

# Critical Analysis of Online Feedback Channels on Writing Skill at Undergraduate Level

Ahsan Bashir, Assistant Professor, University of Education Lahore Rakhshanda Fawad, University of Central Punjab, Lahore Maryam Aleem, University Law College, University of the Punjab, Lahore Saira Akhter\*, Assistant Professor of English, Government College Women University, Faisalabad, Pakistan. Email: sairalinks@hotmail.com

**ABSTRACT-** Selection of feedback channels is an important step to make the learning happen gradually and positively. Nevertheless, there is possibility that students may feel disengaged while at the receiving end of feedback. The effective utilization of modern technology and optimizing different channels available at hand for the feedback (WhatsApp, Google classroom) during online teaching mode could invite students' focus to the exact choice of word and style and provide right direction to write accurately. The purpose of conducting this research is to explore different options available for online feedback channels (WhatsApp, Google classroom) and their effectiveness in term of improving writing skill at undergraduate level. It's a quasi-experimental study to examine the effect of feedback channels (WhatsApp, Google classroom) in pretest and posttest design. The results suggest that though WhatsApp is the source of instant feedback but feedback provided in the Google Classroom has more professional grounds and is a long terms feedback where students can reflect time and again and seek guidance accordingly. This may keep them on the track as what is their weak spot and what strategy could be more appropriate to overcome those mistakes and improve writing skill. The results were collected in the form of data and then analyzed statistically to draw the importance of different feedback channels in the online teaching.

#### Keywords: feedback channels, Writing Skill, online teaching

#### I. INTRODUCTION

Supporting the feedback, it is better to start with citing the article "Inside the Black Box: Assessment for learning in the classroom" in which Black, P., et al (2004) asserted the need for formative assessment. Assessment feedback is important however the selection of method and in the current context of online teaching we will talk about channel is very much relevant discussion. They addressed three question in a serial pattern in which first was about seeking evidence for quality assessment increase the standard and the outcome was "yes". The second question in this series was to testify the margin of improved learning and it was ultimately acknowledged that there remained always need for improvement hence assessment feedback should be planned thoroughly and systematically.

A leap of faith was taken at the time of Covid19 while transforming the higher education towards online platform. It was a time when everyone whether mentally prepared or not for this type of teaching and learning pedagogy has to adjust in any way. Quoting the exact words from Fernando M. Reimers et. al. (2020) "Supporting the continuation of teaching and learning during the COVID-19 Pandemic, "For educators, the COVID-19 Pandemic is a quintessential adaptive and transformative challenge, one for which there is no preconfigured playbook that can guide appropriate responses."

The aim of this research is to delve into multiple options available for classroom communication during COVID19 for feedback in the form of diverse platforms and the channels between teachers and students at undergraduate level using Google Classroom (an LMS platform ) and WhatsApp (Smartphone app). As the circumstances were imposed upon by the fear of disease yet the skills of teachers were challenged as how to make learning possible and what could be the most favorable channel for feedback more effective to improve the writing skills of undergraduate students. Three different feedback groups were made of three different sections of E1 class. One group was receiving feedback through Google Classroom. Second groups was delivered feedback through WhatsApp and third was given no feedback at all. The research revealed interesting results. The purpose of no feedback group was to see the importance of feedback as it testifies the need for proper feedback. Whereas Google Classroom and WhatsApp both showed positive effect with respect to its availability in terms of teaching and learning and ensured the potential usage for educational purpose.

#### II. LITERATURE REVIEW

# Feedback Channel: Theoretical Account

As far as feedback is concerned, it has positive relation with improved learning (Timperley and Hattie, 2007). However, a debatable point is that feedback should always be relevant and should have specific gravity towards formative purpose. First feature is that it should bring improvement (Shute, 2008) on the receiving end serving the purpose of information and comprehension (Huth and Narciss, 2004) to improve the performance in the particular area. Secondly, feedback recommend reflection on the progress by telling the students that how much they have achieved and in which particular area they need to pay attention so that they may come up with improved learning results in the next assessment (Nicole and Macfarlane-Dick, 2006). Third dynamic feature of feedback is its effectiveness in the sense that learner may feel like interacting with the input from teacher that would bring accomplishment (Wintstone, 2017). Feedback is useless if it has no impact on the learning outcome, doesn't matter how skillfully it is designed. Fourth aspect of feedback is its communicative nature between teacher and learner (Carless, 2015). The last but not the least feature of an effective feedback must establish a trust relationship between both agents (teacher and student).

