

[Software Review]

Quizlet: Promoting Learners' Content Literacy

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Abstract

Quizlet (<http://quizlet.com>) is a web-based educational and mobile application platform that allows users to create educational content, share it with others, and practice studying free or premium content in multiple formats. The purpose of this review is to investigate the Quizlet app from a content literacy viewpoint. Despite the few limitations found while reviewing the website and mobile application, Quizlet still offers numerous strong features that are beneficial for learners as well as educators in promoting content literacy.

Keywords: Quizlet, App Review, Content literacy

Application Details	
Publisher:	Quizlet Inc.
Product type:	Web-based and Smartphone Application
Language(s):	Multilingual
Level:	Any
Media format:	APK/IPA (Text, Audio, Image, and video)
Operating systems:	Quizlet website, iOS, and Android
Hardware requirements:	Smartphone or Computer/ Online access & Offline (Premium)
Supplementary software:	None
Price:	Free / Quizlet Go (\$2.99/month) / Quizlet Plus (\$3.99/month)

Introduction

Content literacy is defined as “the ability to use reading and writing for the acquisition of new content in a given discipline” (McKenna & Robinson, 1990). In other words, acquiring content knowledge requires a variety of skills. These skills involve learners practicing checking comprehension, establishing goals for reading, and activating prior knowledge (Chauvin & Theodore, 2015). In content learning, learners are exposed to verbal, visual, and other forms of representations related to a particular area such as science, math, and medicine. In addition, rather than isolating language learning from academic content, tasks that are developed based on meaningful content can increase

learners' opportunities to gain academic language proficiency while learning a language (Egbert & Shahrokni, 2018). Reading skills contribute profoundly to the development of content literacy. Thus, the lack of reading proficiency in subject-dense texts could hinder the development of acquiring new content in all academic areas (Lee & Spratley, 2010; Shanahan & Shanahan, 2008; Snow & Moje, 2010; Spires et al., 2016). While investigating the usefulness of a reading engagement intervention that focuses on content literacy, Kim et al. (2021) found a positive and significant effect of vocabulary knowledge depth as well as reading comprehension in the modal of reading engagement (MORE) intervention. Thus, aiding learners to develop new knowledge in content areas not only helps in making a meaningful connection but also advances knowledge acquisition.

Content literacy can aid in enhancing language learners' motivation and increase their academic vocabulary. Cunningham(2017) noted that when introducing new tools, educators need to focus on training strategies and skills to motivate and guide learners towards autonomy. Thus, when investigating educational tools, learners and educators need to look for capabilities that these tools can provide in advancing learning. Therefore, the purpose of this review is to investigate the Quizlet app from a content literacy viewpoint. The following section presents a detailed description of the features and capabilities of Quizlet when accessed through the website as well as the mobile application.

Detailed description

Quizlet (<http://quizlet.com>) is a web-based educational and mobile application platform that allows users to create educational content, share it with others, and practice studying free or premium content in multiple formats. Quizlet was released to the public in 2007 and allows users to navigate the website using 16 different languages. Quizlet platforms provide access to multiple devices connected to the internet as well as through downloading the application from the app stores for IOS and Android smartphones. Users can access many free educational materials with some limited features compared to *Quizlet Go* and *Quizlet Plus* memberships. *Quizlet Go* provides users to have extra offline access and ad-free studying with all the features of the free version. *Quizlet Plus* offers many other features such as customizing images and audio, personalized study paths, progress insights, and smart grading. Quizlet offers multiple free educational sets for users to adapt in several fields such as languages, science, art and humanities, social science, math, and others as shown in Figure 1.

