Bauer (2004) state that teachers and learners are exposed to a mixture of items which cannot be regarded uniformly in instructional activities (p. 38).

Therefore, in spite of its elusiveness and complexity, various researchers have come up with different definitions of the term “idiom.” The most widespread definition of it, as a linguistic term, is “a group of words that occur in a more or less fixed phrase and whose overall meaning cannot be predicted by analyzing the meanings of its constituent parts” (Simpson & Mendis, 2003, p. 423). Vasiljevic (2015) defines idioms as complex syntactic components which show lexical restrictions that are inexplicable using regular syntactic or semantic rules. Fernando (1996, p. 1) defines an idiom as a “conventionalized multi-word expression often, but not always non-literal” (cited in Liu, 2003, pp. 672-673).

As it is suggested by the definitions above, idioms are generally considered as a subcategory of formulaic language (Moon, 1998) or multi-word units which are defined as “a fixed and recurrent pattern of lexical material sanctioned by usage” (Grant & Bauer, 2004, p. 38). For some researchers, the term encompasses all fixed phrases, proverbs,

formulaic sequences and even single words with polysemy. For example, Katz and Postal (1963, cited in Liu, 2003) consider metaphorically used words such as *weigh* in *weigh a decision* as idioms. On the other hand, according to some researchers (e.g., Moon, 1998) idioms include only “fixed and semantically opaque or metaphorical” expressions like *kick the bucket* or *spill the bean*. Similarly, Fernando (1996) emphasizes invariant or restricted variant nature of idioms to make a distinction between habitual collocations (e.g., *catch a bus*) and idiomatic expressions (cited in Liu, 2003). Grant and Bauer (2004), who regard idioms as a subgroup of multiword units, exclude phrasal verbs even if most have idiomatic meaning as they think phrasal verbs deserve separate attention since they are very large in number.

As for categorization of idioms, non-compositionality is the most widely used criteria (Grant & Bauer, 2004). With regard to non-compositionality, Abel (2003) states that “a decomposable idiom is an idiom whose individual components contribute to its figurative meaning, whereas the constituents of a non-decomposable idiom do not make such a contribution” (p. 329). In terms of compositionality, some researchers (Gibbs, Nayak, Bolton & Keppel 1989; Gibbs, Nayak, Cutting, 1989 cited in Cieślicka, 2013) suggested that idioms can be classified into three categories: normally decomposable idioms (e.g., *break the ice*, *clear the air*), abnormally decomposable idioms (e.g., *bury the hatchet*, *carry the torch*) and non-decomposable idioms (e.g., *shoot the breeze*, *chew the fat*).

Besides syntactic classifications, one semantic classification has been made by Fernando (1996, cited in Liu, 2003), who grouped idioms into three categories: pure, semi-literal and literal (with respective examples of *kick the bucket*, *use something as a stone*, according to). Yet, other researchers attempted to classify idioms in terms of their functions (Moon, 1998) and defined various functional categories from “catchphrases” to personal reference to some discourse functions (Drew & Holt, 1995, 1998). Researchers have examined both spoken and written genres and found that functions of idioms show variance across genres. Such efforts did not solve the problem of heterogeneity and basically fell short of explaining what an idiom is (Grant & Bauer, 2004). In short, there is not an agreed-upon set of criteria for deciding

what an idiom is and how idioms are categorized. So, it is up to the researcher to decide what counts as an idiom. In this study, we regarded idioms as fixed or semi-fixed multi-word units with non-literal (pure) or semi-literal meanings excluding phrasal verbs.

Research on idiom instruction

Seeking an answer to find the most effective methods to teach idioms, various studies have been carried out to investigate whether etymological elaboration could help learners to comprehend and remember meaning of idioms, great majority of them yielding positive results. Boers et al. (2007), for example, investigated affordances of etymological elaboration in helping learners understand the meaning of idioms rather than retaining it, and they found that identifying the source domain of the idioms helped the participants in comprehension. Bagheri and Fazel (2010) investigated the impact of providing the participants with information about the origins of idioms on comprehension and retention of idioms. They found that the treatment group, which received instruction involving etymological elaboration, outperformed the control group, which received no such instruction both in finding the meaning of idioms and retaining it. In a quite similar experiment, Golaghaei and Kakolian (2015) taught 48 idioms to 79 intermediate learners of English who were assigned to three different learning conditions (etymological elaboration, pictorial support and a combination of these two). The results of the study indicated that the combination of pictorial support and etymological elaboration was more effective than etymological elaboration and pictorial support alone, the least effective of the three being pictorial support.

