

# The Effectiveness of Kahoot, Quizlet, and Flipgrid in Online ESL Teaching

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# Abstract

The use of online tools is growing, be it out of necessity due to world events or just the gradual increased use of technology in daily lives. This growing trend in daily life also necessitates the use of online tools for learning. Generally, students are exposed more and more to technology at an increasingly younger age. Their technological literacy and the fact that they use technology in their daily lives means teachers need to begin using it more too. This paper reviews three of the most well-known online tools that allow for education online, with those tools being Kahoot, Quizlet, and Flipgrid. While these tools are known, many educators are not aware of their effectiveness and see them more as games or time-wasting activities rather than actual tools for increased learning. This literature review highlights these tools, each in their own individual context. It looked at their effectiveness as pertains to current teaching trends and language acquisition. This review specifically looked at all these factors in the ESL context. Studies found that Kahoot and Quizlet achieved positive results and language acquisition by using the tenants of gamification to engage students and create motivation through social and competitive benefits and at the same time being enjoyable for students, while Flipgrid, still using enjoyment, but in the pure context of social interaction, arrived at the same positive results.

Keywords: Kahoot, Quizlet, Flipgrid, ESL classroom, gamed-based learning



### 1. Introduction

Through the continuance of the information age, the medium of education is beginning to shift from an in-person classroom organization to a number of online platforms. This is a result of both an increasing reliance on technology and electronics, as well as world events, most notably the COVID-19 pandemic. This shift did not begin with education, but it was preceded by other aspects of life including media consumption, social interactions, and business. With social interactions, one fear held by many is that interactions moving into the online sphere has in turn had the opposite effect and made people less social. Online interaction can harm well-being and reduce sociality if it displaces in-person connections (Lieberman & Schroeder, 2020). This reduced sociality, while being harmful for relationships between people, also bleeds into education, particularly the field of English as a Second Language (ESL).

At the very basic level of ESL teaching, developed and exported by professional organizations such as Cambridge, teacher-centric classes are discouraged and student-centered learning is deemed superior in the retention and learning of English, particularly when students are producing language. In order for student-centered learning to occur, students must be able to communicate effectively with each other. In a normal classroom situation, this interaction is easily created. However, being online often restricts these kinds of interactions and leads students to be more passive in their language learning, exchanging conversation, games, and activities for worksheets, videos, and lectures. This stands opposed to modern ESL teaching trends. This creates a need for the social interaction that was once found naturally in a classroom to be replicated online. Three tools that have been shown to recreate the desired social interactions are Kahoot, Flipgrid, and Quizlet. The effectiveness of these tools were measured by their ability to achieve student-centered learning as well as the language goals set by a lesson. This paper sought to look at current research surrounding Kahoot, Flipgrid, and Quizlet and look at how the studies viewed and analyzed the effectiveness of these tools and their viability within ESL teaching.

#### 2. Background

This paper looked at the three tools of Kahoot, Quizlet, and Flipgrid. To understand the effectiveness of these tools, what these tools are must first be understood.

Kahoot, normally stylized with the exclamation point, is an online learning tool that was founded in 2012 and released in 2013. It takes the general quiz format and turns it into a competition and uses other stimulating elements such as graphics and sound in order to make what was once a monotonous quiz into a "game". It is suitable for use in both an online and face-to-face setting. Kahoot operates in a two-tier system, with one tier being free to use and one tier being paid. For the purposes of this literature review, focus will be put on the free version as that is the most accessible to the average teacher.

Quizlet was founded in 2005 and made available to the public in 2007. It is another example of an online learning tool, albeit more suited for face-to-face situations that are able to use technology. This review, while analyzing Quizlet as a whole, put some focus on the Quizlet Live feature. This feature allows for ESL students to work together in order to match vocabulary to the meaning; meanings and vocabulary words are placed throughout the phones of the group, and they must work together to get the answers and win the "game". Besides the Quizlet Live feature, Quizlet can be used online, and it is not necessary for it to be only face-to-face. The main use for Quizlet is to learn vocabulary.

Flipgrid is the last online tool that was analyzed in this review. It was originally launched in 2014. It is mainly for use in classes that are fully online. A topic is presented, generally through video format but also through text, and students record videos pertaining to the topic. These videos can be viewed collectively and responded to by all involved. This helps to facilitate communication, conversation, and presentations in



an online setting. This tool is the only one out of the three with very little use in a face-to-face setting, as the recordings become unnecessary.

