

## **Z GENERATION TOWARDS THE USE OF SMARTPHONE APPLICATION FOR LISTENING ACTIVITIES IN BLENDED-LEARNING**

**Valentina Dyah Arum Sari**  
Universitas Mercu Buana Yogyakarta – Indonesia

---

### **ABSTRACT**

The character of Generation Z which is closely related to the use of technology triggers awareness of educators to facilitate this generation with teaching and learning techniques that are most suitable for them. One of them is by optimizing the use of gadget or smart phones as learning media for them. Because of this phenomenon, this study was carried out with the aim to find out the use of smartphone application in learning listening skills in blended-learning class of English general courses followed by first semester students who are included as Z generation. The research also aimed to find out the significance of smartphone application dealing with the improvement of listening skill towards the non-English department students and to figure out the possible obstacles while using the smartphone application. Thus, the researcher applied the two selected smartphone applications and conducted data triangulation by pre-testing and post-testing the learners to see the significance. The other instruments were questionnaires and students' listening material summary. The data were analyzed by mixed-method technique, namely qualitative and quantitative. The results showed that the students gave medium positive responses to the use of smartphone applications for learning listening skills in blended-learning class and did not encounter obstacles while using the applications. Moreover, the smartphone applications also gave high positive impacts showed by a significant improvement in results experienced by non-English students in listening skills.

**Keywords:** *blended-learning, listening skill, smartphone applications*

### **SARI**

Karakter Generasi Z yang lekat dengan teknologi memicu kesadaran para pendidik untuk memfasilitasi generasi ini dengan teknik belajar mengajar yang paling cocok untuk mereka. Salah satunya dengan mengoptimalkan penggunaan dawai atau ponsel pintar sebagai media pembelajaran bagi mereka. Oleh karena fenomena ini, penelitian ini dilakukan dengan tujuan untuk mengetahui penggunaan aplikasi smartphone dalam belajar keterampilan mendengarkan di kelas blended-learning mata kuliah umum bahasa Inggris yang diikuti oleh mahasiswa semester pertama yang termasuk dalam generasi Z. Penelitian ini juga bertujuan untuk mengetahui pentingnya aplikasi ponsel pintar yang berhubungan dengan peningkatan keterampilan mendengarkan bagi mahasiswa jurusan non-Inggris dan untuk mencari tahu kemungkinan hambatan saat menggunakan aplikasi ponsel pintar. Peneliti menerapkan dua aplikasi smartphone. Untuk triangulasi data, penelitian ini juga menggunakan pre-test dan post-test untuk melihat signifikansi dari penggunaan aplikasi smartphone. Instrumen lainnya adalah kuesioner dan tugas rangkuman materi yang

didengarkan mahasiswa. Data dianalisis dengan teknik metode campuran, yaitu kualitatif dan kuantitatif. Hasil penelitian menunjukkan bahwa siswa menunjukkan respon positif sedang terhadap penggunaan aplikasi smartphone untuk belajar keterampilan mendengarkan di kelas blended-learning dan tidak menemui hambatan saat menggunakan aplikasi. Selain itu, aplikasi smartphone juga memberikan pengaruh positif tinggi yang ditunjukkan oleh peningkatan signifikan dalam hasil yang dialami oleh siswa non-Inggris dalam keterampilan mendengarkan.

**Kata kunci:** *aplikasi telepon pintar, blended-learning, keterampilan mendengarkan*

---

Received 14 February 2019 last revision 13 June 2019 published 06 October 2019  
<http://dx.doi.org/10.33603/rill.v2i3.1967>

