

Revealing Students' Responds on the Use of Flipgrid in Speaking Class: Survey on ICT

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Abstract

Along with the development of the 4.0 era, the use of ICT media is not a new thing in the world of education. Many previous studies have integrated various technology-based media (ICT) with language learning including speaking lessons. One of the platforms that is, currently, being widely used is FLIPGRID. The main objective of this research is to reveal how students respond to the use of FLIPGRID as an ICT-based media that focuses on Speaking. The research method used is qualitative method. The instruments used in this study were questionnaires and interviews. From the results of the study, it was found that there were 26 respondents of positive responses from the accessibility, internet connectivity, psychological fulfillment, the interactive features and 16 respondents of negative responses of students to the use of the Flipgrid application ranging from competitiveness, equipment, and originality. The most positive responses that arise are that this application is easy to use, while the most negative responses that arise are difficulties or the upload process is quite long. It can be concluded that the FLIPGRID application has more positive responses than negative responses, so that this application can be used by teachers and lecturers in the speaking class.

Keywords: *ICT, Flipgrid, Speaking Skill*

INTRODUCTION

The new challenge for all people around the world including Indonesia happen in 2019 due to the strike of Covid-19. This condition crates a major and unique transformation in all spheres of life like in social, economic, politics, labor including education. All government including Indonesia creates new emergency policy to support the continuity of education using certain technological supports and remote learning system to stop the spread of the virus (Zhang, Wang, Yang, & Wang, 2020). Moreover, governments in most developing countries have responded to the challenge by initiating national programs to introduce computers into education (Katemba, 2020). In March 2020 the minister of Indonesia lunched the policy on revitalizing distance learning for all level of education. The main purpose of giving an online learning to give a meaningful learning activity for all students and protect the form the virus (Kementrian Kebudayaan dan Pendidikan, 2020). This objective then initiates the greater use of information and communication technologies, teacher do more exploration on what kind of

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tool that may support the process of learning and give a meaningful learning for students. Before the pandemic, teacher has limited exploration on the tool used, but after the pandemic teacher uses more tools and apps. While teacher exploring various tool, on the other hand, students face a new form of challenges and difficulties, they struggle to get involved in all activity using various technological tools. During the involvement, students face difficulty to engage with all learning processes and it may display behaviors that prohibit them from accessing instruction, have attentional issues distracting them from instruction, or lack the confidence to participate fully in instruction (Rila, Estrapala, & Bruhn, 2019). By this condition This research tries to reveal the students respond on the use of particular ICT tool for teaching called FLIPGRID.

There are various research related to the teacher perception toward the use of technology in learning but the research on what the students responds on the use of particular tools is fairly limited. Besides, in the research from (Bali & Liu, 2018), they mention that students feel online learning is less satisfied compared to face-to-face learning, this condition may be caused by the limited engagement, participation, and comfort. Furthermore, the fact that disclosing the students response is as important as know how effective a particular ICT tools in teaching. Students is the object of the learning, they should able to achieve all the learning objective therefore their participation is crucial.

Besides the challenges that students' face, teacher also have a problem in using ICT in learning such as limited knowledge on what technology best supports specific learning aims and objectives (Petersen, Townsend, & Onaka, 2020). By this conditions, teacher should do more exploration and self-improvement because the fact that ICT can support the teaching and learning process is undeniable. As Ghavifekr, Afshari, & Amla (2012) mention that schools and other educational institutions including teacher are supposed to prepare students to live in "a knowledge society" need to consider ICT integration in their curriculum. In line with this Chapelle (2002) states that utilizing computer technology in classroom is able to enhance students' linguistic input. Moreover, In technology-based procedures, a specific framework is required to integrate technology as a tool to aid learning (Townsend & Cronin, 2017). This explanation shows the urgency on the use of ICT in teaching in order to bridge the students in their knowledge. In conjunction, another study showed that students tend to have a positive attitude towards online learning, especially if the activity promotes student friendliness towards others and it is socially engaging (Dogoriti, 2015). Moreover, Purnawarman, Sundayana, & Susilawati (2016), mention that online learning can facilitate the students to have wider social interaction.