This paper reviewed studies about Kahoot, Quizlet, and Flipgrid to determine a consensus on the effectiveness of online tools in ESL. These three tools were chosen for their notability and that they each carve out a different area within online learning; Kahoot being viable both online and offline, Quizlet operating more in face-to-face settings, and Flipgrid being totally online. In regards to effectiveness, the papers looked at the satisfaction of both students and teachers. The papers also looked at student interaction not just with the tools but how the tools facilitate interaction with other students. Current ESL trends put the upmost importance on student-centered learning, and the purview of this paper was to see how the tools operate in this trend. While these tools are often used with other academic disciplines, papers used for this review didn't only pertain to ESL. This paper also focused on more recent publications about the three online tools, focusing specifically on research done within the last five years, as the tools are used more year on year due to technology being more integrated with daily lives and also events like the COVID-19 pandemic. ESL was used in this paper as a catchall phrase in regards to all English language learning, and not narrowly looking at those specifically within ESL. This includes EAL (English as an Additional Language), EFL (English as a Foreign Language), as well as others.

#### 3. Online Tools

#### 3.1 Kahoot

As anyone who has interacted with children knows, they love games. This fact is what makes them so useful as a learning tool. Games help motivate the students to gather data, give themselves tests about their own knowledge, look for feedback and advice, come to conclusions and make generalizations so that their knowledge is used later. Kahoot is one of the most visible and used online learning tools that utilizes the game structure in order to achieve learning outcomes. Kahoot involves different aspects of both gamed-based learning and gamification to achieve these outcomes. Licorish et al. (2018) distinguished gamed-based learning and gamification techniques as follows: game-based learning is a pedagogical approach that involves incidental learning via games to accomplish educational outcomes, whereas gamification techniques refer to methods that engage students in intentional learning through a non-gaming system that integrates game elements. By utilizing both of these ideas, Kahoot creates a functioning and effective study tool. This is not just limited to children, as learners of all ages can benefit from the gamification of their learning tools.

This gamification aspect also leads straight into the idea of motivation. Singh et al. (2021) found that lessons from teachers did not achieve their goals without the proper motivation given to the students, and that Kahoot helped to deliver that motivation. Students could fail to achieve learning objectives by not wanting to find the answers due to the material being inappropriate or the student not having the ability to answer the questions. Through gamification, motivation was indirectly created, not through just a desire to learn the objectives, but to win a competition and work within the social aspect of the game. Kahoot created that motivation directly through gamification, and the result was English being learned. This notion was reinforced by Mohd et al. (2018) whose own research found that the creation of motivation was seen through auditory and visual cues such as discussions, animated expressions, and active participation which were all exhibited by students during their study.



Kahoot benefits from being an online tool. Students are spending more and more time online. General observation tells us that people of all ages, especially teenagers, use their phones and the internet near constantly. This shows that teenagers nowadays are comfortable with technology and this trend will continue. Students who are digital natives reap innumerable benefits from being online, and taking surveys or quizzes via Kahoot is a multimedia activity even though it involves assessment (Chiang, 2020). Using the medium that students are comfortable with allows them to continue their learning in the online sphere.

In terms of increasing interaction between students, Kahoot has also been shown by current research to be effective in getting students to interact. The program is mostly used for activities that resemble quizzes and surveys. In a traditional sense, these activities are mostly individual; students have their own paper and fill out the answers in silence by themselves. Kahoot allows the students to have more interaction. In an inperson classroom setting that uses technology, students can laugh, participate, and have fun with each other taking a 'quiz' that much resembles the stoic paper version of old. In a full online setting it also allows for more interaction between students as they can see each other's answers and respond in real-time, all the while keeping the frame of the multiple-choice 'quiz'. It is this increased ability to interact that embodies the student centered approach wanted by professional ESL teachers. While embodying that pedagogical approach, it also allowed the students to have fun, which in turn leads to more learning (Wang & Lieberoth, 2016). Many articles have reported that most students realized that Kahoot had improved their selfmotivation and increased sense of fun in the classroom (Bicen & Kocakoyun, 2018; Ismail & Ibrahim, 2018). This "fun" aspect of the tool has been proved to help students retain the information conveyed in the Kahoot competitions, leading it to be considered highly effective. It is also worth noting that this retention is not exclusive to already well-performing students but, as seen by Sukri et al (2020), students of all academic levels had improved performance in English classes due to Kahoot.