Figure 1

Browse Educational Categories

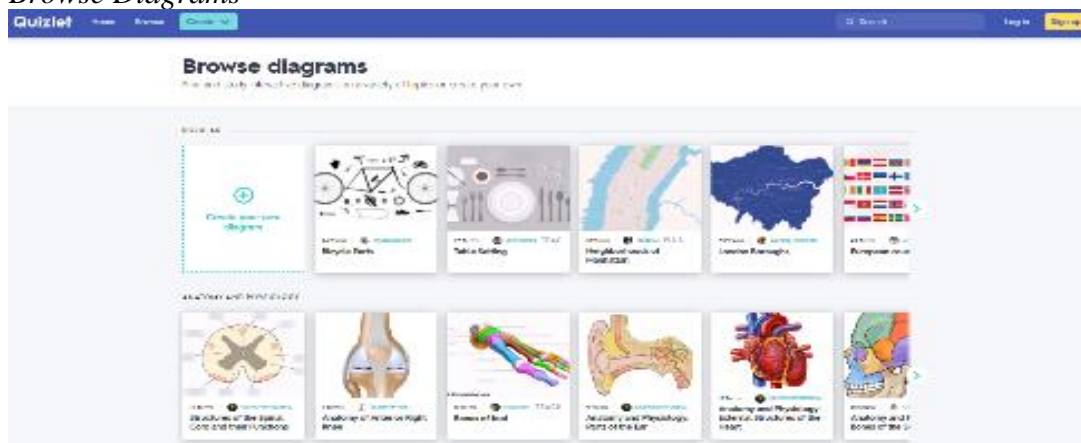
Browse			
	Languages	English French German Latin	Spanish View all
	Science	Biology Chemistry Earth Science Physics	Space Science View all
	Arts and Humanities	Art History Dance Film and TV Music	Theater View all
	Math	Algebra Applied Math Calculus Geometry	Discrete Math View all
	Social Science	Anthropology Business Economics Political Science	Psychology View all
	Other	Computer Skills Sports View all	

Learners can navigate and choose from these fields by browsing the categories or using the direct searching feature. In each of these fields, learners can choose from many open-access materials designed by other users for studying and testing. While Quizlet requires users to register to create folders and study sets, browsing user-created materials does not require email registration. Quizlet offers many other features that support learning such as *Quizlet Live*, *Quizlet Learn*, *Flashcard*, and *Diagrams*.

Quizlet Live is a collaborative classroom game that allows users to play remotely in teams and individuals mode. Users can practice this feature by joining live rooms or by accessing through a QR game code provided by their instructors. *Quizlet Learn* provides customization for learners that need to practice and master specific material. This feature help learners to select a period they need to learn materials by or prepare for a test. The mobile app will send notifications with an adaptive study plan for practicing. In addition, *Quizlet Learn* uses machine learning that recognizes learners' patterns while studying that help adjusting the difficulty levels as well as the information they needed to learn. *Quizlet learn* provides progress updates and study reminders to aid in completing the study plan.

Quizlet is popular for its flashcard feature that allows users to import, create, and customize new and existing study flashcards. Flashcard feature offers an archive of millions of flashcard decks designed and shared by others for studying. Users can explore free online flashcards in many subjects and practice memorizing vocabulary, anatomy, or equations. Also, Quizlet offers customization of interactive diagram-specific activities. Learners and educators can easily create their own or browse a variety of topics to help them study as shown in Figure 2.

Figure 2
Browse Diagrams

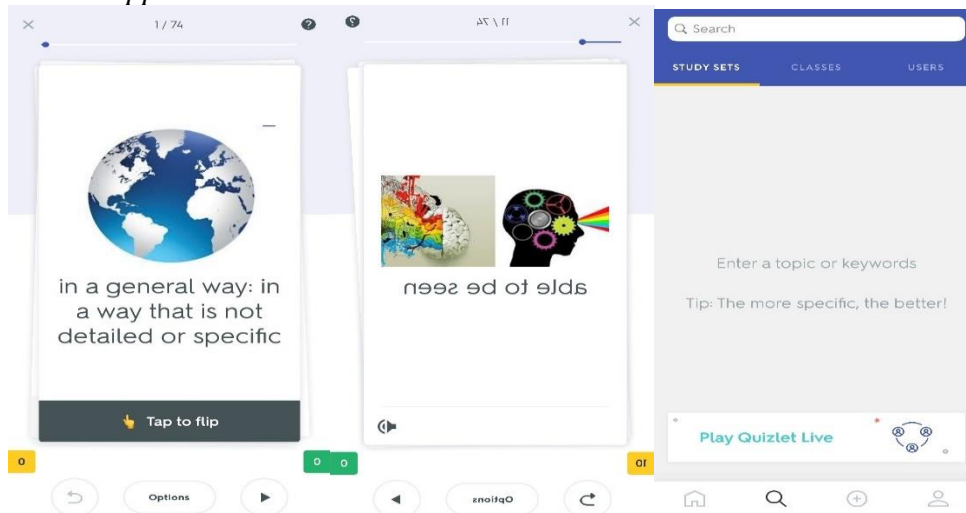


Users can make annotations with interactive diagrams, add new information, and customize them to fit their study plans. In each feature, the Quizlet platform includes tutorial videos on how to design your study set using flashcards and diagrams.