In learning English having speaking skill is important knowledge that should be mastered by the students therefore teacher should help the students to reach that skill. Speaking is a productive skill that may help students and the language user to communicate with other and built their relationships. Speaking skill is the most important skill to acquire foreign or second language learning. Among the four key language skills, speaking is deemed to be the most important skill in learning a foreign or second language (Rao, 2019) (Hutabarat & Simanjuntak, 2019), but speaking also becomes a problem for some students in understanding English they feel difficult and uncomfortable when they have to speak. They are in doubt to express their sentences in English (Inayah & Lisdawati, 2017). In this current situation teacher have many options on what kinds of tool that might use for teaching speaking skill in order to solve the students' problem. Teacher can use any online discussion forum (Abu Bakar, Latiff, & Hamat, 2013), teacher can also use online conference tools, YouTube, TedTalks and others (Curry, 2020). Other tools that majorly used in this era is Flipgrid.

There are several researches related to the use of Flipgrid in teaching; Stoszkowski J (2018), McClure & McAndrews (2016), McLain (2018), (Carrie & Timothy, 2020), (Moran, 2018), all found that Flipgrid has a lot of benefit for the students ranging from young to adult learner. Flipgrid also can be use in many learning subjects such as language, engineering, physics, and many others. Flipgrid is an online video discussion platform designed to empower learners and facilitate social interaction between students (Stoszkowski J. , 2018). Related to speaking skill, McClure & McAndrews (2016) mentioned that Flipgrid was recognized as a low-stakes platform that helped students in their public speaking skills. By this two pervious study we then can see that Flipgrid provides alternatives for students to become more comfortable and easier to share their video in an ever-changing technological world. Other finding on the use of Flipgrid is a study from undergraduate business university students in South Korea which reported that students became more comfortable speaking in English via videos after using Flipgrid over the period of a semester course (McLain, 2018)

In this era of social media, video has become more and more famous, and students are very familiar in using video for attracting their social living. Video response technologies, which are social interfaces allowing people to engage and collaborate with others, have recently gained great popularity (Katemba & Ning, 2018). A specific video response technology, Flipgrid, can be a valuable experiential learning tool, and enables educators to engage students in a variety of learning and assessment activities (Carrie & Timothy, 2020). Moreover, Flipgrid is an online platform that offers students a chance to connect with the instructor and materials more often, and within their comfort zone (Moran, 2018). The impact of the view also felt by the teacher, video let the teacher has a wider time to assess the products of the students. As Dunbar (2019) mention that when students demonstrate their knowledge and skills through video recording, it allows the instructor to provide a more critical and accurate assessment of their knowledge.

By the definition, we can see there are two important variables, first is how teacher can support the students in having a meaningful learning by selecting a proper tool such as Flipgrid for speaking so that students will not feel boredom during the learning process. As Wood (2018) mentioned that the majority of current university students are millennials, who have exhibited boredom with traditional teaching methods so that the teacher should find a best way to escape the students from this issue. Second is how to find the students respond on the use of particular tools. This research focuses on the second variable, this research has an objective to disclose the responds of the students at one of the University in Cimahi, West Java on their experience in using Flipgrid in their Speaking class. This research is expected to give a brief explanation on how the students reacts toward the use of Flipgrid. The result of this research is also expected to give a brief information for the teacher who wish to use Flipgrid in the class so they could optimize the benefits of the Flipgrid and minimize the weakness of this tools.

METHODS

As a qualitative study, this research picturized detail information regarding students' responses on the use of particular tool called FLIPGRID. As we know, the purpose of qualitative research is to describe and interpret issues or phenomena systematically from the point of view of the individual or population being studied and to generate new concepts and theories (Mohajan, 2018). This research gives a detail point of view of students after using FLIPGRID, and can be used as an information for teacher whether this application is suitable for the students or can

be used to help the teacher to anticipate the issues that may emerge during the use of FLIPGRID. There are various settings that may be solved using this qualitative study such as case study, open-ended interview, participant observation, counseling, therapy and others (Cibangu, 2012). This research reached its objective of the study by using open-ended interview and questioners. This research took one semester from September to December 2020, there are sixteen meeting in total and eight times using Flipgrid. During the research the researcher who also act as teacher introduced FLIPGRID to all subjects. After all students have an ability to use the Flipgrid, they begin to use the FLIPGRID bi-weekly in the 2nd, 4th, 6th, 8th, 10th, 12th, 14th, and 16th meeting. In every meeting students were asked to upload their speaking project to Flipgrid, the teacher also asked the students to use all features form such as like, comments, video comments, reaction and others.