### 3.2 Quizlet

Also operating around the tenants of gamed-based learning and gamification is another popular online tool called Quizlet. Quizlet has many tenants similar to Kahoot but differs in a few important but fundamental ways. While Kahoot focuses on activities such as quizzes and surveys, which can help to teach and assess multiple facets of language, Quizlet focusses mostly on vocabulary. Vocabulary is taught on Quizlet through digital flashcards and other forms of individual self-assessment as well as a Quizlet Live activity that allows for group interaction.

While offering less total interaction than Kahoot, and Quizlet being able to be done with individual practice, it still promotes social interaction between students through Quizlet Live. Ursic (2017), described Quizlet live as having students, each equipped with a portable electronic device on which only some of the possible answers are displayed, that are divided in teams of three or four players and compete with the goal of being the first team to answer all of the 12 questions correctly. The desired combination of quickness and accuracy results in a lively class environment, and the students are kept engaged by working together and competing. This format necessitates teamwork and forces the students to have social interaction. This interaction continues student-centered interaction as the students have to help each other to find the answers and use each other's knowledge to complete the vocabulary tasks. Ursic (2017) went on to state that the material can appeal to any educators interested in gamification and determined to maximize students' learning in a collaborative and engaging class environment, an opinion which is also echoed by other studies. To reiterate the previous point about Kahoot, this fun and competitive aspect of the tool enables retention of the vocabulary, thus attributing to the effectiveness of Quizlet.

While Quizlet does provide student-centered learning and social interaction for students in an online setting, the most useful part of Quizlet, the Quizlet Live tool, is most often used as in-class technology rather than fully online technology. This is in contrast to Kahoot which can operate in both areas. In a fully online setting, Quizlet is often used mainly with individual students drilling vocabulary (Cunningham, 2017). Authors have shown when used as an online form of technology in the classroom, Quizlet does prove effective. Muthumaniraja (2019) compared the results of two terms, one using a traditional method of



vocabulary review and another using Quizlet Live; the term with Quizlet Live showed a marked improvement in student scores and ability to retain the language.

The other tried and true way Quizlet achieves effectiveness is through the repetition of going through flashcards, as shown a study by Cunningham (2017) which focused on this aspect and how it led to study autonomy, but this does not follow the student-centered approach that this review focused on. Therefore, studies that focused purely on this aspect of Quizlet were not consulted. However, many studies focused on multiple aspects of Quizlet. One such study was that of Houghham (2019) which, while finding match to be the most popular aspect of Quizlet for his group surveyed, assumingly due to the ease and quickness of use of the feature, still found Quizlet live to be extremely effective and helpful for students, as evidenced in his study by high quiz scores.

#### 3.3 Flipgrid

In contrast to Kahoot and Quizlet, both of which mostly use a text on screen interface, Flipgrid uses video recordings for students to practice their speaking. Flipgrid takes advantage of asynchronous videos made by students, giving the learners as much time as required to practice speaking without the stress of having to perform in front of peers and give a prompt response. Being a video and speaking based program, Flipgrid naturally makes the students the center of the lesson. It was also found that students were more comfortable in attempting the language of the lesson because they felt that there were in an environment considered to be non-threatening. It also allowed students to easily work within the framework of Think Pair Share (TPS). TPS is what creates this non-threatening environment and allows the students to think and plan the ideas for their speech, pair up and practice, and finally share their speaking with the teacher or class as a whole (Budiarta & Santosa, 2020). Students are also able to listen and respond to other students at their own pace, keeping the benefits of less tension and thus increasing the type of varied language used by students. Not only was their language improved but there was also an increased enthusiasm exhibited by the students when they had this kind of TPS coupled with Flipgrid (Budiarta & Santosa, 2020). These positive benefits speak volumes to the usefulness of Flipgrid.

