

A Review of Tureng: The Multilingual Dictionary

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Abstract

Technological advancements such as computer-assisted language learning and mobile-assisted language learning have changed the scope and design of dictionaries. One advancement has been the emergence of online dictionaries, facilitating and expediting word queries and enhancing dictionary consultation with the addition of built-in features. One such online dictionary is Tureng, a commonly favored multilingual dictionary through its web-based and mobile applications. To this end, this review evaluated this online dictionary in accordance with the adapted and modified framework of Kohnke and Moorhouse (2022). The review found that Tureng has an easy-to-navigate interface and high-quality audiovisual content. It was also discovered that Tureng offers ample opportunities for learning vocabulary through its features such as word of the day, the idiom of the week, videos by Tureng, and newly-coined word of the week. It was further revealed that Tureng offers contextualized and audio-visually supported pronunciation learning through its YouGlish supplement. Moreover, practice and self-assessment of grammar, listening, pronunciation, and vocabulary through the test your English component is available on the web-based application. Nonetheless, the dictionary possesses specific technological and pedagogical limitations. More research, especially of an experimental nature, is needed to verify the analysis findings.

Keywords: Language Learning; Online Dictionary; Technology; Tureng; Vocabulary

1. Introduction

Provided with many definitions, a dictionary might simply be defined as a major source of reference that language learners and teachers use in relation to word usage, definitions, pronunciation, grammar, etymology, and several more. The publication of the first printed *English Dictionary of the English Language* (Jackson, 1755) marked the beginning of modern lexicography (McDermott & Moon, 2005), which simply refers to the study of writing, compiling, and editing dictionaries. Fast forward from the mid-18th century to the late-20th century, Dodd (1989) heralded the radical transformation that would occur concerning the distribution of lexicons in the following words:

...instead of multiple identical copies of a dictionary, sold to users, there would be a single version of a database, from which clients of the dictionary services obtained the

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information they required, much as professionals of various sorts already get abstracts and similar data *online*. (p. 87)

Soon after, circa the mid-1990s, started to emerge important online lexicon products were popularized by the world wide web (Burke, 2003). In other words, Online Dictionaries (ODs) have started to become widespread with technological advancements and be used in language education. Levy (2010) declares that technology can be incorporated into language teaching contexts at (i) the physical level (e.g., mobile devices and personal digital assistants), (ii) the management level (e.g., learning management systems), (iii) the application level (e.g., online newspapers and websites), and (iv) the component technology level (e.g., electronic dictionaries and grammar checkers). In this regard, ODs might be exploited at the application level in language education.

ODs have automatically updated material, links to other websites or applications, a better method of data collection, and free usage (De Schryver, 2003). They might assist learners with reading, especially when they are supplemented with hypertexts (Richards, 2015). ODs are also a criterion for evaluating English learning websites, indicating their significance (Liu et al., 2011). Moreover, they are viewed as an opportunity to rivet learners to use dictionaries, discover freshly formed words, and reduce look-up mistakes, thus improving their inclination toward using dictionaries (Chiu & Liu, 2013). Additionally, many language learners consider ODs an essential part of their learning process (Jin & Deifell, 2013). Similarly, positive attitudes toward ODs were expressed by second language learners (Ngo & Eichelberger, 2019). Tananuraksakul (2015) reported an additional advantage of ODs, claiming that they might help foster learner autonomy. Furthermore, scholars argue that employing ODs can also provide the essential audio pronunciation of second language terms (Casañ-Núñez, 2021), referring to the potential integration of multimedia content in ODs addressed in earlier studies (Müller-Spitzer & Kopeng, 2014).

In addition to these benefits that ODs provide, the ability to use a dictionary is considered one of the *savoir-faire* skills, (i.e., skills and know-how) included in the general competencies of language learners (Council of Europe, 2001). Furthermore, the “ability to consult a dictionary and knowledge of the conventions used there for the representation of pronunciation” is considered orthoepic competence (Council of Europe, 2001, p. 118), which is required for language learners as well. Given the critical roles that ODs play in facilitating second language learning, instructors and students must use them in their teaching and learning endeavors (Žammit, 2022). This is further supported by Richards (2015), who claimed that dictionaries (including ODs) might be used as a learning and teaching strategy since teachers are recommended to “help the learners use context to guess, use a dictionary, or break the word into parts” (p. 317).