In the fifteenth meeting, besides uploading the video, the students were also asked to fill the google form as an online questioner. After all the data from the questioner were gathered the researcher invited 25 students as the interviewee. The question of the interview is an open-ended question and used to validate the data gathered from the questioner. The 25 students were randomly selected and all interviewees participated in the questioner. All data from the questioners were then classified, identified and extracted using Microsoft excel, while the interview were conducted using WhatsApp call and was recorded so that the researcher can re-observed the content of the interview.

Research design

This study utilized a qualitative design. The teacher assisted the students to use the FLIPGRID during the learning proses and using it as a media for submitting the speaking projects. During the proses, students are actively using the tools but faces several obstacles that leads them to a discussions with the teacher. On the other hand, students also face a new experience in their speaking class. By this phenomena, the research then facilitated students to express their respond on using FLIPGRID through answering the open-ended questions online. All the responses in both negative and positive were then recorded into excel. After all responses were collected the researcher initiated the interview. By this design the researcher gathered detail and deeply of the students' opinion on the use of FLIPGRID, at the end of this research the students showed positive and the negative responses

Research participants and Sampling Procedures

This research involved 177 students, all of the subjects use FLIPGRID in helping to understand the material and producing a speaking products. All subjects answer the questioners related to their response in using FLIPGRID in their speaking class. After filling the questioners, 25 students were randomly selected for an interview. Both questionnaires and interview were delivered using online media, goggle form for the online questioner while WhatsApp call for the interview part.

Data Collection

The data were collected using questioner and interview in order to have a valid and reliable information regarding the positive and the negative response of students in using FLIPGRID. The Questioners were given to students after 14 meetings. The questions of the questioner are objected to reveal the response of the students.

RESULTS

The result of the study after analyzing the questioners and interview result it was found out that students have more positive than negative responses. There are 26 respondents of the positive responses on the use of Flipgrid ranging from the accessibility, internet connectivity, psychological fulfillment, and the interactive features. The complete positive response can be seen in figure 1.

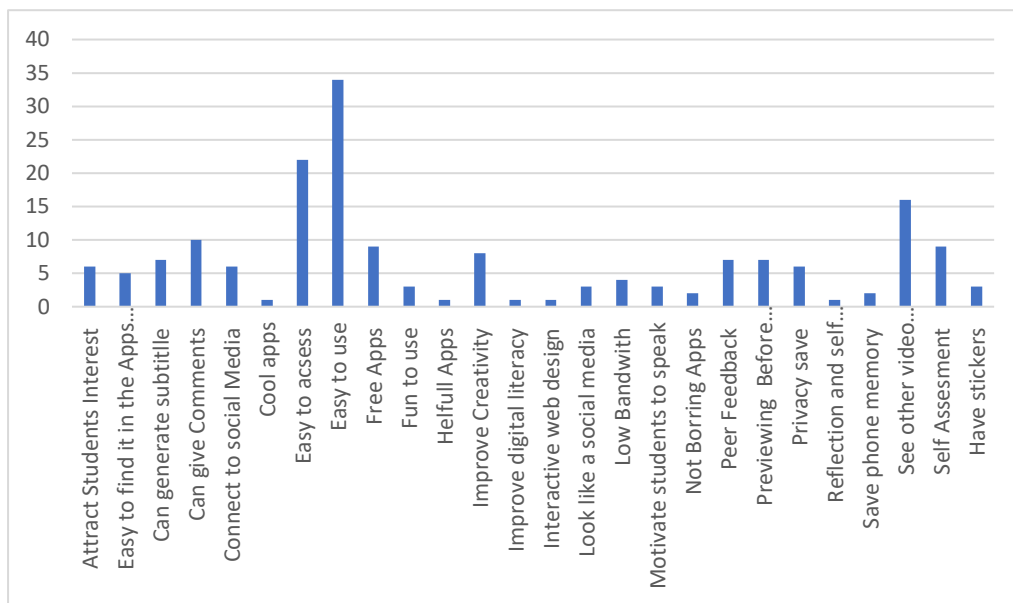


Figure 1: Positive Response on Flipgrid

Other result found from this study, there are 16 respondents of the negative response ranging from competitiveness, equipment, and originality. The detail information can be seen in figure 2.