## **Introduction**

The term Z generation is given to the generation as the successor to the Millennial Generation. The existence of the term is echoed along with the characteristics inherent in the community groups who own this generation. If the Millennial Generation or also called Generation Y is labeled for individuals born in 1981-1995 (Oblinger & Oblinger, 2005), then Generation Z is a predicate for someone born in the years 1995 to 2010 (Bencsik, Csikos, & Juhez, 2006) Grouping by referring to the term specific generation of individuals born in a certain year range is a form of response from the world community today to identify a form of class that has the same experience. This is reinforced by the definition of generation by Kupperschmidt's (2000) which states that the community gives a label as a particular generation based on similarities such as age, year of birth, and events experienced and has a significant influence on the development of the individual group. Although Generation Z is not the latest generation to emerge at this time because of the emergence of the Alfa Generation that has a year born in 2010 to the present, but Generation Z gives a special impression on aspects of life today because of the characteristics they have and which are able to have a significant influence also for the pattern of present life. Generation Z is pinned to the title of effective worker for the digital era and current technology, education as an accommodator of science should be a strong foundation to help Generation Z achieve the predicate. Thus, the characteristics and needs of Generation Z that are closely related to technology, the internet and other digital components open the way as well as can be used by education to provide this generation of internet with the knowledge delivery techniques that are most suitable for them. It aims to achieve the more effective learning objectives.

Answering the need for the development of learning techniques that are adapted to Generation Z characters, a technique namely blended-learning has been implemented. As stated by Brew (2008: 98), blended-learning is a combination of online and face-based class to give more effective result in learning. Blended-learning is considered capable of providing learning experiences that accommodate the characteristics of Z Generation because through this learning model, students can accomplish their tasks in a more efficient time (McCarthy & Murphy, 2010: 67). In addition, this learning model can accommodate the students' autonomous learning so that they can achieve the goals of their learning more optimally (Marsh, 2012: 4). In the world of higher education, especially in non-English majors there are several general courses that must be given to their students as a capital of basic and applied skills and knowledge. One of them is a general English course. At one private university situated in western part of Yogyakarta, first-level students are given the obligation to attend lectures on general English courses. In this course, students will be dynamic in learning four skills in English, one of which is listening skills. These skills are important because most of our time is as much as 80% is spent communicating, and 45% of that percentage is spent listening (Lawson, 2007, as cited by Sofiana, 2015). Concerning to the statement of how much people do listening, it can be ascertained that having good listening skills is the key to the success of communicating accurately, especially in learning English.

The study by Sofiana (2015) entitled "Implementation of Blended-Learning in Extensive Listening Courses", showed that the blended-learning technique was successfully accepted by the students of Nahdlatul Ulama 'Jepra Islamic University. The research participants were satisfied with the blended-learning model. In addition, students feel effective in learning listening skills and easier to understand the material in listening skills in Extensive Listening courses. The importance of having listening skills in English, and the success of previous studies on the application of blended-learning in listening skills, sparked the idea of researchers to look for learning techniques that are consistent with the characteristics of first semester students as students of general English courses. The first semester students at one private university situated in western part of Yogyakarta, are dominated by those born in the generation which are later called Z Generation. Generations that are close to the internet and digital systems and this technology need the techniques that are most suitable for them to achieve successful learning listening skills. Therefore, the researcher aims to

apply blended-learning in English language lectures and uses the learning tools that are closest to first semester students as Generation Z namely gadget, especially applications on smartphones. There are two applications chosen to help students sharpen their listening skills more independently and use their own learning styles. They are *Learn English Podcasts – Free English Listening by British Council* and *500 English Listening Practice*. The two applications can be downloaded for free through Playstore or Appstore. They also offer levels of listening material including beginner, intermediate, and advanced. Furthermore, this application provides a quiz in the form of deciding True or False of statements based on the sound recordings. This makes the applications get high ratings and good reviews. The research is conducted with non-English department students in first semester who are included in Z Generation at one private university situated in western part of Yogyakarta. The research was carried out on blended-learning based in English general subjects for the success of the learning process in listening skills.