Considering all of these, this review evaluated the most popular and widely used online dictionary in the Turkish context – Tureng (Baskin & Mumcu, 2018; Yurdagül & Öz, 2018, Türkmen & Can, 2019). The framework by Kohnke and Moorhouse (2022) comprises four sections: (1) introduction, (2) utilizing the technology for language teaching, (3) challenges in using the technology for language teaching, and (4) conclusion. By adapting and modifying this framework, the present review analyzed Tureng under five headings: (1) introduction, (2) general description, (3) technological features, (4) pedagogical features, and (5) conclusion. To the best knowledge of the researcher, no studies have ever undertaken this academic venture.

This review is, therefore, expected to bridge this literature gap and contribute to language learning and teaching practices.

2. General Description

Coined by the first three syllables of Turkish and English, the Tureng dictionary was launched in 2006 by the Tureng Translation Company translators with more than 15 years of work experience. The online dictionary (OD) provides dictionary services in Turkish, English, German, French, and Spanish to those in such fields as translation, education, and international trade. The dictionary is organized into 120 categories, ranging from general and common usage to colloquial and idioms (<https://tureng.com/en/aboutus>). It also allows users to hear as many as two million words in nine accents: one in Turkish, three in English (American, British, and Australian), one in German, two in French (French and Canadian), and two in Spanish (Spanish and Mexican). The Tureng dictionary claims that its Spanish English dictionary presents learners with selected translations and considers individual Spanish cultures. It is also stated that the German English dictionary provides translations across various categories and appeals to a wide range of people from everyday users to professionals. Another argument made by the dictionary developers is that the Turkish English dictionary is the product of unremitting toil to deliver meticulous translations for each category. It is further maintained that the translations from French to English include not only words but also attitude, which was inspired by the French people.

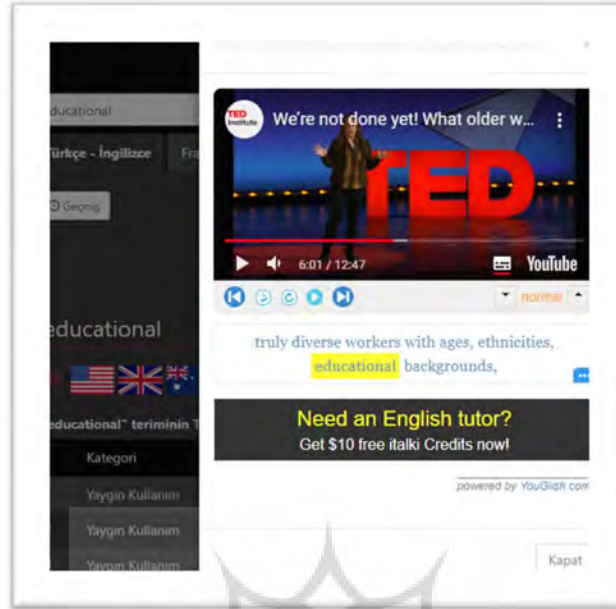
The very top bar presents users with 9 tabs (Figure 1) to make selections from. Users can choose the dictionary language in the first tab. The second tab allows them to look up synonyms of words in the dictionary. All the synonyms of the query item are listed, with parts of speech in abbreviated forms (e.g., v. for verbs, n. for nouns). The third tab gives brief background information about the dictionary. The *Tools* tab presents the hyperlinks to mobile applications (Tureng iPhone Application, Tureng Android Application, Tureng Spanish Android Application, Tureng French Android Application, Tureng German Android Application, Tureng Android Vocabulary Notebook, Tureng Spanish Android Vocabulary Notebook, Tureng iPad Application, Tureng Windows Application, and Tureng MacOS Application) and browser extensions (Google Chrome extension) (<https://tureng.com/tr/>). The external links to 370 resources are listed in the fifth tab. The last tab on the left allows for communicating with Tureng Translation Ltd. via email. There is a *Login/Register* tab, which does not provide any benefits apart from unlimited search history logging. The dictionary also has day and dark modes that can be adjusted in the middle tab on the right. The very right tab allows users to change the interface language to the five languages it provides the dictionary service.

