



Designing Interactive Workbook via *Liveworksheets* for Reading Skill at Grade 10

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Abstract

This research aimed to design interactive workbook via Liveworksheets for reading skill at tenth grade. The subject of this research was a class of 10th grade students in a Senior High School in Tanjungpinang, which consisted of 16 students. This research was research and development with the ADDE model based on Richey and Klein (2014). This research focused on designing interactive workbook for the tenth grade second semester English materials. It consisted of announcement text, recount text, and narrative text. There were four phases in this research which are analysis phase, design phase, development phase, and evaluation phase. The result from the validation stage showed that there was minor revision in the media aspect. After the revision had been approved by the validator, the interactive workbook was decent to be used in the classroom. From the practical result, it can be seen that the interactive workbook got good responses from the students. The interactive workbook also met the students' characteristics which were classified as generation Z.

Keywords: interactive workbook, reading skill, higher order thinking skill

INTRODUCTION

A workbook was beneficial in the learning process. According to Collado & Abubo (2021), a workbook can stimulate students to understand the lessons by doing the activities. Astuti (2017) stated that a workbook can be used as an assessment instrument. Yusubjanovich (2021) stated that teachers can observe students' skills and knowledge by using workbooks. It can be concluded that a workbook can help students to work independently and the teacher can use it to assess students' understanding of the material given.

Even though it was beneficial, a workbook faced some problems in the digital era, especially in online learning. The problems appeared because most of the workbooks used were still in the printed version. Based on the interview with the teacher that was done in March 2022 at a Senior High School in Tanjungpinang, the teacher confessed that printed workbook was not

effective in online learning and it was not quite motivating the students to learn English since it was not attractive. The teacher also confessed that the exercises in the available printed workbook did not match the students' characteristics and were not contextual. Hence, an update of the workbook was needed to fix these problems.

An interactive workbook was one of the updates that can be done for online learning. It was different from the printed workbook. The difference between a printed workbook and an interactive workbook was the output (Ani & Lazulva, 2020). Interactive in this term described as the combination of computer hardware and software that allowed a two-way flow of information between the user and information system (Ryabchikova et al., 2020). Since it was interactive, then the exercises in the workbook were supported by text, animation, graphics, and audio. The students can also answer the questions directly on the workbook and the score will be sent to the teacher's email (Ratnawati, 2021). It meant that the output of the interactive workbook can be accessed online.

Interactive workbook suite online learning because it used technology to use it. It meant it was more effective. It also helped students to understand the material easier in online learning. As the research that was conducted by Ratnawati (2021), it showed that 87.5% of students found it easier to understand the material by doing the exercises in the interactive workbook.

In creating an interactive workbook, we must pay attention to the current needs. In the current education, it was not just about teaching the students about knowledge, but it also needed to grow their potential (Pratiwi & Alimuddin, 2018). As stated in the *Peraturan Pemerintah Republik Indonesia Nomor 17 Tahun 2010 tentang Pengelolaan dan Penyelenggaraan Pendidikan Pasal 77* that "Secondary education aimed to form students to be a person who was knowledgeable, capable, critical, creative and innovative". One of the alternatives to grow students' potential was by directing the learning process so that students can apply high-order thinking skills (HOTS) (Pratiwi & Alimuddin, 2018). Therefore, students needed to practice with HOTS questions to grow their potential.

Higher Order Thinking Skill (HOTS) was part of the revised Bloom's Taxonomy which were analyzing (C4), evaluating (C5), and creating (C6). HOTS consisted of skills that were needed in the 21st century which were, critical thinking and problem solving, creativity and innovation, communication, and collaboration skills (Pratiwi et al., 2019). Compared to just recalling and restating, HOTS was the highest level of thinking ability (Rozi & Hanum, 2019). HOTS encouraged students to find solutions for a problem using the knowledge that they already had (Jailani et al., 2017). HOTS was the thinking skill that was needed in the present day, therefore it was important for students to develop it.