# **Blended Learning and Feedback Channels**

Previous researches are tended to observe how students perceived about various channels available for feedback like audio, video as well as both types of feedbacks based on the students' preference with reference to their personalized nature, clarity of their reception, accessibility option when offline and source of more intimacy and either choice explained the variables selected for the specific research. However, in this revolutionary period the variables are drastically changed and the concept of blended learning has expanded the concept of feedback channels. Now we have defined platforms for example; LMS (learning Management System) and CMS (Course Management System).

Sibuea (2018) asserted that the best way to increase knowledge and learn new and required skills is the utilization and maximization of teachers and students' interaction in the form of advanced methods, novel approaches and advanced strategies in every possible way. And no doubt, COVID19 puts us in the situation to reluctantly and desirably experienced every available mode of teaching and learning and digital communication (Smartphones Apps like Facebook, YouTube, Google Classroom, WhatsApp) embarks upon a new horizon of higher education.

### **Blended Learning Commute**

The concept of blended learning in higher education welcomed the digital communication channels is based on instant messaging through SMS, Email, Facebook, Blogs, Podcast and nowadays most used WhatsApp. Credit goes to blended learning that allows all the platforms available for teachers to interact with students to make learning happens. It's the mutual understanding between teacher and students that which platform is preferably used or alternatively available to set the meeting time. There are various platforms like social network (in this research context WhatsApp), blogs, podcast, online video lectures, CMS (Course Management System) and LMS (Learning Management System) for blended learning in this hour (COVID19) of need without time and place constraints.

Picciano (2007) claimed that blended learning has revolutionized the concept of classroom and redefined boundaries of time and space with the with the help of digital technology by introducing different media platforms. Marsh (2012) defined the concept behind the blended learning is to maximize the opportunities of gaining knowledge and improved performance, increase the chances of students' interaction that may promote teamwork while reducing the stress level creating autonomous learning space that resultantly cater personalized content for learning. This definition of blended learning accessorizes the teacher with customization authoring to blend different platform for improved learning.

### **Feedback Channels: Practical Account**

With the intrusion of digital communication with classroom setting, there was need to adapt the platform for the learning purpose. A natural experimental set up appeared when COVID19 restricted the human mobilization and confined them to their houses. Blended learning concept was not new and it was the right time to come up with different options (Higgins, et. al., 2014) to maximize the availability of students in the online learning environment. Now this learning environment was at stake but thanks to digital communication technology that loaded the Smartphones with every possible App available for teaching and learning. All lectures, study material, assessment and feedback become possible contrary to the time and

place. Plenty of feedback channels make it easy to customize and personalize the feedback for individual students in the form of written feedback through Google Classroom and oral feedback through WhatsApp voice message. In this way, teachers cater students with different learning conditions and increase the chances of interaction and collaboration (Graham, et. al., 2013). This is the reason blended learning works in higher education (Chambers & Bowyer, 2017). Thorne (2013) discussed the challenges of blended learning coping with it can be guaranteed as successful learning outcome. The appropriate channelizing of pedagogics, teacher' & learners' role, educational progress, syllabus design, and efficiency (Hettiarachchi & Mozelius, 2017). Knocking about these challenges by adopting the blended learning approach may deliver positive learning behaviour (Chang, Kagambe & Kintu, 2017).

While going online during Covid19, blended learning concept makes it possible for both teachers and students to interact through Google Classroom and WhatsApp (both available in web and mobile Apps form). A very dynamic feature of Google Classroom allows individual teachers to create class and start teaching in the real time through Google Meet as well as remote learning mode. Whereas Smartphones allow the teacher and students to make groups for internal institutional communication for clerical work and social interaction with students to activate their learning process. This allow instant messaging to deliver class work, and lectures.