Figure 1
The Top Bar of the Dictionary



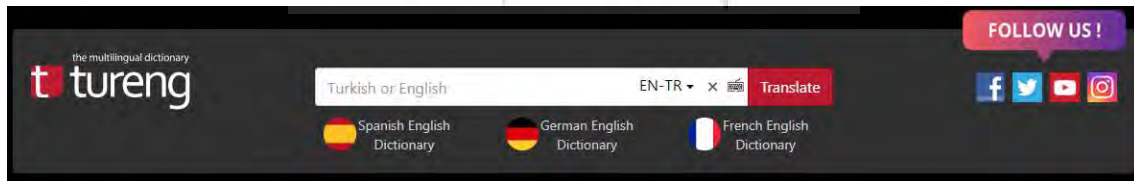
A valuable feature of the dictionary is YouGlish (<https://youglish.com/>) (Figure 1). Once users create a query on the dictionary, the icon of this feature appears at the very right of the accents. This feature shows users relevant videos where the search word is pronounced.

Figure 2
YouGlish: Pronunciation in Context



The search bar is easy to use and allows users to select the query language. Shortcuts to those languages are also available right below the bar, with small flag icons representing the languages (Figure 3). The keypad icon next to *Translate* allows users to type in the accents and diacritical marks in these languages: Turkish (ç, ı, ğ, ö, ş, ü), German (ä, ö, ü, ß), French (à, â, ç, é, è, î, ï, ô, ù, û, ü, ÿ), and Spanish (á, é, í, ñ, ó, ú, ü). Once a query is made, users are provided with many results. The three dots on the very right of each result provide users with additional information by way of external links to 14 other websites (e.g., Google images and Merriam-Webster) when clicked. On the very right of the search bar are the links to Facebook (https://www.facebook.com/turengsozluk?ref=br_tf), Twitter (<https://twitter.com/turengcom>), YouTube (<https://www.youtube.com/channel/UCxCGCFr1XpKEgZNXX2HKoxw>), and Instagram (IG) (https://www.instagram.com/tureng_presents/) accounts of the dictionary.

Figure 3
The Search Bar on the Website



New features have been added to the web-based version of the dictionary. Users are presented with *Word of the day* (WoD) (Figure 4), *Trending now* (TN) (Figure 5), *Idiom of the week* (IoW), *Guest of the week* (GoW), *Test your English* (TyE), *Videos by Tureng* (VbT), *Newly coined* (NC) (Figure 10), *Newly added* (NA) (Figure 11), *Apps by Tureng* (AbT), and *Write to us* (Wtu).

WoD presents information about the part of speech and provides model sentences about the daily word in English and Turkish. As the name suggests, the WoD changes daily on the website. TN shows the recent popular query items on the dictionary. In both features, the target items are hyperlinked, meaning that users can click on them and access further information. Needless to say, the lexical items in TN also alter depending on the search statistics

Figure 4

Word of the Day Feature

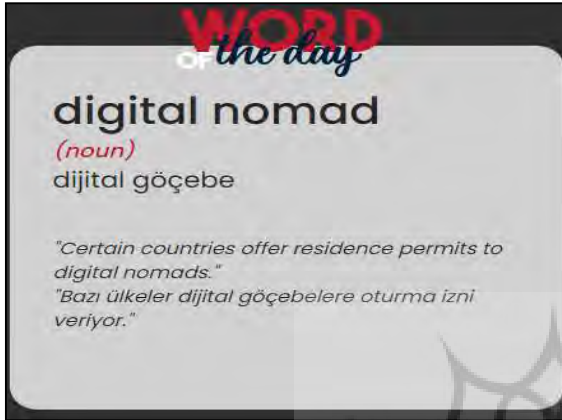
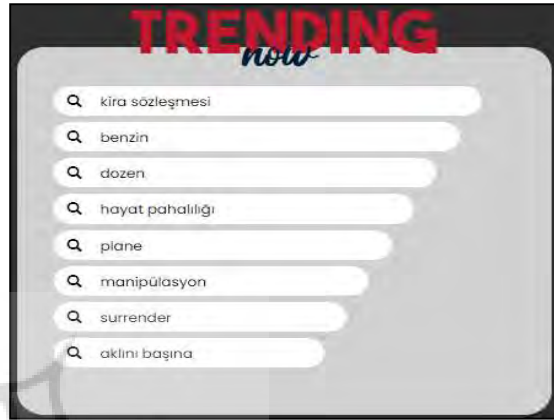


Figure 5

Trending Now Feature



Tureng also supplies users with IoW on a visually-appealing interface including the idiom in English and Turkish (Figure 6). The idioms displayed on the website shift weekly. Additionally, the dictionary recommends some accounts of people who share English content for learners on Instagram (e.g., @americaiturk, @alexhocaenglish, and @roastmyenglish) through its GoW feature (Figure 7). The GoW feature shows different videos of mainly the same users every week.