How etymological elaboration aids comprehension and/or retention is usually based on Paivio's (1991) Dual Coding Theory (Bagheri & Fazel, 2010; Boers et al., 2007; Stengers, Deconinck, Boers & Eyckmans, 2016; Talebinezhad & Farhadian, 2014; Vasiljevich, 2015). This is because etymological information is thought to conjure up mental images which complement verbal information. Learners make use of verbal (or sometimes textual) data and also construct visual imagery when they are provided with etymological information, yet such imagery is said to be indirect because it is the learner who creates the imagery rather than being given ready-made visuals. In

etymological elaboration, as used in some studies, the participants were asked to associate the origin of the idiom with a walk of life from which the idiom originated. That is, they were asked to identify the source domain of the idiom. For example, in Vasiljevic's (2015) study, the participants were asked to choose the right domain for each idiom among three options. Similarly, in Stengers et al.'s (2016) study, the participants were requested to hypothesize about the source domain by choosing one of the two potential domains for each idiom, and then the relationship between the domain and the components of the idiom was presented. However, due to various reasons, such as ambiguity of the words in the idiom and lack of skills in learners, it might be hard to identify the source domain (Boers et al, 2007), or even if the source domain is identified, this might not help the learner comprehend the meaning of the idiom.

Despite these positive results of the investigations into etymological elaboration, some researchers have been critical of the use of etymological elaboration in teaching idioms. For example, the nature of the visual representation that they produce might differ from one person to another. Students also need support from the teacher to be able to use the etymological information to create mental images or they may not be skillful enough to do so. We do not know the processes involved in transforming the verbal data to imagery, the level of sophistication in images that learners create and how concrete the images are (Vasiljevic, 2015). Another problem is that not all idioms lend themselves to etymological elaboration; some of them might not be transparent enough for students to be able to create concrete mental images, or some others are so frequently used that it is hard to recognize the stories behind idioms (Boers, 2001). Moreover, when the figurative meaning of the idioms is highly arbitrary, etymological elaboration might be of little or no use to help learners to comprehend such an arbitrary relationship (Boers, et al., 2007).

As for the research into whether pictorial support facilitates retention of linguistic form of idioms, the findings of research has produced mixed results. The results of the two consecutive studies (Boers, Lindstromberg, Littlemore, Stengers, & Eyckmans, 2008; Boers, Piquer-Píriz, Stengers & Eyckmans, 2009) revealed that

pictorial support might not be of much use with regard to retention of idiom form, particularly in visual learners. Vasiljevic (2015) compared the use of pictorial support with etymological notes given in the participants' L1, and unlike the findings of the two studies above, she found that etymological information was more effective in helping the learners retain meaning of the idioms, while pictorial support was more effective in remembering linguistic form. By the same token, in Szczepaniak and Lew's (2011) study visual aids were found to help retain idiom knowledge, particularly linguistic form. The following sections of this paper elaborate on the methodology adopted and provide a discussion of the main findings.

Method

This study adopted a posttest-only experimental design with two experimental groups without a control group. The participants in the study read 17 short passages with 18 idioms online in Moodle. All of the participants studied idioms through a scorm package that provided passages with hypertext annotations including the definition of each idiom. However, the passages in the first experimental group included pictorial support for each idiom, while those in the second provided the participants with etymological information about the idioms besides the definition provided for both groups. In other words, the participants to the first group (pictorial support group) studied using passages with hyperlinked annotations including definitions and an image accompanying each text (hyperlink annotations with definitions + a visual accompanying each passage), while those in the second group (etymology group) read passages with hyperlinked annotations including the definition of and etymological information about the idiom (hyperlinked annotations + definitions and etymological information). The learners were also asked to answer comprehension questions to make sure they read the texts. An immediate posttest was given to see if the learners were able to learn the meaning of the idioms and use them to fill in gaps in a set of individual sentences.

As a pretest, the participants were asked to complete the Vocabulary Knowledge Scale (VKS; Wesche & Paribakht, 1996; see Appendix). The learners were asked to specify what they knew about each of the 18 idioms in the scale. That is, they were asked to provide

the Turkish meaning of each idiom and a sample sentence if they knew what the idiom means. Their response to each item in the VKS ranged from 1 to 5, the latter implying a deeper lexical knowledge than the former. The pre-instruction VKS scores ranged between 1.05 and 1.64, and the mean VKS score for the 18 idioms was found to be 1.26, implying that the idioms selected for the study were highly unfamiliar for the participants.