# **Research Gap**

Mahoney (2019) pointed out that available literature review in the area feedback channel as Google Classroom and WhatsApp use is very less that may exhibit the scale of student's progress especially in the context of Pakistan. Previous literature also authenticate that feedback channels were explored with the perspective of students' and teachers' perception not on the learning outcomes. Chew, 2014; Carruthers, 2015 observed that till now researches were based on the medium of channels as textual, audio and video. Espasa, A., Mayordomo, R. M., Guasch, T., & Martinez-Melo, M. (2019) deduced that in spite of the fact major interest lies within the dimensions of which channel proves to be the best for formative feedback. Here in this research our major concern is with feedback that has to be delivered to the students through the channels like Google Classroom and WhatsApp. These are two different platforms with different features so it is important to see the difference between them and how and why a feedback is more or less effective.

# Difference between Google Classroom and WhatsApp

In 2014, Google launched GSE (G Suite for Education) (Siu, 2016) as an LMS and was used by only subscribed institutions. It can be used online at website address and can be downloaded as an App from Appstore and Google Play that makes it very unique to be handy and practical. It facilitates digital interaction between teachers and students and breathtakingly accessed cross platform. It is user friendly, support multimedia and share course contents in an organized manner. With reference to feedback, Google Classroom support audio, video, and written text.

Reviewing past researches reveal that the social medial is gaining lot more popularity when it comes to learning and collaboration in terms of higher education. However, there is lack of literature in this field that may show the limited use of these available tools. During last five years, Smartphones promote the use of WhatsApp that proves a promising communication app. It allows to create students / teachers' groups for sharing lectures, worksheets, assignments, quizzes, and attendance. It is better for social networking to create a friendly environment that encourages the students to learn at their own pace and teacher customizes the lectures and feedback according to individual students' need (Fischer, 210). There are few benefits of WhatsApp over other messaging apps (de Oliveira and Church, 2013) like cheap packages availability, frequent and instant updates, socialization, community development, more privacy and security options are here as compared to other social apps. However, it has many disadvantages while using WhatsApp as you have no control on the frequency of messaging that make it an informal platform when it comes to higher education. It is, therefore, formal communication requires to deliver important message through instant messaging.

Bere (2013) observed that as a result of WhatsApp used in the higher education set at South African university, students showed their positive perception about learning and its authenticity with fun element. There is a positive impact of WhatsApp use observed by Bere, Chipunza, and Plana, (2013) asserting that it is accessible, support cooperative behavior, and motivate students for learning English language. Besides this, there is a negative research to be noted in Kuwait conducted by Salem (2013) exhibiting poor writing skill development.

#### **Research Gap**

While going through past literature, an observation was made that following gaps were there and this research will bridge them with an authentic data provided through this. One is the absence of control group and the other is effects of feedback on the writing skills observed on the online classroom. It is to acknowledged here that after observing this first gap, researchers devoted a lot of work to bridge it and somewhat this issue has been resolved. However, the need for the observation of second issue surges after COVID19 in the Pakistani context. As the online platforms have been reluctantly utilized by the Pakistani universities. This was the ideal time to collect real time data that is not only fresh rather reliable as the most updated platforms were used by Govt universities.

III. METHODOLOGY

#### Subjects

Students of University of Education, Lahore participated in this study to be observed in response to the feedback given through WhatsApp and Google Classroom (GCR). Students were registered in EII course as prescribed by HEC. The grammatical items that were tested were the part of this course. Hence, students writing skills with reference to the use of modifiers, subject-verb agreement and discourse markers were observed and feedback was given to improve these writing areas to bring accuracy in writing skill. Students were informed about being subject of this research. There were three groups (sections) of students of equal strengths in which one group was control group with no feedback while the other two were experimental groups receiving feedback through WhatsApp and Google Class room (GCR).

#### **Research Design:**

#### Schedule

The use of Tablets, smartphones, laptops and computers was understood and communicated as the classes were created on GCR for overall semester track record of attendance, assignments, quizzes, and project presentations. Students' quizzes on GCR were conducted based on the said grammatical items.

First Session: Instructor introduced the students about research purpose and how they will be given feedback from now onward. The syllabus was shared and the mode of test and feedback were also explained in detail.