Learning with Quizlet allows users to approach materials using multiple sets. With each study set, users can have several options to practice and design their materials. These options can be viewed as flashcard practice, typing answers, spelling, matching games, and as a test format. Questions can be also formed using True/false, multiple-choice, written, and matching. Mobile app users can practice flashcards quizzes using multiple

steps. For instance, learners can tap the flashcard using their phone to view the reverse side for more explanation. Also, learners can swipe left to continue studying the card or swipe right to mark it as known, shown in Figure 3.

Figure 3
Mobile App Flashcard



The screenshots shown in Figure 3 were captured from the mobile application view where it allows users to access the same sets saved in their library to study remotely. The following section takes the features presented above and review them to point out potential strength and weak points when using Quizlet.

Evaluation

The evaluation section addresses the strong as well as the weak features viewed while using the Quizlet website and mobile app. The evaluation process focuses on four content literacy criteria developed based on the definition of McKenna & Robinson (1990) and incorporates other technological features of Quizlet. The initial review process showed that the Quizlet website and mobile application allow users to use reading and writing to create and access materials in various content areas.

First, the Quizlet website and mobile app provide users with reading to learn new content. As shown in figures 1 & 2, learners can select to read educational sets from various fields to develop content knowledge. Reading materials provided in science, math, geography, and medicine play a significant role in the development of content literacy. Although Quizlet offers short passages in the educational study sets, they are beneficial for reading and content comprehension. Moreover, Quizlet provides access to many generated flashcards in different content areas. This feature does not only serve as another language-learning opportunity but also provides learners to develop content knowledge which makes it meaningful and authentic. One of the disadvantages found after browsing generated study sets for language learning is the number of mixed results. For instance, in language learning, Quizlet does not offer refining results for proficiency or grade levels. This aspect can be time-consuming for users to scroll down hundreds of pages to find

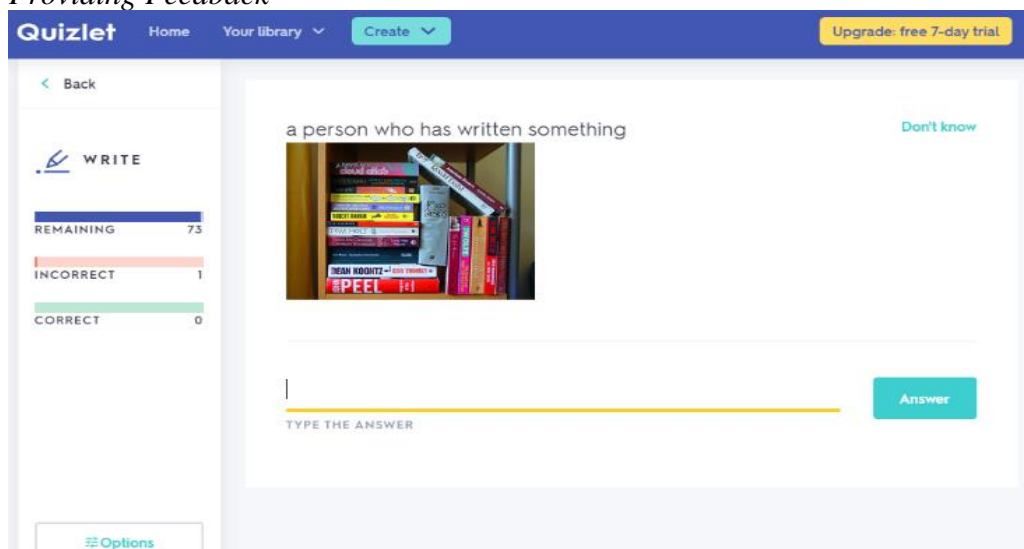
their desired study set. The issue could be solved by adding more categorizing features that users can apply to sort the number of outcomes for better results.