Flipgrid operates fully online. This differs from Kahoot and Quizlet, both of which could to some degree be used online and off. The studies reflect this; some like Mango (2019) emphasized that Flipgrid provides an online video-mediated discussion platform that facilitates learners to communicate with each other through video messages that they can share with their classmates, the teacher, and possibly other learners around the world, while Tuyet and Khang (2020) viewed Flipgrid as an online video-mediated communication tool that allows ESL learners to have more time to practice speaking English outside the classrooms in a comfortable and enjoyable environment. Effectiveness is shown through the students again having fun and thus being able to recall the information, as can clearly be seen in the videos and student responses to other videos. Similarly, Edwards and Lane (2021) also highlighted the fun aspect by notes that the results from their study suggested that students liked having the ability to interact with their classmates and learning more about their peers. This was even seen in situations where students were initially thought to be too shy, like in the study by Petersen et al. (2020) in which before the study they had an assumption about the shyness of their Japanese students which was proven to not be a hindering factor as the students were able to publicly show their videos on Flipgrid which not only took away the possible hindrance of shyness but showed that the students had such a command of the subject that they were able to post the public videos for others to see without fear. In a similar way to Kahoot and Quizlet's gamification and creation of motivation, the indirect way of using a desire for social situations among peers led to the achievement of learning outcomes.



#### 4. Discussion

This paper sought to determine the effectiveness of Kahoot, Quizlet, and Flipgrid within the ESL market. Through the research it was quickly discovered that not only were the tools effective, but each carved their own niche and functioned at high levels. The general idea that that online teaching is one dimensional and monotonous was disproved through these engaging tools. The tools also worked through different settings, with some being fully online and others as hybrid, which shows that regardless of the teaching situation technology and online work can be utilized effectively. The findings can be summarized as such:

Table 1: Summary of Usefulness of Kahoot, Quizlet and Flipgrid

Tool	Use	<b>Results of Use</b>
Kahoot	A platform with a reimagined quiz format utilizing game-based learning that allows students to demonstrate knowledge in a competitive and fun manner.	Student confidence, participation, and motivation were increased, and students were able to definitively show attained knowledge.
Quizlet	A platform using gamification to teach vocabulary through traditional flashcards as well as a competitive vocabulary matching game known as Quizlet Live.	Student retention of vocabulary was increased, and assessment scores were improved.
Flipgrid	A platform featuring video recordings of students demonstrating target language and a social aspect to the videos allowing for interaction between students.	Students demonstrated increased fluency through being able to record and review the target language. Student confidence also increased as well as interaction.

The usefulness and examination of these tools is extremely important moving forward in the context of advancing technology and events like the Covid-19 pandemic which have moved more and more human activities into the online world. This review only scratched the surface of the online tools available and looked at those which are at the forefront of most teachers' arsenals; many other tools exist and are being developed. It is these researchers' opinion that since the tools analyzed are often used as the foundation for online tools being utilized, that more recently developed tools, in a more technologically advanced environment, will be even more effective than those studied here. Further research could be done on more recently developed tools and would most likely garner impressive results. It should also be noted that limitations do also exist with these tools as pointed out in studies such as that done by Syahrizal and Pamungkas (2021) which noted that students sometimes posted negative feedback to Flipgrid regarding access to data for use of online tools, appropriate equipment for a flawless experience, and worries about originality due to the ability to duplicate internet videos. While this finding was specifically for Flipgrid, due to them being associated with the online aspect and not the tool of Flipgrid in particular, this negative feedback could be applied to all three tools mentioned here and this should be of consideration.



## 5. Conclusion

This research hoped to clarify the usefulness of Kahoot, Quizlet, and Flipgrid, and has used research to outline how to use them in an ESL context. The usefulness and effectiveness of these tools has most likely increased due to the Covid-19 pandemic; however, the research for this paper mostly utilized work from before the start of the pandemic as that was the research most vetted and readily available. Further research can now be done on these tools through their increased use in this context, which would further improve the academic understanding of these tools. The tools outlined are effective, engaging, and essential for the modern-day ESL classroom.