### **Method**

In this study, researchers used mixed-method research to carry out this study. According to Wirawan (2012: 160), mixed-method research is a research that combines qualitative and quantitative methods all in one evaluation process. Mixed-method research will make research findings richer. Related to that, Sugiyono (2011: 404) added that mixed-method research was used to obtain more comprehensive, valid, reliable and objective data. The population of this study were all first semester non-English students of one private university situated in western part of Yogyakarta who took general English courses. In addition, the first semester students who could be considered as the research population were those who have years of birth between 1995 and 2010. This was to meet the Z Generation criteria as the focus in this study. Therefore, to find out the year of birth of the students, before the research was carried out, the researcher distributed a questionnaire which contains information about the year of birth data of students and their perception of listening skills. The sample in this study was the first semester non-English department students of one private university situated in western part of Yogyakarta with the year of birth between 1995 and 2010 academic year 2018/2019. Samples from this study were determined through purposive techniques.

The researcher used questionnaire to obtain data related to the implementation of the smartphone application in a blended-learning class. The questionnaire was also used to reveal the benefits of using the smartphone application as well as the possibility of difficulties experienced by students in their application. In addition to questionnaire, to obtain valid data, a test was used as a tool to determine the effect of using the English Listening smart phone application in the blended-learning class on improving listening skills for semester 1 students in non-English majors. There are two types of tests that will be applied in this study, namely the pre-test and post-test. The pre-test is intended to get initial information about the ability to listen to first semester non-English students whereas the post-test is used to obtain information and the existence of significance result of the smartphone application in the blended-learning class.

In this study, data obtained were analyzed using qualitative-quantitative analysis. According to Miles and Huberman (1994, p. 10), in research, data were analyzed during the data collection process. Apart from that, the data is also analyzed after the data collection process in a certain period. As stated by Sugiyono (2009, p. 337), there are four data analysis activities. They are data reduction, data presentation, data triangulation, and conclusion drawing. The researcher draws conclusions obtained from data analysis and also the facts obtained in the study. In addition, the conclusions presented the results obtained in the study. The researcher analyzed the data collected from the results of the questionnaire. Thus, the results of data analysis obtained from the questionnaire are presented in a descriptive-qualitative manner. The researcher analyzed the results of the questionnaire on the implementation of the use of smartphone applications in the blended-learning class. In addition, the researcher analyzed the results of the questionnaire on evaluating the benefits of implementing smartphone applications as well as the possibility of difficulties experienced by students in their application as the focus of this study through the three steps described as follows:

- a. Calculate the score for each answer option. There are four choices of answers namely Strongly Agree, Agree, Disagree, and Strongly Disagree. In the questionnaire, Strongly Agree gets a score of 4; Agree to print 3; Disagree to print 2; and Very Disagree was assessed 1. In the study, scores 4 and 3 were considered as scores that had positive responses. However, scores 1 and 2 are considered as scores that have negative responses.
- b. Presents data in a table.

- c. Calculate the score through the following formula:  $P = \frac{W}{QRS} \times 100\%$

(Sugiyono, 2009, p.143-144)

P: Score Percentage

W: Total score

R: Number of items

Q: Maximum score for each item

S: Number of respondents

Tabel 3.1 Qualification of Questionnaire Score Percentage Result

No	Percentage (%)	Qualification
1	$75\% < p \leq 100\%$	High
2	$50\% < p \leq 75\%$	medium
3	$25\% < p \leq 50\%$	Low
4	$0\% \leq p \leq 25\%$	very low

(Sugiyono, 2009, p. 144)

## Results and Discussion

Pre-test is one of the instruments used in this study. The pre-test was used to determine the significance of the application of smartphone applications to listening skills. The researcher conducted a pre-test for first semester students who took general English courses at one private university situated in western part of Yogyakarta. The students came from the Department of Agrotechnology and Psychology. The students are included in Z generation which is referred to as the internet generation or also iGeneration (Putra, 2016). Z Generation was born in the period 1995 - 2010. The students who were participants in this study qualified as Z generation because they had years of birth between 1998 until 2001. After carrying out the pre-test, researchers introduced two smartphone applications used in this study called Learn English Podcasts - Free English Listening by British Council and 500 English Listening Practice. 500 English Listening Practice has Beginner, Intermediate and Advanced level sharing features. There are also features to adjust the speed of conversation in listening material - the lower the number, the slower the speed. It eases the application users to determine and adjust the audio speed which is expected to simplify the user's understanding of the audio material being played. Learn English Podcasts - Free English Listening by British Council has more or less the same features as the previous application. In this application, there are many material choices. However, there are several stages before users can listen to audio in this application. Before playing the desired audio, the user must click the download button firstly and requires internet access, and after that users are free to access audio that has been downloaded offline. Learn English Podcasts - Free English Listening by British Council provides transcripts for each audio which is of course intended to facilitate users in checking their understanding of the contents of the audio. There are also exercises in