Setting and participants

The study was carried out with 121 intermediate Turkish-L1 learners of English whose ages ranged between 18 and 23. Institutional permissions and informed consent from the participants were gained before the study. 61 of the participants were registered into a separate course titled “Visual”, and 60 of them were registered into another one titled “Etymology” through random cluster sampling. Each of the participants was given a username and a password, so that they could have access to the Moodle site. When they logged into the site, they saw the course in which they were registered to avoid possible confusion; unregistered courses were hidden. The learners were given a short demo on how to use the site and the scorm package before they began to study.

Materials

The participants were asked to read the texts and use the annotations to check the meaning of each idiom in each text. There were totally 18 idioms in 17 short passages, some of which were dialogues, and each passage included only one idiom except for the first one, in which there were two idioms (See Table 1). Though the passages were short, they provided the essential context for the idiom. Almost half of the idioms were pure, the rest were semi-literal. While selecting the idioms, various textbooks focusing on idioms were examined and frequently taught idioms were identified to be included in the study. As idioms that might be at least roughly equivalent in L1 might be easier to learn (Irujo, 1993, cited in Tran, 2011), idioms without L1 equivalents were selected in the present study. Another selection criterion was the unfamiliarity of idioms for the participants, so that the researchers can investigate the impact of the treatments on learning gains. In this study, we used Fernando’s classification and included

pure and semi-literal idioms as we regard them to be problematic for EFL learners (See Table 1).

Table 1. The Types of Idioms Used in the Study According to Fernando's Classification

Category	Idiom	Frequency in COCA corpus
Pure	<i>kick the bucket</i>	54
	<i>to pay through the nose</i>	45
	<i>take the bull by the horns</i>	56
	<i>to pull someone's leg</i>	105
	<i>get the sack</i>	10
	<i>tongue-in-cheek</i>	116
	<i>in stitches</i>	81
	<i>make no bones about sth</i>	178
	<i>out of the blue</i>	15
	<i>bite the bullet</i>	182
Semi-literal	<i>let the cat out of the bag</i>	30
	<i>to beat around the bush</i>	66
	<i>bark up the wrong tree</i>	42
	<i>bury the hatchet</i>	54
	<i>a drop in the bucket</i>	199
	<i>hair-raising</i>	225
	<i>to kick up one's heels</i>	70
	<i>don't look a gift horse in the mouth</i>	28

The passages with annotations for the idioms to be studied were prepared using a commercial software package (Softchalk, n.d.). The learners were instructed to complete two true/false questions given below the text. There were totally 36 true/false items for the 18 idioms. In this study, the learners' answers to 36 true/false items were recorded by the scorm software, and each truly answered item was given one point. The mean score for the participants to the pictorial support group was 27.15, while it was 29.70 for the etymology group out of 36.

The image shows two screenshots of a Moodle-based learning interface. The top screenshot, titled 'Idioms-visual', features a navigation bar with page numbers 1-21 and 'score print all'. It contains two cartoon illustrations: one of a man barking at a tree labeled 'Wrong tree >>>' and another of a man carrying a sack labeled ''Oh, over 'ere!'. To the right is a photograph of a man in a suit holding a box, with a green 'EXIT' sign above him. Below the illustrations is a text passage about a man named John who 'barks up the wrong tree' and 'got the sack'. A blue hyperlinked annotation box for 'got the sack' contains the text '(was fired, was dismissed)'. Below the passage are links for 'return to top | previous page | next page'. The bottom screenshot, titled 'Idioms-story', has a similar navigation bar. It shows the same text passage about John. The 'got the sack' annotation box is expanded to show an etymological note: 'At one time a workman kept all his tools in a sack (or in a box) and took them with him to his job. At work he used to leave them to his employer. If he were dismissed, whether through his own fault or lack of work, the employer would give him the sack, that is, he would return the workman's sack of tools.' A copyright notice is visible at the bottom right: 'Content ©2013. All Rights Reserved. Date last modified: December 30, 2013. Created with SoBCalk mobile page'.

Figure 1. A sample passage with pictorial support and etymological notes in hyperlinked annotations

Each idiom was presented in a context, in which it was written in bold and a hyperlinked annotation was provided for it. Since each learner was given a username and password, they were automatically guided to the group to which they were assigned.