Second Session: In the second session students were assigned a quiz based on the selected items. Instructor determined the error types and decided to be checked the same in pretest and posttest from all three sections. Feedback was provided online through WhatsApp and Google Classroom (GCR).

Third Session: Immediate feedback was conducted and feedback was delivered through selected modes to the respective groups.

Fourth till Seventh Session: During this time period, students were taught by the same instructor. Lectures were based on the selected grammatical items chosen for the research study. Class practice and worksheets were provided to give comprehensive knowledge on these items.

Eighth Session: This was the scheduled time for delayed posttest. This test was supposed to see the difference after receiving feedback though selected feedback channels. The data obtained through this research is authentic and reliable for the future reference.

#### Instrument:

Quizzes were prepared while considering the higher level of Bloom's Taxonomy starting from the application criteria moving upward as analyze, evaluate and create. Researcher's focus was the three grammatical items as modifiers, subject-verb agreement, and discourse markers. Coherence and cohesion are possible to achieve if the discourse is appropriate and idea has a flow completing the purpose of communication that is the basic objective of this course.

# IV. DATA ANALYSIS:

For this quasi-experimental study, pretest-posttest design was used to measure the effectiveness of online feedback channels (WhatsApp, GCR) on both experimental groups while comparing it to control group that is not receiving any feedback. The three groups were;

- 1. Experimental group 1 receiving feedback through WhatsApp
- 2. Experimental group 2 receiving feedback through Google Classroom (GCR)
- 3. Control group receiving no feedback

Following the schedule by the instructor, all three tests (pretest PT, Immediate posttest IPT, delayed posttest DPT) were conducted according to the given timetable. Statistical analysis was made after collecting the data through ANOVA.

This paper focused on 3 different types of grammatical errors that plays crucial role in case of coherence and cohesion in writing. To avoid any conflict and to make sure that the learners are homogenous, a pretest was conducted. Furthermore, determining the significant difference statistical tool ANOVA was applied. To narrow down the acute difference, Games-Howell test was also run.

# **RQ.1.** What is the effect of feedback provided though GCR on the writing accuracy of students of University of Education, Lahore?

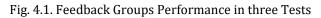
# a) Effectiveness of Feedback

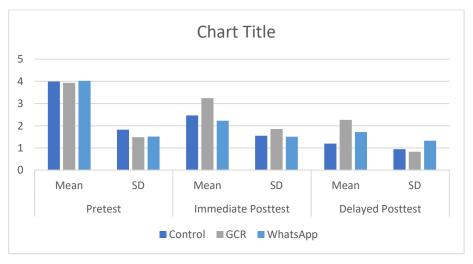
Measuring the quality of various online feedback channels in which WhatsApp and Google Classroom (GCR) while comparing it with a control group receiving no feedback, are the part of this research a quasiexperimental design was considered appropriate. The finding of the frequency of error rate was the first step and then mean as well as standard deviation. This helped in observing the online feedback channels effectiveness. It identified the effectiveness between all three groups and even within the groups individually. With the help of collected data, a bar graph was created to show the caparison between three groups taken from all three test so, it's an overall illustration.

Groups / Tests		Control	GCR	WhatsApp
Pretest	Mean	3.997	3.928	4.021
	SD	1.825	1.486	1.515
Immediate Posttest	Mean	2.468	3.247	2.226
	SD	1.549	1.853	1.505
Delayed Posttest	Mean	1.192	2.26	1.713
	SD	0.945	0.824	1.327

Table. 4.1. Feedback groups Performance in three Tests

While seeing this table, a better option is to convert it into bar chart. That will illustrate the overall situation clearly.





The above bar chart illustrates the performance of the three selected groups receiving feedback in the three tests and their difference in the form of standard deviation and mean scores. In the pretest, it is observable that mean scores are same of all three groups but SD of control is higher. Moving forward to the immediate posttest, mean as well as standard deviation is higher of that GCR group. However, when it came to posttest, mean is greater of GCR while WhatsApp group was showing higher standard deviation.