However, based on the questionnaire result that the researcher shared in March 2022 at the subject school, more than half of the tenth-grade students did not know about HOTS questions. The students who know about HOTS questions also answered that they rarely practiced with HOTS questions. Based on the interview with the English teacher, it was found that the teacher rarely gave HOTS questions because most students had low English mastery. If students rarely practiced with HOTS questions, it will be difficult for them to grow their potential, as stated by Arifin & Retnawati (2017) stated that students need to often practice with HOTS questions to develop their HOTS ability. HOTS questions can also promote students' thinking skill as stated by Nourdad et al. (2018) that to encourage students to think in higher level, teacher should provide them with high-level questions and it may also increase their motivation to learn English. Hence, exercises with HOTS questions were needed for students to get used to HOTS questions.

In creating an interactive English workbook, we also needed to pay attention to the skills that will be taught so that it can help students to improve their English skill. For this research, the researcher focused to create exercises for reading skill. Reading skill as one of the English skills had some benefits for students. Students can improve their vocabulary and grammar by reading (Rahmi & Ratmanida, 2014). Students can get a lot of information through reading which can

help them to broaden their knowledge (Astria, 2019). These benefits were crucial for students therefore teachers need to teach the reading skill to students.

Reading had relations with HOTS, especially in the learning process. Reading can train students' thinking skill to become higher (Fazriani et al., 2019). Students would also get higher reading comprehension ability if they had higher critical thinking (Zainil et al., 2020). If students had higher reading ability, then it would be easy for them to understand the other issues (Febrina et al., 2019). It was in line with the research result that was conducted by Yoke et al. (2015), it showed that classroom with HOTS activity can provoke students to think critically, which can improve their reading skill. If students' reading skill is improved, then they would find it easier to improve the other English skills.

With the problems stated above, the researcher tried to design an interactive workbook for online English learning via the *Liveworksheets* website. The researcher chose the *Liveworksheets* website over other websites since it was easy to operate and it also had a user-friendly interface. This website also allowed self-correction so it can save more time for teachers. With this website, teachers can add sounds, videos, drag and drop exercises, arrow connections, multiple choices, and students can also perform oral exercises which meant that this website was fully utilized the technology (Novikova, 2020). With its functions, *liveworksheets* can make the learning process more interesting for students.

II METHOD

The research design in this research was research and development. The R&D model in this research was based on the ADDE model by Richey and Klein in (Budiarta et al., 2021). He stated that there were four phases in R&D; they are (1) analysis, (2) design, (3) development, and (4) evaluation. This research was conducted at a Private Senior High School in Tanjungpinang. The subject for this research was the tenth-grade students which consisted of 16 students.

The instruments that were used in this research were validation sheets and students' response questionnaire. They were used in the evaluation stage. The validation sheets were used for the expert test and the students' response questionnaire was used in the user test.

In this research, the data were analyzed using descriptive analysis and descriptive statistic. The descriptive analysis was used to analyze qualitative data taken from the interview, the students' questionnaire, and validation sheets. The descriptive statistic was used to analyze the data from students' responses. The descriptive statistic was according to Rani & Maarif (2021) with formula as follows:

$$P = \frac{f}{n} \times 100\%$$

Where:

F = Frequency

N = Number of Cases

P = Percentage

Table 1. Range of percentage interpretation criteria

Percentage Range	Category
86% - 100%	Very decent
76% - 85%	Decent
60% - 75%	Less decent
0% - 59%	Not decent

Adopted from Rani & Maarif (2021)

III RESULT

3.1 Analysis

In the analysis phase, the researcher collected information from the English teacher and also the tenth-grade students of the subject school. The information was gained through interviewing the English teacher and sharing a questionnaire to the students.

The result from the teacher's interview showed that the printed workbook was ineffective in the online learning. It also did not motivate the students to learn English since they were not attractive. The questions in the printed workbook also did not match the students' characteristics and the questions were not contextual. It was also found that the teacher rarely use HOTS questions in the classroom since the students had low English mastery.