this application, so that application users can immediately check their understanding of the audio they have listened to. In this section, when practice questions are read, there is a feature that gives users the freedom to while listening to related audio simultaneously and accommodates the learning independence of application users.

Applications were implemented for three weeks in blended-learning class. Students practiced listening with the help of the two smartphone applications. In monitoring the use of the application, students were asked to make the task of summarizing the audio content they had listened to. Students were required to rewrite the content in their own words. Student responses' toward the use of smartphone applications were written in the items on the questionnaire distributed to the students. This is also to answer the first formulation of the problem in this study, "How is the application of smartphone applications in listening skills in English general courses based on blended-learning followed by first semester students?" There are 23 statements on the questionnaire that show the formulation of the problem. Based on the results of the questionnaire, the students showed a positive response to the use of smartphone applications for learning listening skills. Positive response is indicated by the selection of number 5 to strongly agree, number 4 to agree and number 3 which means neutral but can be assumed to be still leaning towards positive. Positive responses are shown in table 4.1. Percentage of Questionnaire Results for Problem Formulation 1.

Table 4.1 Percentage of Questionnaire Results for Problem Formulation 1

Item No.	The number of positive response	Percentage
1,2,3,4,5,6,7,8,9,10,11,12,13,14,15, 16,17,18,19,20,21,22,23	3397	74%

The students responded well to the use of smartphone applications. They were familiar with smartphones so that they could operate the smartphone application easily. They used the features contained in smartphone applications optimally, such as selecting audio levels that suit their desires, namely beginner, intermediate or advanced. They chose topics according to their interests. In addition, they also utilize transcript features and audio speed settings. With a percentage of 74%, according to Sugiyono (2009, p. 144) It is included as the medium qualifications.

Questionnaire item number 24, 25, 26, 27, 33, 34, 35, 36, 38 answered the second problem formulation, namely "How does the application of smartphone applications affect the listening skills of first semester students in English subject based on blended-learning?" Based on the results of the questionnaire, the students gave positive responses to the effect of using smartphone applications for learning listening skills. Positive responses are shown in table 4.2. Percentage of Questionnaire Results for Problem Formulation 2.

Table 4.2.  
Percentage of Questionnaire Results for Problem Formulation 2.

Item No.	The number of positive response	Percentage
24, 25, 26, 27, 33, 34, 35, 36, 38	1375	76,3%

The percentage of 76.3% showed high qualifications which presented that the use of smartphone applications really gave a good influence on their listening skills while giving a good impression in learning listening skills. This was indicated by the statement that they found self-confidence when using these applications to improve listening skills and provide special pleasure for students in practicing listening. The listening applications were also responded well by the research participants because it was believed in providing an opportunity for students to practice listening skills in their own way. The ease and improvement was demonstrated by their ability to retell the contents of the listening material they were listening to in the form of a brief description.