Figure 6

Idiom of the Week Feature

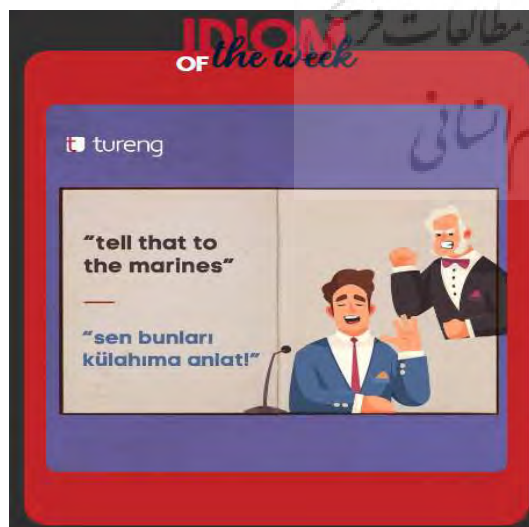
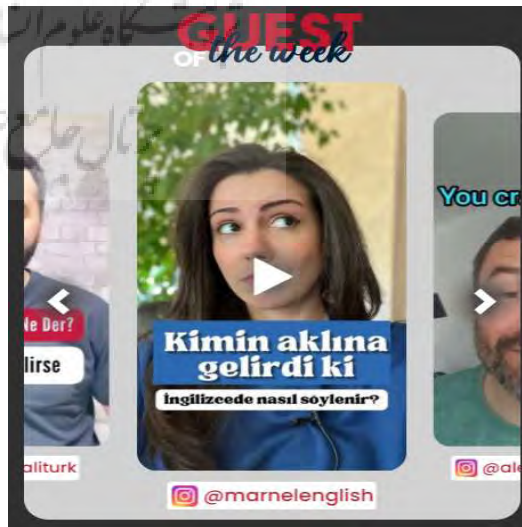


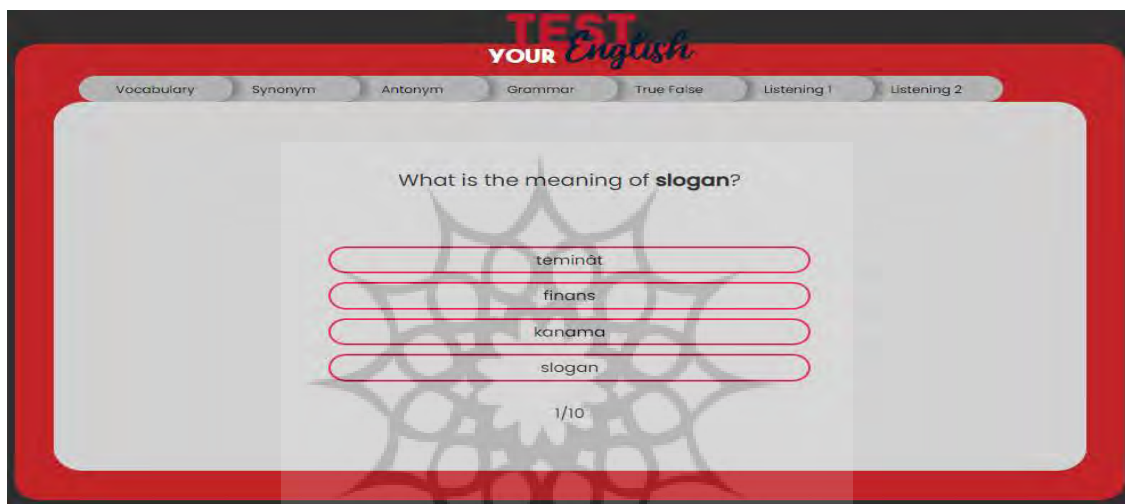
Figure 7

Guest of the Week Feature



The web-based version also allows for assessment, with such options as vocabulary (comprising a four-choice test with 10 questions asking users the meaning of the word in bold), synonym, and antonym (a two-choice test with 10 questions each, with easy and hard options), grammar (a four-choice test consisting of 10 questions assessing grammar, with easy and hard options), true/false (a 10-question general knowledge test in the form of true/false), and listening (a two-choice test asking learners to select the correct word upon hearing their pronunciation in American English (AmE) and British English (BrE) (Figure 8). In all these tests, the choices are English except for vocabulary. The vocabulary test is designed specifically for Turkish learners of English.