The result from the students' questionnaire showed that more than half of the students did not know about HOTS questions. Because of that, it was difficult for them to know whether their English teacher gave them HOTS questions or not, and it was also difficult for them to know their difficulty with HOTS questions. While the students who knew about HOTS questions confessed that they had problems with HOTS questions. The problems were HOTS questions were not easy to understand, the difficulty level of the questions is high, students cannot analyze them, and students did not understand the concept of the questions.

3.2 Design

In this phase, the HOTS questions were made. In creating the HOTS questions, the researcher used the guidelines from Widana (2017) in *Modul Penyusunan Soal HOTS* which was published by *Kementerian Pendidikan dan Kebudayaan* in 2017. The designing phase started by choosing the basic competencies for reading skill that will be used to make HOTS reading exercises. Choosing the basic competencies was needed since not all basic competencies can be used to form HOTS questions. The researcher chose three topics of the second semester to be used in the interactive workbook: announcement text, recount text, and narrative text.

The next step after choosing the basic competencies was arranging the questions grid. The questions grid was arranged so that it could help the researcher to construct the questions later on. It arranged based on the format from *Modul Penyusunan Soal HOTS* which was published by *Kementerian Pendidikan dan Kebudayaan* in 2017.

Then the researcher chose the stimuli that will be used in the questions. The researcher made the stimuli and also took some of the stimuli from other sources. The stimuli were made and chosen based on the newest topic and they were contextual, which means they were based on the students' reality.

The last step in the design phase was creating the HOTS questions. The HOTS questions were made in the HOTS questions card before they were transferred to the interactive workbook. The questions cards were also based on the format from *Modul Penyusunan Soal HOTS* which was published by *Kementerian Pendidikan dan Kebudayaan* in 2017.

3.3 Development

In the development phase, the workbook's display was made. Components were added in this phase, such as color and illustration. In this phase, the worksheets were exported to the *Liveworksheets* website to make it interactive. The illustrations for the workbook were taken from *freepik.com* and *Canva*. They were free to use.



Picture 1. (a), (b) Interactive workbook display

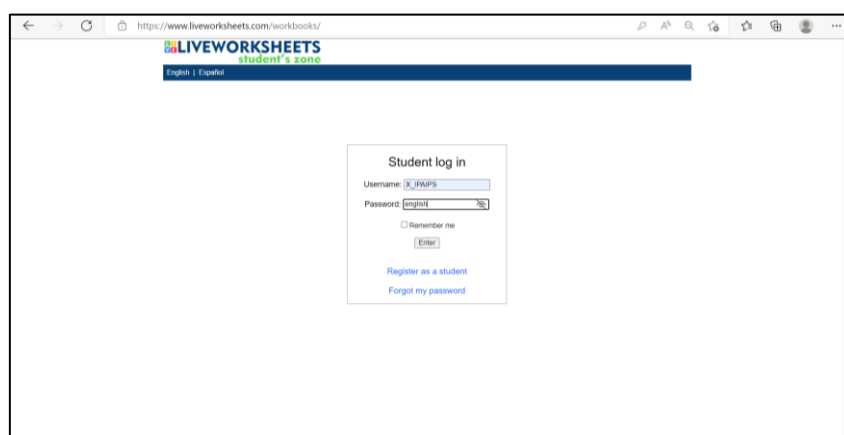
In the process, the main application that was used Microsoft Word. The appearance of the workbook was designed as attractively as possible with the appropriate illustration and color. So that students can be comfortable doing the exercises in the interactive workbook.

3.4 Evaluation

The last stage of the ADDE research model was the evaluation phase. In this phase, there were two kinds of tests: expert test and user test. The expert test was done by the English teacher of the subject school teaching English lesson to the class of the subject students, and two aspects were tested, namely material aspect and media aspect. The user test was done by 16 students in the tenth-grade of the selected school.

In the expert test, two aspects that were scored by the English teacher which were material and media aspects. The material aspect got no revision. However, the media aspect had minor revision and it needed to be revised. Then the researcher revised them and the English teacher validate it to see whether or not it is approved.