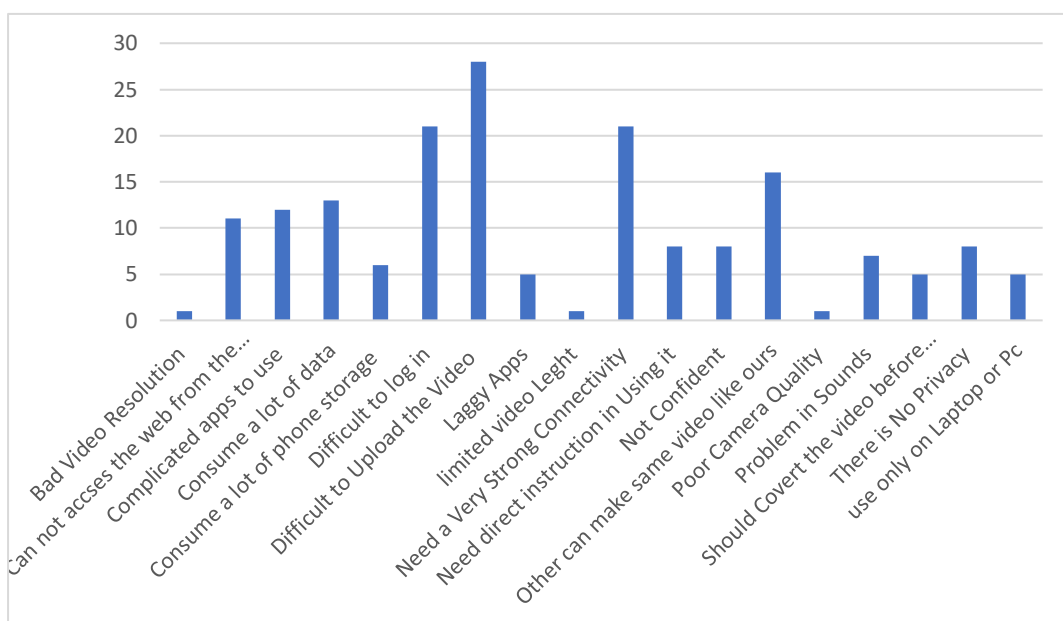


Figure 2: Negative Response on Flipgrid

DISCUSSION

Positive Response

Figure 1 describes that there are several responses related to the use of Flipgrid ranging from the easiness in using the application to the psychological sector of the students such as feeling secured with their privacy, self-reflections, and having a good motivation. On the interview, the 6 interviewees said that this application helps them to feel save because they don't need to share it publicly and that only a particular group of people who may get access to the video. On the other hand, participants stated that, Flipgrid help them to access online social media and other social platforms, it indicates that some students feel comfortable to publish their works. This finding is in line with the idea of the compatibility, it says that Flipgrid is a compatible platform that can engage with other application such as social media or the LMS; google classroom, Microsoft teams and others (Carrie & Timothy, 2020). Similar opinion also conducted by Antonius, Sugeng, Monika, & Charito (2020) who mention that one of the respons from the students of online media is the compatibility of tools to access the media.

The highest positive respond level is on the easiness of using this tools, 35 students agree that this tool is easy to use, this finding is in line with the study conducted by Smart & Cappel (2006). Moreover, sixteen interviewees also mention that this tool is easy to use, students can follow all instructions given by the teacher to use and to exploration. Students also said that even if the instruction from the teacher is limited they can simply follow the instruction in Flipgrid or find some other tutorial from YouTube. Moreover, the other reason why this tool is easy it is that students do not need to create an account or 'sign-up'; they simply just need the web link for their grid, which is free to access. This helps reduce any potential 'overload' of platforms in their existing digital ecosystem (Stoszkowski, McCarthy, & Fonseca, 2017). This finding also in-line with the data from the figure.1, there are 22 students who stated that this tool is easy to access.

Collaboration is another response that was underlined by the participants, this collaboration mostly discovered in the term of giving and responding the comments from the uploaded video. students said that by giving a comment in both video and text can facilitate them to discuss with their friends such as how their video look likes, what should be improved, and whether they like it or not. Through this collaboration we also find the idea of peer-feedback. Syahrizal and Rahayu (2020) mentioned that peer feedback are very beneficial in sustaining powerful learning process. From the interview, the interviewees mentioned that the comments features give them access to assess their friend and their work. Other term that emerged is the reflection and self-assessment, one participant in the question said about it and 5 interviewees also say that they can assess themselves and reflect what the weakness and the strength of their speaking projects.