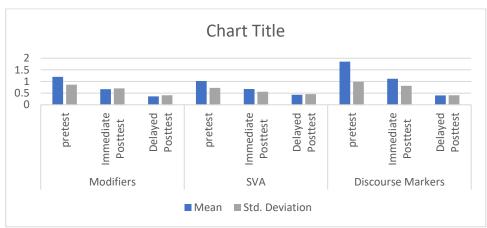
# b) Effectiveness of Feedback Treatment on TLE (Targeted Linguistic Error)

It's an important step to evaluate the effectiveness of online feedback channels on the targeted linguistic items. Therefore, descriptive results helped in identifying the impact of feedback on the linguistic items as selected Modifiers, subject-verb Agreement, and discourse markers.

		Mean	Std. Deviation
Modifiers	pretest	1.2	0.862
	Immediate Posttest	0.67	0.706
	Delayed Posttest	0.36	0.406
SVA	pretest	1.02	0.722
	Immediate Posttest	0.68	0.558
	Delayed Posttest	0.43	0.457
Discourse Markers	pretest	1.85	0.989
	Immediate Posttest	1.12	0.815
	Delayed Posttest	0.4	0.406

Table 4.2.	
------------	--

Possibly, interpreting this table may feel difficult so here is the bar chart to see the detailed analysis of selected linguistic items and feedback effect in three tests.





In the above bar graph, the feedback effect, provided on the linguistic items, is quite obvious. Pretest was taken to identify the error frequency. However, after receiving feedback through online channels, there is a clear difference. First of all, this bar graph shows that feedback definitely has positive impact in every form and delivered through any medium. Secondly, there is an obvious improvement in the reduction of error frequency from immediate posttest to delayed posttest.

# RQ.2. Which online feedback channel is more effective between WhatsApp and GCR when it comes to new piece of writing at undergraduate ESL students at University of Education, Lahore?

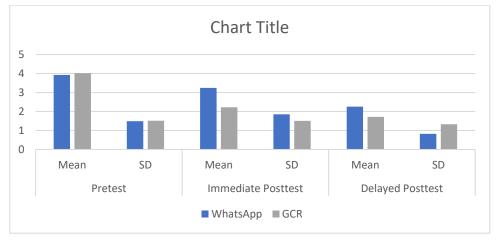
This question is in fact the thesis of this research. As the feedback effect was observed with reference to the online channels that has been selected so, there were two online feedback channels; one is the WhatsApp and the other is Google Classroom (GCR).

The difference between the two online selected platforms showed that one (WhatsApp) has short-term feedback effect whereas second (GCR) has long-term effect in the treatment of these errors.

Groups / Tests		WhatsApp	GCR	
Pretest	Mean	3.928	4.021	
	SD	1.486	1.515	
Immediate Posttest	Mean	3.247	2.226	
	SD	1.853	1.505	
Delayed Posttest	Mean	2.26	1.713	
	SD	0.824	1.327	

Table 4.3.

Figure. 4.3.



In the above figure 4.3, it is proven that students are responding to the feedback in any form. The results are improving and learners are getting real-time feedback (WhatsApp) as well as delayed feedback (GCR) where they can open their assignments anytime and revise their knowledge hence reducing error rate.

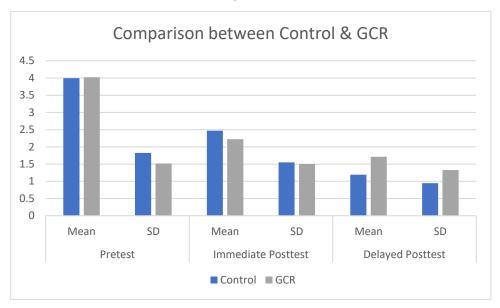
# RQ.3. How to Identify and to describe the difference of online feedback channels and no feedback at all on the accuracy of writing skills of undergraduate students at University of Education, Lahore?

The third question is actually the reliability check about the effectiveness of feedback. After reviewing the literature and conduction this quasi-experimental study, it can be said with greater assertion that feedback has positive impact. This bar-graph shows that group receiving GCR feedback is effecting in the positive way whereas WhatsApp is also serving same positive effect. Students after receiving instant feedback through WhatsApp became conscious and reading detailed feedback on GCR made then conscious about errors and this might help them to retain the feedback for long-term.