After the English teacher had approved the revised aspect, the interactive workbook could be shared to the students to conduct the next stage which was user test. The interactive workbook can be accessed through the Liveworksheets website with the link <https://www.liveworksheets.com/workbooks/> with the username X_IPAIPS and the password was “english”.



Picture 2. Liveworksheets username and password

After revision, the next step was the user test. The user test was done by 16 tenth-grade students of the subject school. Eleven students from the social studies class and five students from the science class. In the user test, the students were asked to observe and implement some activities in the interactive workbook. Then, the students were asked to fill in the students' response questionnaire.

Table 2. Students' Response Questionnaire Result

No.	Statement	Response		"Yes" Percentage
		Yes	No	
1	The display of the interactive workbook is interesting	14	2	88%
2	Using the interactive workbook increase students' learning interest	13	3	81%
3	The combination of colors in the interactive workbook is interesting and not monotonous	13	3	81%
4	Studying using interactive workbook makes learning English not boring	12	4	75%
5	Interactive Workbook is interesting and encourages students to be more active in the learning process	11	5	69%
6	The exercises help students to understand the material easier	14	2	88%
7	The presentation of the questions makes students interested	14	2	88%
8	The questions help students to know their learning abilities	12	4	75%
Total				81%

Adapted from Agestiana (2019)

From the table, it can be seen that the majority of the students had good responses towards the interactive workbook. It can be seen from the percentages that each statement got >50% of "Yes" responses. Only a few students responded to the statements with "No". It did not reach half of the classroom. The highest statement that got "No" responses was only statement number five with five students. Based on the total percentage of the good responses, it can be seen that the interactive workbook is categorized as decent (81%).

IV DISCUSSION

In this research, the researcher had designed an interactive workbook via *Liveworksheets* for reading skill at tenth grade. The result of the research showed that the interactive workbook is decent. The interactive workbook can be used in the classroom. It can be seen from the responses that students gave for each statement in the students' response questionnaire. The interactive workbook got good responses because it met the students' characteristics and needs.

Meeting with students' characteristics and needs were crucial in the learning process. Understanding the students' characteristics can impact their learning success (Lai & Hong, 2015). Szymkowiak et al. (2021) stated that the characteristics of students were differentiated by their age. Certain groups of age had different preferences and expectations. That meant the current high school students had different characteristics from the high school students ten years ago since they were from different groups of age. The current high school students were called generation Z, a transitional generation of the Millennial Generation with increasingly developing technology.

According to Dimock (2019), generation Z are those who were born in 1997-2012. This generation was also called as digital generation (Berkup, 2014). Ozkan & Solmaz (2015) added that generation Z was network youth who used the internet daily. As a digital generation and network youth, it was difficult for them to live without technology. Their learning and understanding were influenced by their digital life (Jaleniauskiene & Juceviciene, 2015). Therefore, their learning styles and preferences were also different from the other generation.

The result of this research showed that most of the students found that the display of the interactive workbook was interesting. They liked the color of the interactive workbook, and it made the learning English process became interesting. This was in line with Jaleniauskiene & Juceviciene (2015), he stated that generation Z preferred visual learning. Rothman (2016) added that visual learning with images and colored or highlighted text was more effective for generation Z since they had a short span of attention. It meant that the presentation of the interactive workbook suited the characteristics of generation Z, who were visual learners.

Most of the students found that the interactive workbook increased their learning interest. It also encouraged them to be more active in the learning process. These results were in line with Rothman (2016), he stated that generation Z was interested in interactive multimedia. He also stated that generation Z liked instant feedback. Therefore, the interactive workbook got a good score since it was interactive, and it also had self-correction, showing them their score after doing the exercises.

The students responded that the exercises in the interactive workbook helped them to learn the materials and helped them to know their learning abilities. It meant that the HOTS questions helped them in the learning process. It was in line with Rothman (2016) that generation Z must focus on developing their critical thinking and problem-solving. Jaleniauskiene & Juceviciene (2015) also stated that if the generation Z is challenged to solve problems and find solutions.