Other related response is that the students feel convenient in using Flipgrid, students said that Flipgrid give the opportunity to work without time dependent, they can work asynchronously. This kind of learning really help students to manage their time, internet connectivity, and hardware availability. Thomas and Jones (2017) said that asynchronous and not time- or place-dependent, benefits 'commuter students' who live off-campus and are more likely to experience challenges in relation to their engagement beyond the classroom. From the interview, the interviewees also mentioned that they have more freedom to make a good quality video for their speaking project. Students also love the flexibility. Neves & Hillman in 2017 also appreciate the flexibility offered by Flipgrid.

The web design and the features are other positive response that were stressed out by the students. Students find that by recording the video they can use some stickers and filters

that make their speaking project looks more attractive. These features surely make students to be more creative, figure 1 also shows that Flipgrid helps them to improve their creativity. We can see that students said it is fun to use the stickers and filters and that this app is not boring, it is fun. Flipgrid is a cool application. Other element mentioned by the interviewees is that video makes them less boring, they like to watch a video rather than reading. Students appear to prefer watching one another speaking on video than reading written materials, which they perceive to be time-consuming and 'boring'. Students with less developed writing and reading skills also appear to prefer video-based interaction. (Carrie & Timothy, 2020).

In Relation to the use of internet connection, students agreed that this tool use fairly low bandwidth and small amount of phone storage. The students who participated in this research use laptop and phone and they can easily access it. Antonius, Sugeng, Monika, and Charito (2020) mentioned that the benefits of this tool can be categorized into three factors: first is availability and sustainability of internet connection, second is accessibility of teaching media, and the last is its compatibility of tools to access the media.

Negative Response

Figure 2 gives a brief list of the negative responses on the use of the Flipgrid. First negative response can be categorized as a competitiveness. As it is common that on many social media platforms, videos can be liked or hearted to show agreement or approval. This can lead to competitiveness, with the confidence of some students potentially dented if a video receives fewer views or likes than others. Flipgrid also share the same idea where students can "like" or "dislike" a video, this situation leads to negative response of the students, they feel uncomfortable when they get less "like". They feel to be liked when more "like" where they have the bigger score, so it is very important for the teacher to debrief the students that the function of "like" is just to get a social interaction with other students but not as a scoring standard. In line with this, A few students were uncomfortable about being "on screen", with some voicing concerns that their appearance would be "judged" by their peers. Consideration should therefore be given to the suitability of the platform for introverts, although research has suggested that introverted students prefer communicating via social media and in person (Voorn & Kommers, 2013)

To access and use the platform, students must have a suitable digital device (i.e. camera and microphone) and a good internet connection. Students who have old or low specification phones or tablets with a low sound and picture quality may feel inferior to that of the newer and high specification gadgets, this may create problems. From the Figure we can see that some students have limited phone storage, low internet connection, difficulty in uploading the video, low video quality, lagging apps due to low quality of the device, low video sound quality, and error in uploading the video also due to limited internet quota. Students in both interview and questioner complained that this activity need a huge amount of internet data.

Students also feel worries about being duplicated by other students, they feel that there is a huge possibility that their work can be copied and eventually effecting the final score.

CONCLUSION

From both questioners and interview we can see that students shared both negative and positive responses. There are 26 respondents of positive responds ranging for the accessibility, internet connectivity, psychological fulfillment, the interactive features of Flipgrid. On the accessibility and ease of use of the tools students mentioned that this tool is easy to use, easy to access. They can use the tools from their PC, laptop, phone, or tablet. They do not need to "log in" as long as teacher shares them the link. On internet connectivity, students said that this tool uses a

fairly low bandwidth. And on psychological fulfillment they feel happy in using this tool it has various features such as filters and stickers. Moreover, they also said that this tool helps them to do peer-feedback and self-assessment in the same time, where they can improve the quality of their speaking projects. Using Flipgrid also allows them to communicate and collaborate with other students by using the comments features in both text and video.

On the other hand, the negative responses of Flipgrid were presented by 16 respondents. They mentioned competitiveness, equipment, and originality. Students feel the sense of competition in Flipgrid is very high and it makes them feel uncomfortable. Moreover, limited internet data, and limited supporting devices make them face a lot of difficulties in uploading the video, maintaining the quality of the sound, and having a good resolution of the video. These conditions cause their phone to lag and cause a domino effect to their speaking activity. In case of originality, they are afraid their video will be duplicated.