Figure 8
Test Your English Feature



Many videos that provide much information (e.g., phonetic transcription, part of speech, definition, model sentence, and articulation of the model sentence) about common English words are also displayed on the web-based version of the dictionary (Figure 9). More videos are available on the dictionary's YouTube account.

Figure 9
Videos by Tureng



Another feature available on the website is NC word of the week that shows the target item's meaning in English and Turkish, along with its definition in English (Figure 10). The words are visually supported and demonstrated weekly. Additionally, NA words and phrases can be seen on the website (Figure 11). Upon the addition of novel items, the words and phrases change. Users are also provided with a list of the apps by Tureng and their links to the App Store and Google Play. At the bottom of the webpage is another feature that allows users to send a message to the administrator by only typing in their name and email address.

Figure 10

Newly Coined Words Feature



Figure 11

Newly Added Words Feature



3. Technological Features

The web-based version of the dictionary is easy to access (<https://tureng.com/tr/turkce-ingilizce>), and the mobile versions can easily be installed via App Store and Google Play, which are visible on the website (i.e., AbT). Both web and mobile platforms are compatible with OS/Browser versions, iPhone, Android, iPad, Windows 10/11, and macOS. It is also easy to navigate through the features on the web and mobile versions, and the features are illustrated in Figures 1-11. AbT and Wtu are also esthetically good. Users can easily operate both versions thanks to the user-friendly interface. Every feature is visible and accessible in the OD. Online help is not available for either version, but users can contact the administration through Wtu. The colors and fonts used in the OD are pleasing to the eye, and the audio quality in the accents, YouGlish videos, GoW videos, and VbT are of high quality. The graphics used throughout the website and mobile apps are also colorful and have high resolution.

However, the website fails to fulfill the requirements of currency (or timeliness) referring to how current the information on the website is (Metzger, 2007). Users, according to Ball and Bothma (2018), should be informed about the updates in the dictionary's content. This, in fact, is partly available on Tureng under the NA words, but there are no dates indicating the updates or changes. Another technological limitation might be the lack of filters for

categories available on the website. That is, users are unable to filter their queries based on categories such as automotive and common usage. This contradicts the information structure, advanced search features, and filtering, which are the qualities sought in the design of ODs (Ball & Bothma, 2018). The third limitation is concerned with the links available on the website. The external links to *Tureng Windows/MacOS Applications* do not work, which contradicts the usability principle of ODs provided via links (Ball & Bothma, 2018). Similarly, the list of resources exploited in the dictionary's design includes references but without clickable links.

4. Pedagogical Features

Despite primarily providing dictionary service and serving a facilitative role, the Tureng dictionary also presents instructional tools such as YouGlish, WoD, IoW, GoW, TyE, VbT, and NC words (or neologisms). In addition to the mainstream accents (e.g., AmE and BrE) of the languages (e.g., English) available that supply users with the pronunciation samples of the words typically found in dictionaries, the Tureng dictionary also allows users to access numerous videos via YouGlish, where they can hear the word pronunciations in context from both native and nonnative speakers. One advantage of this feature is that it provides captions under videos where users can see the query items highlighted. It is further possible to pause, rewind, replay, and skip videos. Earlier studies revealed that English language learners from various linguistic backgrounds and diverse educational contexts usually prefer mainstream accents such as AmE and BrE (McCrocklin & Link, 2016; Kung & Wang, 2019; Mısırlı & Gürbüz, 2021). Therefore, the provision of these accents in the dictionary might be considered a plus. Additionally, YouGlish was found to be effective as a potential tool for pronunciation lexicographers (McCarthy, 2018), progressing in oral skills by way of word usage (Fu & Yang, 2019), improving mispronounced words (Kartal & Korucu-Kis, 2020), and teaching word stress (Sardegna & Jarosz, 2022). Furthermore, YouGlish might be claimed to facilitate vocabulary learning since it provides audiovisual input and a contextualized learning environment. The integration of YouGlish into the dictionary is, therefore, a distinctive feature of the Tureng dictionary.