Since the interactive workbook attracted the students to learn English, it meant that the interactive workbook can motivate them. Motivation was important in the learning process. As Szymkowiak et al. (2021) stated, motivation was the key to effective learning. Students cannot achieve their learning goals without motivation (Purnama et al., 2019). Increasing students' motivation meant that their learning outcomes would be better.

V CONCLUSION

Based on the findings and discussion in designing interactive workbook via *Liveworksheets* for reading skill at grade 10, it can be concluded that an interactive workbook was needed in the learning process, especially online learning. The interactive workbook was designed using the ADDE model, consisting of analysis, design, development, and evaluation stages. The exercises in the interactive workbook were in HOTS form to develop students'

thinking skills. The validity result of the interactive workbook was obtained from the expert test in the evaluation stage. The material aspect had no revision, while the media aspect had a minor revision. After the revision, the interactive workbook can be shared to the students to conduct the user test. The user test was done to know the practicality of the interactive workbook. The user test result showed that the interactive workbook is decent, and it can be considered to be used in the classroom.

REFERENCES

- Agestiana, V. (2019). *Pengembangan Media Pembelajaran Interaktif Berbasis HOTS Menggunakan Aplikasi Lectora Inspire* [Universitas Islam Negeri Raden]. [http://repository.radenintan.ac.id/7283/1/Skripsi Full.pdf](http://repository.radenintan.ac.id/7283/1/Skripsi%20Full.pdf)
- Ani, N. I., & Lazulva, L. (2020). Desain dan Uji Coba LKPD Interaktif dengan Pendekatan Scaffolding pada Materi Hidrolisis Garam. *Journal of Natural Science and Integration*, 3(1), 87. <https://doi.org/10.24014/jnsi.v3i1.9161>
- Arifin, Z., & Retnawati, H. (2017). Pengembangan instrumen pengukur higher order thinking skills matematika siswa SMA kelas X. *PYTHAGORAS: Jurnal Pendidikan Matematika*, 12(1), 98. <https://doi.org/10.21831/pg.v12i1.14058>
- Astria, T. (2019). The Effectiveness of Inquiry Chart Strategy In Teaching Reading Comprehension of Report Text Towards The Eleven Class Students At SMAN 12 Padang. *Jurnal Ilmiah Universitas Batanghari Jambi*, 19(2), 220. <https://doi.org/10.33087/jiubj.v19i2.617>
- Astuti, D. W. (2017). The Content Analysis Of English Workbook Used In SMKN 1 Gombong. *JELE (Journal of English Language and Education)*, 3(1), 8. <https://doi.org/10.26486/jele.v3i1.263>
- Budiarta, G. R., Putra, I. N., Nitiasih, P., & Adnyayanti, N. (2021). Boosting the Quality of EFL Class Through HOTS-based English Activity Book : Upgrading Independent Active Class During Pandemic. *4th International Conference on Innovative Research Across Disciplines (ICIRAD 2021)*, 613(Icirad), 188–194.
- Collado, V. F., & Abubo, R. P. (2021). *Comparison between the Use of Lecture and Workbook in Improving the Academic Performance of Students in Ecology*. 12(6), 4412–4421.
- Fazriani, N., Supendi, D. A., & Humaira, H. W. (2019). Pengaruh Pendekatan Higher Order Thinking Skill (HOTS) Terhadap Keterampilan Membaca Siswa Kelas X SMK Negeri 3 Kota Sukabumi. *Stilistika: Jurnal Pendidikan Bahasa Dan Sastra*, 12(2), 124–138. <https://doi.org/10.30651/st.v12i2.2802>
- Febrina, Bustami, U., & Asnawi, M. (2019). Analysis of Reading Comprehension Questions By Using Revised Bloom ' S Taxonomy on Higher Order. *English Education Journal*, 10(1), 1–15.
- Jailani, J., Sugiman, S., & Apino, E. (2017). Implementing the problem-based learning in order to improve the students' HOTS and characters. *Jurnal Riset Pendidikan Matematika*, 4(2), 247. <https://doi.org/10.21831/jrpm.v4i2.17674>
- Nourdad, N., Masoudi, S., & Rahimali, P. (2018). The Effect of Higher Order Thinking Skill Instruction on EFL Reading Ability. *International Journal of Applied Linguistics and English Literature*, 7(3), 231. <https://doi.org/10.7575/aiac.ijalel.v.7n.3p.231>
- Novikova, Y. (2020). Using Liveworksheets To Diversify Language Lessons. *Bulletin of Kharkov National Automobile and Highway University*, 0(91), 221. <https://doi.org/10.30977/bul.2219-5548.2020.91.0.221>
- Pratiwi, N. P. W., Dewi, N. L. P. E. S., & Paramartha, A. A. G. Y. (2019). The Reflection of HOTS in EFL Teachers' Summative Assessment. *Journal of Education Research and Evaluation*, 3(3), 127. <https://doi.org/10.23887/jere.v3i3.21853>
- Pratiwi, W., & Alimuddin, J. (2018). Pengembangan bahan ajar bermuatan High Order Thinking