Data collection tools

The data in the present study were collected using two instruments: (a) VKS (adapted from Wesche & Paribakht, 1996; see Appendix), and (b) the immediate post-test (for the target idioms). The learners were asked to fill out the VKS before they studied the texts on the Moodle. The immediate posttest was given at the end of the two-hour period that the participants spent on the Moodle site studying the idioms. The immediate post-test was composed of 18 gap-filling items. The learners were asked to use the idioms in gapped sentences in two sets. In other words, each idiom was tested once.

The post-test was piloted with 46 students with higher proficiency levels. Although the selected idioms are commonly used in English and the students that took the pilot test were more proficient than the participants to the present study, the researchers expected that they still did not know a great majority of the idioms. Therefore, they were provided with the definitions of the idiom, and they studied them for a short time. After this short study period, they were given a nineteen-item pilot test.

Item analysis was carried out to see if the items in the test worked. Item facility and item discrimination indices were calculated. One of the items was deleted since its item discrimination index was below .20. Four items whose item discrimination indexes were between .20 and .29 were revised. Other items with an item discrimination value of over .30 were directly included in the test. The item facility of each item was also calculated. The item facility values ranged between .11 and .91, with a mean value of 0.39. These values indicated that the test was slightly more difficult than a test of average difficulty. KR-21 reliability index of the test was calculated to be .81; this indicated that the test could be used.

Data analysis

The data were analyzed using SPSS 15.0. Before carrying out the statistical analysis on the data, learners' VKS scores were calculated, and their post-test scores were calculated by assigning 1 point for each correct answer, so the highest score to be received was 18. Totally, three different scores were calculated for each participant: a global score (out of 18), pure idiom score (out of 10) and semi-literal idiom score (out of 8), so that the pictorial support and etymology group could be compared on their global performance, pure and semi-literal idioms.

Results and Discussion

The post-test scores were compared using Mann Whitney U test. Before comparing the groups' scores using a parametric test, the dataset was examined to see if it was appropriate for parametric analysis. As the result of Shapiro-Wilk's test ($p=.056$) showed, the scores of the pictorial support group were normally distributed with a skewness of $-.201$ ($SE = .306$) and a Kurtosis of $-.769$ ($SE = .604$). This was also supported by the examination of the

histograms, Q-Q plots and box plots. However, a Shapiro-Wilk's test ($p = .011$) together with the examination of the histograms, Q-Q plots and boxplots showed that scores of the etymology group were not normally distributed with a skewness of .165 ($SE = .309$) and a Kurtosis of -1.158 ($SE = .608$). Moreover, to test if the dataset met the homogeneity of variances for ranked data, one-way ANOVA was carried out to compare the absolute deviations (by using Levene's test), and there was not a statistically significant difference between the variances [$F(1, 119) = .022, p = .882$]. Therefore, a Mann Whitney U test was carried out to compare the mean scores of the groups. The test indicated that there was not a statistically significant difference between the scores of the pictorial support group ($Mdn = 9.00$) and etymology group ($Mdn = 8.00$), ($U = 1786.000, p = .819$). As a result, the null hypothesis was accepted; that is, it was found that the etymology and pictorial support group did not differ significantly in the post test. Moreover, the medians of the groups were almost identical.

In addition to global idiom scores, the groups' score for pure idioms and semi-literal idioms were compared. Before carrying out any tests, normality assumptions were tested, and it was found that the data were not normally distributed. Therefore, Mann Whitney U test was used to compare the etymology and pictorial support group's score for pure idioms and semi-literal idioms. To test if the dataset met the homogeneity of variances for ranked data, one-way ANOVA was carried out to compare the absolute deviations (by using Levene's test). The results showed that there was not a statistically significant difference between the variances of the etymology and pictorial support group for pure idiom scores, [$F(1, 119) = .096, p = .757$]. Similarly, the ANOVA test was not significant for the semi-literal idiom scores, [$F(1, 119) = .040, p = .801$]. As the groups were independent from each other and the Levene's test for ranked data was not significant for both datasets (pure idiom scores and semi-literal idiom scores), Mann Whitney U test was carried out to compare groups' scores. The result of this test for pure idioms ($N=10$) indicated that there was not a statistically significant difference between the scores of the pictorial support group ($Mdn = 4.00$) and etymology group ($Mdn = 4.00$), ($U = 1721.000, p = .569$). Therefore, we accepted the second null hypothesis that scores of the pictorial support group and etymological information group do not differ with regard to the retention levels of pure idioms. The result of Mann Whitney U test for semi-literal idioms ($N=8$) also revealed that there was not a significant difference between the scores of the pictorial support group ($Mdn = 5.00$) and etymology group ($Mdn = 5.00$), ($U = 1794.500, p = .853$). As a result, we accepted the third null hypothesis that scores of the pictorial support group or etymological

information group do not differ with regard to the retention levels of semi-literal idioms.