The pre-test and post-test scores for 40 students showed a significant improvement in results experienced by non-English students in listening skills. After using the smartphone application and trying to listen to audio as much as 2-3 times, their listening skills increase. The use of smart phone applications in listening skills was an embodiment of the blended-learning learning model that is believed to be able to provide students with an autonomous learning atmosphere and learning environments that accommodate their own learning styles so they can reach their goals easily and effectively. (Marsh, 2012: 4). The exercises found in smartphone applications provide students the chances to accomplish the tasks by summarizing the contents of the audio they have listened to and retelling it in a shorter and more efficient time ( McCarthy & Murphy, 2010: 67). In answering the third problem formulation, "Is the difficulty of first semester students in

using smart phone applications in listening skills in English general subjects based on blended-learning ?, the questionnaire items no. 28, 29, 30, 31, 32, 33, 37 were questioned to the students. Based on the results of the questionnaire, the students did not encounter obstacles in the use of smartphone applications. The results were shown in table 4.4. Percentage of Questionnaire Results for Problem Formulation 3.

Table 4.4.  
Percentage of Questionnaire Results for Problem Formulation 3.

Item No.	The number of positive response	Percentage
28, 29, 30, 31, 32, 33, 37	1036	74%

The percentage of 74% was included in the medium qualification. Only a small portion of the students got the obstacles in the use of smartphone applications. There were two students who said that barriers occurred when their smartphones storage memory were almost full, so they could only use one of the two applications used in this study. One person stated another obstacle related to their smartphone hardware which made them uncomfortable in using smartphone applications in doing the listening practice by using the smartphone applications. Two other people responded that the application does not have transcript in Indonesian. It was related to one another person's statement that meeting and catching up new vocabulary were quite difficult for them.

Based on the results of the questionnaire, the formulation of problems 1 and 3 show medium qualifications. This means there were still several things that needed improving in the application of smartphone applications. The implementation of smartphone application in listening practice had to concern on how to minimize obstacles. Regarding on that, the results of the questionnaire for formulation of problem 2 showed that the use of smartphone applications still showed a positive response. The statement was indicated by a percentage of 76.3% which was included as high qualifications and a significant increasing score of the pre-test to post-test.

### **Conclusions and Recommendations**

The use of smartphone applications in listening skill learning is able to provide a positive influence on each of the skills listening to first semester students from non-English majors. However, based on the results of the questionnaire, the formulation of problems 1 and 3 still shows moderate qualifications. It means that there are things that need to be

improved towards the use of smartphone applications so that the obstacles are minimized too. Through looking at the positive effects provided by the application of smartphone applications, learning activities for the millennial generation or Z generation can be filled or varied by including smartphone applications like this. It can also provide ideas for learning other skills such as speaking, reading and writing. Moreover, smartphone applications are considered close to the characteristics of students today and the research result shows that it is able to provide significant improvement test score results and positive influences. Therefore, this research will be an idea for further research, namely the design of smartphone applications for learning English especially in listening skill.

## References

- Arikunto, S. (2006). *Metode Penelitian Kualitatif*. Jakarta: Bumi Aksara
- Ary, D., Jacobs, L.C., Razavieh, A. (2002). *Introduction to Research in Education (sixth edition)*. Wadsworth Publishing
- Bencsik, A., Csikos, G., & Juhaz, T. (2016). Y and Z Generations at Workplaces. *Journal of Competitiveness*, 8(3), 90–106. Retrieved from <https://doi.org/10.7441/joc.2016.03.06>
- Bencsik, A., & Machova, R. (2016, April). Knowledge Sharing Problems from the Viewpoint of Intergeneration Management. In *4th International Conference on Management, Leadership and Governance: ICMLG2016 (p.42)*. Academic Conferences and publishing limited. Retrieved from <http://www.cjournal.cz/files/227.pdf>
- De Britto, Juary. (2015). *The Effects of Listening Comprehension on English Language Learners Writing Performance while Taking Notes*. In BSU Master's Theses and Projects. Item 23. Retrieved from <http://vc.bridgew.edu/cgi/viewcontent.cgi?article=1019&context=theses>
- Dill, K. (2015). 7 Things Employers Should Know About The Gen Z Workforce, *Forbes Magazine*, 11.6. Retrieved from <http://www.forbes.com/sites/kathryndill/2015/11/06/7-thingsemployers-should-know-about-the-gen-z-workforce/print/>
- Gilakjani, A. & Ahmadi, M. (2011). A Study of Factors Affecting EFL Learners' English Listening Comprehension and the Strategies for Improvement. *Journal of Language Teaching and Research*, Vol. 2, No. 5, pp. 977-988, September 2011. Retrieved from <http://www.academypublication.com/issues/past/jltr/vol02/05/05.pdf>
- Howe, N., & Strauss, W. (2000). *Millennials rising: The next great generation*. New York: Vintage.
- Liu, Q & He, X. (2014). *Using Mobile Apps to Facilitate English Learning for college Students in China*. Retrieved from <http://www.diva-portal.org/smash/get/diva2:896787/FULLTEXT01.pdf>
- Mannheim, K. (1952). The Problem of Generations. *Essays on the Sociology of Knowledge*, 24(19), 276-322–24. Diunduh dari <http://www.history.ucsb.edu/faculty/marcuse/classes/201/articles/27MannheimGenerations.pdf>