- Skill (HOTS) pada pembelajaran tema persatuan dalam perbedaan. *Prosiding Seminar Nasional Unimus, 1*, 531–538.
- Rahmi, Y., & Ratmanida. (2014). The Use of Discovery Learning Strategy in Teaching Reading Report Texts to Senior High School Students. *Journal of English Language Teaching*, 3(1), 179–188.
- Rani, L., & Maarif, S. (2021). Development E-Module Three Variables Linear Equations System Based On Mathematic Communication. *Journal of Medives : Journal of Mathematics Education IKIP Veteran Semarang*, 5(2), 377. <https://doi.org/10.31331/medivesveteran.v5i2.1707>
- Ratnawati, T. M. (2021). Upaya Meningkatkan Prestasi Belajar pada Pembelajaran Daring Instalasi Motor Listrik Menggunakan Lembar Kerja Peserta Didik (LKPD) Interaktif. *JIRA: Jurnal Inovasi Dan Riset Akademik*, 2(6), 839–848. <https://doi.org/10.47387/jira.v2i6.166>
- Rozi, F., & Hanum, C. B. (2019). Pembelajaran IPA SD berbasis HOTS (Higher Order Thinking) menjawab tuntutan pembelajaran di abad 21. *Seminar Nasional Pendidikan Dasar Universitas Negeri Medan*, 246–311.
- Ryabchikova, V. G., Rubleva, O. S., Sergeeva, N. A., & Yakovleva, N. A. (2020). Using interactive worksheets when teaching foreign languages by the “flipped class” technology. *Perspektivy Nauki i Obrazovania*, 45(3), 195–206. <https://doi.org/10.32744/pse.2020.3.15>
- Widana, I. W. (2017). *Modul penyusunan soal HOTS*. Direktorat Pembinaan SMA Direktorat Jenderal Pendidikan Dasar dan Menengah Departemen Pendidikan dan Kebudayaan. http://repo.mahadewa.ac.id/id/eprint/651/1/MODUL_PENYUSUNAN_SOAL_HOTS_Dit_PSMA_2017.pdf
- Yoke, S. K., Hasan, N. H., Jangga, R., & Mat Kamal, S. N.-I. (2015). Innovating with HOTS for the ESL Reading Class. *English Language Teaching*, 8(8), 10–17. <https://doi.org/10.5539/elt.v8n8p10>
- Yusubjanovich, I. A. (2021). The Importance of Production Practice in The Formation of Professional Skills of Students of Pedagogical Colleges. *JournalNX- A Multidisciplinary Peer Reviewed Journal*, 7(6), 221–224.
- Zainil, Y., Rosa, R. N., & Fitrawati. (2020). *An Analysis of Reading Comprehension Questions in English Textbooks for SMAN Kota Padang: HOTS*. 463, 76–80. <https://doi.org/10.2991/assehr.k.200819.015>