WoD might be used as an effective strategy to teach learners to sustain and control their attention (Rueda et al., 2005; Kliegel et al., 2006). WoD also supplies learners with vocabulary exposure and uses and engages them in their learning journey (Vesely & Gryder, 2009). Repeated exposure to words via WoD might help increase learners' reading and speaking vocabulary (Aase & Sagvolden, 2006). In this sense, the WoD feature of Tureng might contribute to vocabulary awareness and knowledge. As Abrar-Ul-Hassan (2010) states, WoD might assist learners with the development of lexical range through self-regulated endeavors.

IoW is another feature on the OD. Language learners are very likely to encounter idiomatic expressions in printed or multimedia or daily conversations (Alrishan, 2015), forming the underlying reason for teaching idioms and the requirement for idiomatic awareness. The pedagogical benefits that might be derived from learning idioms are also manifold, ranging from the enhancement of grammatical, etymological, lexical, and syntactic knowledge to the knowledge of communicating meaning through idiomatic discourse (Liontas, 2017). In this regard, the IoW feature of Tureng might be claimed to contribute to learners' idiomatic awareness in case of its continuous use.

A selection of videos from the Instagram accounts on language education is shared weekly on Tureng. Considering the content variety in these videos ranging from grammar

explanation to the use of idiomatic expressions, it might be asserted that learners are likely to gain linguistic and pragmatic awareness and knowledge. In other words, the video-enhanced input learners receive via GoW might assist with the development of linguistic (e.g., grammatical, lexical, semantic, and syntactic) and pragmatic awareness. A previous study found that it is beneficial to increase learners' ability to perceive implicatures by presenting them with contextually relevant input via video employing pragmatic education approaches (Derakhshan & Eslami, 2020). Also, the positive effects of videos on grammar and vocabulary instruction were reported in earlier studies (Secules et al., 1992; Cintrón-Valentín et al., 2019). It must also be noted that some videos include explanations in Turkish, suggesting that Turkish learners of English benefit pedagogically (i.e., facilitation of grammar and vocabulary learning) due to the effect of the native language (Mohebbi & Alavi, 2014).

An assessment feature is also available on Tureng by giving immediate feedback on learners' performance in vocabulary, synonyms, antonyms, grammar, true/false, and listening tests. To state it differently, Tureng provides both linguistic (i.e., grammar and vocabulary) and nonlinguistic focus (i.e., general knowledge) in the form of assessment. Given that students can learn from (i) "the opportunities which arise during the tests for developing what they know and what they can do" and (ii) "the feedback which they receive after the test, both from their reflection..." (Tomlinson, 2005, p.39), this assessment feature might create potential learning opportunities for learners in relation to vocabulary, grammar, and listening. Additionally, students' chances to learn better are enhanced considering the forward effect of testing, in which testing the previously taught materials facilitates subsequent learning (Lee & Ahn, 2018). Furthermore, learners have a great chance to develop lexical knowledge and awareness thanks to the synonym/antonym practice in the TyE feature. This claim restores credibility as earlier studies supported the teaching of vocabulary by emphasizing lexical connectedness (i.e., the ways words are related to such as synonyms and antonyms) (Fisher & Blachowicz, 2005). Last but not least, two listening options present learners with a platform to practice and self-assess similar-sounding words by listening to their pronunciation in AmE and BrE or by listening to both options and selecting the correct pronunciation of the target word. Kang and Kermad (2015) argue that one of the facets of classroom-based pronunciation assessment is a perception that also encompasses listening discrimination. Additionally, Baker (2014) reports the use of listening discrimination activities by language teachers to help learners develop comprehensible speech. Furthermore, the English varieties (i.e., AmE and BrE) included in the exercises are greatly preferred by language learners (Rindal, 2014) and are mostly included in language teaching materials (Rose & Galloway, 2019). Even such mainstream varieties are claimed to be more understandable than nonnative varieties (Ambele & Boonsuk, 2021), which might benefit learners in listening assessment.

Tureng also displays animated videos that provide information about common English words, such as definition, meaning, and model sentences in written and auditory forms. Peters (2019) found that students have increased chances to learn vocabulary through audiovisual input. Also, Teng (2020) reported that learning vocabulary through captioned videos facilitated the acquisition of vocabulary in terms of form, meaning, and use. Considering that the videos provided via VbT are rich in audiovisual input and include captions, the academic profits mentioned might also be valid for Tureng users.