As noted earlier, previous studies in the literature found mixed results with regard to the effectiveness of etymological elaboration and pictorial support. In this study, we found no significant difference between definition + etymological notes and definition + pictorial support. The findings of the present study do not corroborate with that of Szczepaniak and Lew (2011), who found that pictorial support was more effective than etymological notes in helping the participants retain idiomatic meaning. On the other hand, Vasiljevic (2015), who used L1 notes, found that etymological notes rather than pictorial support are more effective. However, as our study found no statistical differences between learning idioms using pictorial support and etymological notes, it added to the conflicting results of the previous studies. The difference between the results of the previous studies and our study might be attributed to the L2 definitions we have provided for the target idioms.

Besides, lack of difference between the two groups can be partially attributed to the learners' unfamiliarity with learning neither via notes nor via pictorial support. Although we tried to make sure that the etymological notes are easy to understand by using high frequency words in notes, some of the students might not have understood the stories behind the idioms studied. Another possible problem with etymological notes might be that it is sometimes possible to remember etymological story behind the idiom, yet it proves challenging to establish a connection between the meaning of the idiom and this etymological data. Remembering the etymological information is expected to help students retain the meaning of the idiom if they could establish a relationship between the etymological information and the meaning. However, the results of the study indicated that there was not a statistically significant difference between two groups' pure and semi-literal post-test scores. However, it is wise to remember that the idioms included in this study both have clear etymological explanations and are appropriate for pictorial representation. Therefore, these two methods could be used to introduce variety into instruction but not as ultimate remedies for teaching idioms.

Limitations and Further Research

A significant limitation of the present study was that the learners were immediately tested on what they had studied, and no late posttest was given. It is possible that the impact of etymological information and pictorial support might affect retention differently depending on the duration between

instruction and testing and re-testing. In line with this limitation, future work could extend the time between instruction, post testing and late post testing. Providing etymological information might not be as effective in helping learners retain meaning of idioms (Vasiljevic, 2015) as etymological elaboration because the latter seems to involve deeper processing. Therefore, further research could also compare instruction delivered by using etymological information versus etymological elaboration. Prospective research studies on this issue could also compare etymological notes with elaboration or pictorial support by using them individually or in combination with other techniques.

Conclusion

Idioms are notoriously difficult for nonnative learners of English, and this study attempted to investigate whether providing etymological notes or pictorial support helped learners retain idiom meanings better in online reading. However, it was found that neither was more effective than the other in the retention of idiomatic expressions. But this should not be taken to mean that they are ineffective given that the participants' scores increased. Thus, the results of our study add to the controversy over the effectiveness of etymological notes and pictorial support in teaching idioms in L2 settings. However, our findings can suggest that rather than learning idioms using a single technique like providing etymological notes or pictorial support, it might make sense to use them in combination. Besides, a sensible method to follow might be to choose frequently used items based on corpus resources and match the nature of idioms with the type of teaching strategy. Future work with longer periods of instruction can help clear the ground and inform teachers about what technique to choose when teaching idioms.

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Appendix: Vocabulary Knowledge Scale

Look at the following list of idioms and give each one a number rating 1-5 based on how well you know the idiom.

Look at the VKS (Vocabulary Knowledge Scale) below:

1. I don't remember having seen this idiom before.
2. I have seen this idiom before, but I don't know what it means.
3. I have seen this idiom before and I think it means...
4. I know this idiom: it means...
5. I can use this idiom in a sentence, e.g., ... (Underline the target idiom in your sentence.)

English Word	1-5	Turkish Word/English Sentence
1. bark up the wrong tree		
2. get the sack		
3. bite the bullet		
4. bury the hatchet		
5. tongue-in-cheek		
6. a drop in the bucket		
7. hair-raising		
8. to pay through the nose		
9. let the cat out of the bag		
10. to kick up one's heels		
11. to kick the bucket		
12. Don't look a gift horse in the mouth		
13. in stitches		
14. take the bull by the horns		
15. to beat around the bush		
16. to pull someone's leg		
17. make no bones about sth		
18. out of the blue		