Second, Quizlet provides users with writing opportunities in various disciplines to learn new content. Quizlet offers a variety of content areas as shown in Figure 1 allowing learners and teachers to select and build meaningful tasks that fit their interests. For instance, playing the *Quizlet Live* feature can motivate learners to communicate in the learning process and have an opportunity for social writing. Learners can collaborate to write definitions that fit the terms and vice versa. This feature aid learners to interact, learn, and write using content-related topics with others. Moreover, the *Quizlet learn* feature aligns with the content literacy criteria by supporting learners to utilize reading and writing to acquire new content. For example, *Quizlet Learn* uses machine learning that identifies users' patterns while practicing study sets to adjust the difficulty levels. This is an essential feature in an educational technology tool to help scaffold learners by providing appropriate content knowledge for their levels.

Third, Quizlet provides users with opportunities to learn content vocabulary. Quizlet is a great tool used to develop vocabulary learning through flashcards. It supports visual and content learning by incorporating flashcard games as well as diagrams in studying and practicing. For example, Quizlet allows users to build a class to assemble study sets and share them with others. This feature can benefit learners to construct autonomous learners by sharing and joining multiple classes in various fields. Technology tools such as Quizlet emphasize content learning that is important for learners not only to memorize the information presented but also to create a motivating and authentic learning environment. Quizlet is a user-friendly website to navigate through course sets, designing course folders, or joining a classroom. Easy navigation is one of the most critical aspects that learners, content designers, and teachers need to see in an educational platform.

Fourth, Quizlet provides users with ways to check comprehension of new content. Effective scaffolding and feedback are essential elements for content comprehension and language learning. For instance, Quizlet offers a learning assistant to track progress while studying across study modes providing essential scaffolding as shown in Figure 4.

Figure 4
Providing Feedback



Quizlet offers smart grading in the learn and write modes which provide instant feedback, evaluate understanding, and repeat what requires more learning. Feedback feature is essential in educational technology tools to support tracking learning progress and vocabulary retention. Another feature Quizlet offers that could promote scaffolding and content comprehension in learning is the “spell” feature in practicing flashcards. The feature allows users to type while listening to the pronunciation of a word or definition at various speeds and get automated feedback which is vital in content literacy advancement and checking comprehension.

Quizlet offers numerous strong points and a few limitations found that could be considered for future updates. For instance, the Quizlet platform provides no access to third-party applications that can add more content creation and design development. Also, the Quizlet mobile app and website do not provide access to the Microsoft Word software or other commonly used applications for easy content access. Quizlet does not allow users with free access to download study sets on computer devices and the mobile app for offline practices. However, the premium versions *Quizlet Go* and *Quizlet Plus* provide access to practicing study materials offline. Also, the offline feature allows users to sync their study data from the website to the mobile app and vice versa which makes it accessible when studying remotely or using multiple devices. In addition, Quizlet does not require signing up for viewing user-created materials and browsing. This feature is an advantage to allow users to navigate through the website materials before signing up. Quizlet does not support video uploading in the study sets which could hinder the design of some course activities. Thus, including videos may be motivating for learners and content learning. Overall, Quizlet appeared to be helpful, user-friendly, and provide rich content and features that line up with content literacy criteria.

Conclusion

To sum up, the evaluation of the Quizlet website and mobile application showed essential features in promoting content literacy. Quizlet evaluation showed that the app provides the ability to use reading and writing to learn new content. Also, Quizlet provides opportunities to support vocabulary learning and content knowledge comprehension. Despite the few limitations, Quizlet still offers numerous strong features that are beneficial for learners and educators. Allowing users to choose from existing materials, adapt, and create new study sets is vital in educational technology tools. Combining multilingual materials and various study fields is essential for language and content learning. Even with the many free features, the Quizlet premium memberships provide additional helpful features. Lastly, this review paper can be useful for learners to explore the features of Quizlet and for teachers to evaluate what Quizlet could provide as an educational tool.

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