These two kinds of responses show that Flipgrid has more positive rather than negative responses. By this the teacher can use this tool to support the learning process especially in the speaking class. In minimizing the obstacle in using the Flipgrid teacher should have a clear and deep communication with the students and also giving them a continuous support and assistance.

REFERENCES

- Abu Bakar, N., Latiff, H., & Hamat, A. (2013). Enhancing ESL Learners Speaking Skills through Asynchronous Online Discussion Forum. *Asian Social Science*, 224-233. doi:10.5539/ass.v9n9p224
- Ali, M. A., & Jabar, N. (2016). Cultural Video Project Assignment (VPA) through the Eyes of Young ESL Learners: A Multi-Modal Vocabulary Learning Approach. *Indonesian Journal of EFL and Linguistics*. doi: <https://doi.org/10.21462/ijefll.v1i2.11>
- Antonius, S., Sugeng, N. A., Monika, W. S., & Charito, A. Q. (2020). Students' Perception of Online Learning during Covid-19 Pandemic: A Case Study on the English Students of STKIP Pamane Talino. *Journal of Social Sciences and Humanities*.
- Armstrong, D. A. (2011). Students' Perceptions of Online Learning and Instructional Tools: A Qualitative Study of Undergraduate Students Use of Online Tools. *The Turkish Online Journal of Educational Technology*, 222-226.
- Bali, S., & Liu, M. C. (2018). Students' Perceptions Toward Online Learning and Face-to-face. *IOP Conf. Series: Journal of Physics*, 1-8.
- Carrie, T., & Timothy, H. (2020). Strategies for Using Flipgrid in Education. *US-China Education Review B*, 26-31. doi:10.17265/2161-6248/2020.01.003)
- Chapelle, c. (2002). *English language learning and Technology: Lectures on Applied Linguistic in the Age of Information and Communication Technology*. Philadelphia: John Benjamin Publishing.
- Cibangu, K. S. (2012). Qualitative Research: The Toolkit of Theories in the Social Sciences. In Asunción López-Varela (Ed.). *Theoretical and Methodological Approaches to Social Sciences*. *InTech*, 95-126.

- Curry, N. (2020). *Supporting Every Teachers: 8 Tips for Developing Academic Speaking, Listening, Reading, and Writing in Online Contexts*. Retrieved from www.cambridge.org:
<https://www.cambridge.org/elt/blog/2020/04/22/developing-academic-language-skills-in-online-contexts/>
- Dogoriti, E. (2015). Towards an Instructional Tool for Teaching of English as A Second/Foreign Language (ESL/EFL) in Higher Education. *International conference on information, communication technologies in education*, (pp. 401-411).
- Dunbar, L. (2019). When Responses Cannot be Written Down: Video submission possibilities in the music classroom. *General Music Today*, 29-30 .
- Ghavifekr, S., Afshari, M., & Amla, S. (2012). Management Strategies for E-Learning System as the Core. *Life Science Journal* , 2190-2196.
- Hutabarat, A., & Simanjuntak, D. C. (2019). A Phenomenological Study: Speaking Anxiety Overwhelms English Learners. *JELPEDLIC*, 4(1), 44-58.
- Inayah, R., & Lisdawati, I. (2017). Exploring Students' Difficulties in Speaking English and Their Attitude. *JELPEDLIC*, 2(1), 12-23.
- Katamba, C. V. (2021). Enhancing Vocabulary Performance Through Mobile Assisted Language Learning at a Rural School in Indonesia. *Acuity: Journal of English Language Pedagogy, Literature and Culture*, 6(1), 1-11. <https://doi.org/10.35974/acuity.v6i1.2457>
- Katamba, C. V., & Ning, W. (2018). Students` Responses in Enhancing New Vocabulary Through Subtitled English Movies. *Acuity: Journal of English Language Pedagogy, Literature and Culture*, 3(1), 45-75. <https://doi.org/10.35974/acuity.v3i1.623>
- Kebudayaan, K. P. (2020, Maret Selasa). Pelaksanaan Kebijakan Pendidikan dalam Masa Darurat Penyebaran Corona Virus Desease (COVID-19). *Surat Edaran* . Jakarta , Indonesia :
 Kementrian Pendidikan dan Kebudayaan .
- McClure, C., & McAndrews, L. (2016). Going Native to Reach the Digital Natives: New Technologies for the Classroom. *ITAA Annual Conference Proceedings*, (pp. 8-10). Retrieved from http://lib.dr.iastate.edu/itaa_proceedings/2016/presentations/135
- McLain, T. R. (2018). Integration of the Video Response App Flipgrid in the Business Writing Classroom. *International Journal of Educational Technology and Learning*, 68-75.
 doi:<https://doi.org/10.20448/2003.42.68.75>
- Mohajan, H. K. (2018). Qualitative Research Methodology in Social Sciences. *Journal of Economic Development, Environment and People* , 23-48.
- Moran, L. (2018). *Streaming media: Setting the Focus Back on Teaching and Learning*. Retrieved from <https://blog.epson.com/education/setting-the-focus-back-on-teaching-and-learning/#>
- Neves, J., & Hillman, N. (2017). Student Academic Experience Survey. New York: *Higher Education Academy*. Retrieved from <https://www.hepi.ac.uk/wp-content/uploads/2017/06/2017-Student-Academic-Experience-Survey-Final-Report.pdf>