Groups / Tests		Control	GCR
Pretest	Mean	3.997	4.021
	SD	1.825	1.515
Immediate Posttest	Mean	2.468	2.226
	SD	1.549	1.505
Delayed Posttest	Mean	1.192	1.713
	SD	0.945	1.327

Table.4.4	
-----------	--

Figure.4.4.



Looking into the above table and illustrated graph, that GCR feedback is playing major role in improving the accuracy level of students. Focusing on the delayed posttest result, the significant difference of 0.1 of the standard deviation is reinforcing the positive role of GCR feedback. It was further testified with the help of ANOVA detailed results proving our hypothesis correct.

# V. CONCLUSION:

Meeting the challenge of the modern academic world, there is need to be vigilant enough on the part of teachers to use online feedback channels complimenting the online teaching mode. This is very supportive and encouraging for the students to learn in the challenging environment. The learners are very much familiar with the online environment and using it since their childhood, their nature is to receive quick result. GCR is a comprehensive learning platform and is supportive for the teachers to provide relevant feedback. In this way, students can receive the feedback instantly and identify the area of improvement. This point is also very important to share that there are various online feedback channels, however, in this study two very frequent mode of communication were considered for the feedback that are relevant to the academic environment in virtual mode.

The results of this study are reliable and reinforced the effectiveness of feedback. The selected errors were the part of syllabus and meeting the level of this research. Believing in Schmidt theory of noticing hypothesis, learners' response was that of a conscious learner eager to learn about their errors and ways to improve it. Delivering feedback in a timely fashion is important as learners wait for it.

This research was intended to see the role of online feedback channels in the improvement of students' writing accuracy. With the help of this authentic repot, it can be asserted that feedback is important, however, it is a plus to see the nature of feedback as we analyzed that WhatsApp helps in providing instant feedback but is short-term. Whereas, GCR plays the role of delayed feedback but with the benefit of long0term availability and students' may revise their concepts time and again by visiting their assignments. There is no deny in the fact that both online feedback channels serve their purpose fully yet it is also important o acknowledge that GCR support in passive learning and reduce their error effectively.

### REFERENCE

- 1. Bere, A. (2013). Using mobile instant messaging to leverage learner participation and transform pedagogy at a South African University of Technology. British Journal of Educational Technology, 44(4), 544561.
- 2. Black, P., Harrison, C., Lee, C., Marshall, B., & Wiliam, D. (2004). Working inside the Black Box: Assessment for Learning in the Classroom. Phi Delta Kappan, 86(1), 8–21. https://doi.org/10.1177/003172170408600105