- Mardapi, Djemari. (2008). *Teknik Penyusunan Instrumen dan Nontes*. Yogyakarta: Mitra Cendikia Offset.
- Miles, M. B. & Huberman, A. M. (1994). *Qualitative Data Analysis: an expanded sourcebook (second edition)*. SAGE Publications
- Putra, Yanuar. (2016). Teori Perbedaan Generasi. *Among Makarti Vol.9 No.18*, Desember 2016. Retrieved from <http://jurnal.stieama.ac.id/index.php/ama/article/viewFile/142/133>
- Sofiana, Nina. (2015). Implementasi Blended Learning pada Mata Kuliah Extensive Listening. *Jurnal Tarbawi* 5(1). Retrieved from [https://www.google.co.id/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&cad=rja&uact=8&ved=0ahUKEWjvzdeH7o3aAhUHLI8KHfdZDsIQFggwMAE&url=http%3A%2F%2Fjournal.unisnu.ac.id%2FJPIT%2Farticle%2Fdownload%2F303%2F617&usq=AOvVaw3LXpfvRA0qKL\\_4vp4d99d0](https://www.google.co.id/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&cad=rja&uact=8&ved=0ahUKEWjvzdeH7o3aAhUHLI8KHfdZDsIQFggwMAE&url=http%3A%2F%2Fjournal.unisnu.ac.id%2FJPIT%2Farticle%2Fdownload%2F303%2F617&usq=AOvVaw3LXpfvRA0qKL_4vp4d99d0)
- Sugiyono. (2009). *Metode Penelitian Pendidikan (Pendekatan Kuantitatif, Kualitatif dan R&D)*. Bandung: Alfabeta
- Oblinger, D. and Oblinger, J., Eds. (2005). *Educating the Net Gen*. Washington, D.C.: EDUCAUSE.
- O'Bryan, A. & Hegelheimer, V. (2009). Using a mixed-methods approach to explore strategies, metacognitive awareness and the effects of task design on listening development. *Canadian Journal of Applied Linguistics*. 12 (1), 9-38. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.868.1491&rep=rep1&type=pdf>
- O'Malley, J.M., & Chamot, A.U. (1989). Learning strategies in second language acquisition. *Applied Linguistics*, 10 (4), 418-437. Retrieved from <http://e-flt.nus.edu.sg/v1n12004/chamot.pdf>
- Strauss, W., & Howe, N. (1991). *Generations: The history of America's future, 1584 to 2069*. New York: William Morrow & Co.
- Underwood, M. (1989). *Teaching listening*. London: Longman

### **Acknowledgement**

This research was supported financially by LLDIKTI Wilayah V Yogyakarta, Indonesia through the Grant Research for beginner lecturer in 2018.

### **Biography**

**Valentina Dyah Arum Sari** is a member of English Language Education Study Program lecturers at Universitas Mercu Buana Yogyakarta, Indonesia. The author is interested in doing research in English Language Teaching field. The author can be reached at [valentina@mercubuana-yogya.ac.id](mailto:valentina@mercubuana-yogya.ac.id)