- Nicol, D., & Macfarlane-Dick, D. (2006). Formative Assessment and Self-regulated Learning: A Model and Seven Principles of Good Feedback Practice. *Studies in Higher Education*, 199-218. Retrieved from <https://www.tandfonline.com/doi/abs/10.1080/0>
- Petersen, J. B., Townsend, S. D., & Onaka, N. (2020). Utilizing Flipgrid Application on Student Smartphones in a Small-Scale ESL Study. *English Language Teaching*, 164-176. doi:<https://doi.org/10.5539/elt.v13n5p164>
- Purnawarman, P., Sundayana, W., & Susilawati. (2016). The use of Edmodo in Teaching Writing in a Blended Learning Setting. 242-252. doi:<https://doi.org/dx.doi.org/10.17509/ijal.v5i2.1348>
- Rao, P. S. (2019). The Importance of Speaking Skills in English Classrooms. *Alford Council of International English & Literature Journal(ACIELJ)*, 6-18.
- Rila, A., Estrapala, S., & Bruhn, A. L. (2019). Using Technology to Increase. *Beyond Behaviour Sage Journals*, 36-45.
- Sinambela, K. L., & Simanjuntak, D. C. (2017). Study on the Use of Oral Drills and Role-Play Method in Improving Students' Interactive Speaking Achievement. *JELPEDLIC*, 2(1), 24-45.
- Smart, K. L., & Cappel, J. J. (2006). Students' Perceptions of Online Learning: A Comparative Study . *Journal of Information Technology Education*, 201-219.
- Stoszkowski, J. (2018). Using Flipgrid to Develop Social Learning. *Compass: Journal of Learning and Teaching*, 1-5.
- Stoszkowski, J., McCarthy, L., & Fonseca, J. (2017). Online Peer Mentoring and Collaborative Reflection: A Cross-Institutional Project in Sports Coaching. *Journal of Perspectives in Applied Academic Practice*, 118-121.
- Syahrizal, T., & Rahayu, S. (2020). Padlet for English Speaking Activity: A Case Study of Pros and Cons on ICT *Indonesian EFL Journal*, 149-156. doi: <https://doi.org/10.25134/ieflj.v6i2.3383>
- Thomas, L., & Jones, R. (2017). Student Engagement in the Context of Commuter Students. *London: The Student Engagement Partnership*. Retrieved from www.tsep.org.uk/resources
- Townsend, S., & Cronin, A. L. (2017). The Universal Access Framework: An Architecture for Uniting Learning with Mobile Phones. . (29th International Conference on Teaching, Education and learning (ICTEL). Bangkok, Thailand .
- Voorn, R., & Kommers, P. (2013). Social Media and Higher Education: Introversion and Collaborative Learning from the Student's Perspective. *International Journal of Social Media and Interactive Learning Environments*, 59-73.
- Wood, J. (2018). *College Students in Study Spend 8 to 10 Hours Daily on cell phone*. Retrieved from <https://psychcentral.com/news/2014/08/31/new-study-finds-cell-phone-addiction-increasingly-realistic-possibility/74312.html>
- Zhang, W., Wang, Y., Yang, L., & Wang, C. (2020). Suspending Classes Without Stopping Learning: China's Education Emergency Management Policy in the COVID-19 Outbreak. *JRFM*, 1-6.