- Bouhnik, D., & Deshen, M. (2014). WhatsApp goes to school: Mobile instant messaging between teachers and students. Journal of Information Technology Education: Research, 13, 217-231. Retrieved from <u>http://www.jite.org/documents/Vol13/JITEv13ResearchP217-231Bouhnik0601.pdf</u>
- 4. Bowyer, J. & Chambers, L. (2017). Evaluating blended learning: Bringing the elements together. Research Matters 23, 3, 2017, pp: 17—26. UCLES. Retrieved from: www.cambridgeassessment.org.uk/Images/375446-evaluating-blended-leearning-bringintheelements-together.pdf
- 5. Carless, D (2015) Excellence in University Assessment: Learning from Award-Winning Practice. London: Routledge.
- 6. Carless, D, Salter, D, Yang, M, et al. (2011) Developing sustainable feedback practices. Studies in Higher Education 36(4): 395–407.
- 7. Carruthers, C, McCarron, B, Bolan, P, et al. (2015) 'I like the sound of that' An evaluation of providing audio feedback via the virtual learning environment for summative assessment. Assessment & Evaluation in Higher Education 40(3): 352–70.
- 8. Chew, E (2014) 'To listen or to read?' Audio or written assessment feedback for international students in the UK. On the Horizon 22(2): 127–35.
- 9. Chipunza, P. R. C. (2013). Using mobile devices to leverage student access to collaborativelygenerated resources: A case of WhatsApp instant messaging at a South African University. International Conference on Advanced Information and communication Technology for Education (ICAICTE 2013).
- 10. Church, K., & de Oliveira, R. (2013). What's up with whatsapp? Comparing mobile instant messaging behaviors with traditional SMS. Proceedings of the 15th International Conference on Human-computer Interaction with Mobile Devices and Services.
- 11. Espasa, A., Mayordomo, R. M., Guasch, T., & Martinez-Melo, M. (2019). Does the type of feedback channel used in online learning environments matter? Students' perceptions and impact on learning. Active Learning in Higher Education. <u>https://doi.org/10.1177/1469787419891307</u>
- 12. Fischer, Y. (2013). "The Facebook is dead long live WhatsApp". De Marker. Retrieved September 26, 2013, from http://www.themarker.com/technation/1.2126492
- 13. Graham, et. al., (2012) Improving online social presence through asynchronous video. The Internet and Higher Education 15(3): 195–203.
- 14. Hattie, J., Timperley, H., (2007) The power of feedback. Review of Educational Research 77(1): 81– 112.
- 15. Higgins, A. (2014). Blended learning: How teachers balance the blend of online and classroom components. Journal of Information Technology Education: Research, 13, 121—140. Retrieved from: http://www.jite.org/documents/Vol113/JITEv13ResearchP121-140Jeffrey0460.pdf
- 16. Mahoney, P, Macfarlane, S, Ajjawi, R (2019) A qualitative synthesis of video feedback in higher education. Teaching in Higher Education 24(2): 157–79.
- 17. Mozelius, P. & Hettiarachchi, E. (2017). Critical factors in implementing blended learning in higher education. ICT Journal, 6(2): 37-51. DOI: 10.1515/ijicte-2017-0010.
- Narciss, S, Huth, K (2004) How to design informative tutoring feedback for multi-media learning. In: Niegemann, HM, Leutner, D, Brünken, R (eds) Instructional Design for Multimedia Learning. Münster: Waxmann, pp. 181–95.
- 19. 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 31(2): 199–218.
- 20. Nicol, D (2010) From monologue to dialogue: Improving written feedback processes in mass higher education. Assessment & Evaluation in Higher Education 35(5): 501–17.
- 21. Picciano, A. (2007). Introduction. In Blended learning research perspectives. The Sloan Consortium (USA).
- 22. Plana, M. G. C., Escofet, M. I. G., Figueras, I. T., Gimeno, A., Appel, C., & Hopkins, J. (2013). Improving learners' reading skills through instant short messages: A sample study using WhatsApp. 4th WorldCALL Conference, Glasgow, 10-13 July 2013.
- 23. Reimers, F., (2020). Global Education Innovation Initiative at the Harvard. Graduate School of Education.
- 24. Narciss, S, Huth, K (2004) How to design informative tutoring feedback for multi-media learning. In: Niegemann, HM, Leutner, D, Brünken, R (eds) Instructional Design for Multimedia Learning. Münster: Waxmann, pp. 181–95.
- 25. 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 31(2): 199–218.

- 26. Nicol, D (2010) From monologue to dialogue: Improving written feedback processes in mass higher education. Assessment & Evaluation in Higher Education 35(5): 501–17.
- 27. Salem, A. A. M.(2013). The impact of technology (BBM and WhatsApp applications) on English linguistics in Kuwait. International Journal of Applied Linguistics & English Literature.
- 28. Shute, VJ (2008) Focus on formative feedback. Review of Educational Research 78(1):153-89.
- 29. Sibuea, T. F. (2018). STUDENTS'PERCEPTIONS ON THE USE OF GOOGLE CLASSROOM TO SUPPORT BLENDED LEARNING FOR THE PENGANTAR LINGUISTIK UMUM COURSE. LINGUA: JURNAL ILMIAH, 14(2), 49-63.
- 30. Siu, A. (Sep 27, 2016). A timeline of Google Classroom's march to replace learning management systems. Retrieved from: https://www.edsurge.com/news/2016-09-27-atimeline-of-google-classroom-s-march-to-replace-learning-management-systems
- 31. Winstone, NE, Nash, RA, Parker, M, et al. (2017) Supporting learners' agentic engagement with feedback: A systematic review and a taxonomy of recipience processes. Educational Psychologist 52(1): 17–3.