#### 6. References

- Bicen, H., & Kocakoyun, S. (2018). Perceptions of students for GAMIFICATION Approach: Kahoot as a case study. *International Journal of Emerging Technologies in Learning (IJET)*, 13(02), 72. doi.org/10.3991/ijet.v13i02.7467
- Budiarta, I K. & Santosa, M. H. (2020). TPS-Flipgrid: Transforming EFL speaking class in the 21st century. *English Review: Journal of English Education*, 9(1), 13-20. doi.org/10.25134/erjee.v9i1.3824
- Chiang, H.-H. (2020). Kahoot! in an Efl reading class. *Journal of Language Teaching and Research*, *11*(1), 33–44. doi.org/10.17507/jltr.1101.05
- Cunningham, K. (2017). Quizlet For Learner Training and Autonomy. *Teaching English Reflectively* with Technology; A Project of IATEFL's Learning Technologies Special Interest Group in Collaboration with TESOL's Computer-Assisted Language Learning Interest Section, 123–135.
- Edwards, C., & Lane, P. (2021). Facilitating Student Interaction: The Role of Flipgrid in Blended Language Classrooms. *Computer Assisted Language Learning Electronic Journal*, 26–39.
- Houghham, D. (2019). Active Learning and Learner Development with Quizlet: An Action Research Project. *Bulletin of the Faculty of Liberal Arts Hiroshima Jogakuin University*, 1–21.
- Ismail, R., & Ibrahim, R. (2018). Fun Elements in Educational Game Design to Boost Students Learning Experience. *Nali Symposium 2018*, 19–22.
- Licorish, S., Owen, H., Daniel, B., & George, J. (2018). Students' Perception of KAHOOT'S Influence on Teaching and Learning. *Research and Practice in Technology Enhanced Learning*.
- Lieberman, A., & Schroeder, J. (2020). Two social lives: How differences between online and offline interaction influence social outcomes. *Current Opinion in Psychology*, *31*, 16–21. doi.org/10.1016/j.copsyc.2019.06.022
- Mango, O. (2019). Students' Perceptions and Attitudes toward the use of Flipgrid in the Language Classroom. In K. Graziano (Ed.), Proceedings of Society for Information Technology & Teacher Education International Conference (pp. 1970-1973)



- Mohd Muhridza, N. H., Mohd Rosli, N. A., Sirri, A., & Abdul Samad, A. (2018). Using game-based Technology, Kahoot! for Classroom Engagement. *LSP International Journal*, 37–48. doi.org/10.11113/lspi.v5n2.77
- Muthumaniraja, S. (2019). Quizlet® Live for Vocabulary Review. *The Center for English as a Lingua Franca Journal*, 79–92.
- Petersen, J. B., Townsend, S. D. C., & Onaka, N. (2020). Utilizing Flipgrid Application on Student Smartphones in a Small-Scale ESL Study. *English Language Teaching*, 13(5), 164–176. doi.org/10.5539/elt.v13n5p164
- Sukri, S. I. A., Yunus, M. M., Sevakumaran, D., Rajeswari Chandara Kumaran, N. M., & Badusah, J. (2020). Kahoot Does Wonders: English Articles. International Journal of Academic Research in Progressive Education and Development, 9(1), 360–371.
- Singh, C., Ichsan, I., Rahmayanti, H., Yunus, M., Ong, E. T., Singh, T., & Rengasamy, K. (2021). A review of research on the effectiveness of Using KAHOOT to Enhance STUDENTS' motivation to learn english. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 12(3), 201–207. doi.org/10.17762/turcomat.v12i3.657
- Syahrizal, T., & Pamungkas, M. (2021). Revealing Students' Responds on the Use of Flipgrid in Speaking Class: Survey on ICT. *Journal of English Language Pedagogy, Literature, and Culture*, 96–105.
- Tan Ai Lin, D., Ganapathy, M., & Kaur, M. (2018). Kahoot! It: Gamification in Higher Education. *Pertanika Journal of Social Sciences & Humanities*, 565–582.
- Tuyet, T. T. B., & Khang, N. D. (2020) The Influences of The Flipgrid App on Vietnamese EFL High School Learners' Speaking Anxiety. *European Journal of Foreign Language Teaching*, 5(1), 128– 149. doi:10.46827/ejfl.v5i1.3264
- Ursic, A. (2017). Gamification of Vocabulary Learning: A Case Study. *The International Conference on Innovation in Education Proceedings*, *3*, 271–274.
- Wang, AI, & Lieberoth, A (2016). The effect of points and audio on concentration, engagement, enjoyment, learning, motivation, and classroom dynamics using Kahoot!. In Proceedings from the 10th European Conference on Games Based Learning, (p. 738). Reading, UK: Academic Conferences International Limited.