NC words are another feature available on Tureng. According to Cook and Stevenson (2010, p. 129), newly formed terms pose challenges for natural language processing systems since they are not in the system's lexicon and hence lack lexical information. Al-Melhi and

Busabaa (2022) investigated the learners' levels of awareness, knowledge, and use of newly-coined pandemic-related vocabulary, suggesting that the frequent use of these lexical items contributed to their recognition and comprehension. Considering that NC words contribute to cultural understanding (Rets, 2016) and hence the importance for vocabulary learning, this feature of Tureng might promote learning neologisms since they are visually and textually supported and auditorily when clicked on the image.

Notwithstanding the pedagogical opportunities for learners, the Tureng dictionary has some downsides. The first consideration concerns the results obtained following a query. Users are presented with many words and phrases, among which they must choose. This means that only advanced-level users might benefit from the dictionary by themselves, and users with a lower level of proficiency might need the guidance and support of more knowledgeable others. This, however, does not necessarily mean that advanced learners can enjoy maximum benefits due to individual learner differences. Similar to the first one, another concern about the dictionary is the lack of contextualization of the results. That is, the obtained results after a search are not presented with contextual use, albeit the indications of categories. This leaves users with vagueness regarding the pragmatic use of the lexical items. A third downside might be the absence of proficiency levels (e.g., A1 through C2) that pertain to the words in accordance with the Common European Framework of Reference (Council of Europe, 2001). This might be misleading for learners to find the words appropriate for their proficiency levels and useless for teachers who wish to create specialized wordlists. Last but not least, lack of customization is another drawback of the dictionary. The subsidiary website of the Tureng dictionary (i.e., <https://youglish.com/>) allows users to open an account and personalize their learning by saving videos or providing additional information on the target lexical items. However, this feature is missing from Tureng.

5. Conclusion

This review evaluated the Tureng dictionary – the most commonly used OD by Turkish learners of English (Baskin & Mumcu, 2018; Yurdagül & Öz, 2018, Türkmen & Can, 2019). The analysis indicated several technological advantages of the dictionary, such as rich audiovisual input and user-friendly interface in both web-based and mobile versions. A few technical hiccups in relation to filtering and links were also reported. The analysis further revealed that Tureng offers potential learning benefits concerning vocabulary, grammar, and pronunciation and contributes to linguistic (e.g., lexical, grammatical, idiomatic) and pragmatic awareness and knowledge by way of its features (e.g., YouGlish, WoD, IoW, GoW, VbT, NC, and TyE). Pedagogical constraints are also present, for instance, the appropriateness for only advanced users, lack of contextualized use of words, a lack of proficiency levels of query items, and the customization of learning. Overall, the Tureng dictionary is considered to offer a lot in terms of academic benefits. However, experimental studies are necessary to corroborate the analysis findings in this review.

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Appendix A

List of Abbreviations

Abbreviated form	Corresponding definition
OD	Online dictionary
ODs	Online dictionaries
WoD	Word of the day
TN	Trending now
IoW	Idiom of the week
GoW	Guest of the week
TyE	Test your English
VbT	Videos by Tureng
NC	Newly coined
NA	Newly added
AbT	Apps by Tureng
Wtu	Write to us
AmE	American English
BrE	British English

Appendix B

Product at a Glance

Product Type and Title	Reference – Tureng: The multilingual dictionary
Producer Details	Tureng Dictionary and Translation Ltd. https://tureng.com/en/turkish-english Contact: tureng@tureng.com
Language(s)	Turkish, English, French, German, Spanish
Level	Starter (A1) to Advanced (C2)
Activities	Grammar, Listening, Pronunciation, Vocabulary
Media Format	Downloadable mobile (iOS, Android) application and website
Operating System(s)	Mobile: iOS 12.1 or later, iPadOS 12.1 or later, macOS 11.0 or later and a Mac with Apple M1 chip or later, Android 4.1 or later Computer: web-based; the latest version of Chrome, Firefox, or Safari recommended
Hardware Requirements	Suitable for most smartphones and tablets
Apps by Tureng	Tureng iPhone Application, Tureng iPad Application, Tureng MacOS Application, Tureng Vocabulary Notebook iPhone Application, Spanish Vocabulary Notebook iPhone Application, Tureng Android Application, Tureng Spanish Application, Tureng French Application, Tureng German Application, Tureng Vocabulary Notebook Android Application
Documentation	None
Price	Mobile applications and websites are free of charge, but there are in-app purchases available to remove ads. Monthly Subscription £4,99 Annual Subscription £39,99