Indonesian Journal of Primary Education

Physical Design Analysis Learning Videos
Titled "What Is That Form?"

Rani Nuraeni[1], Art Apriliya[2], Resa Respati[3]

Indonesian University of Education[1,2,3]
Corresponding author: raninuraeni1198@upi.edu

Abstract

The purpose of this study is to describe the physical design of elementary school form learning videos in the Ruangguru application. This study uses a qualitative approach with content analysis methods. The source of data in this study is a video learning Indonesian class VI, the form material in the Ruangguru application entitled "Formulir Itu Apa Ya" is supported by the results of interviews with the narrator in the learning video. The results show that there is accessibility, visibility and timing. The accessibility of this learning video in the ease of accessing the video is classified as good access because the stages in accessing the video are easy to understand by the user, the exposure of the information displayed helps the user to access it as desired. Visibility regarding the clarity of audio, images and text in the learning video is quite clear because the audio is always clear, display in the form of animated images made with digital engineering technology with a resolution on this video that can be selected according to the user's wishes, namely 480p / 234 kbps or 720p / 351 kbps, and the text in this learning video is both the size, type and color of the writing in the proportional program. The timing of the tempo setting in the introduction, content, and closing of this learning video is quite efficient. The tempo setting in the introduction is 44 seconds, the tempo setting on the content is or 6 minutes 34 seconds, and the closing tempo setting is 10 seconds. Judging from the physical design, the learning video entitled "Formula Itu Apa Ya" is recommended to be used by teachers for teaching because it meets good video standards.

Keywords: physical design; video tutorials; form materials in elementary school.

PRELIMINARY

Indonesian language learning is essentially teaching students about correct and good Indonesian language skills according to their goals and functions. According to Atmazaki (in Khair, pp. 89, 2018) suggests that "Indonesian subjects aim for students to have the ability to communicate effectively and efficiently in accordance with applicable ethics, both orally and in writing"(Khair, 2018).

Akan tetapi pembelajaran pendidikan bahasa terkhusus pembelajaran bahasa Indonesia dalam menghadapi tantangan di era disrupsi kurang mendapat perhatian. Inovasi dalam pembelajaran bahasa Indonesia harus banyak dilakukan. Namun, banyak pendidik yang kurang peduli terhadap inovasi dalam

kegiatan pembelajaran bahasa Indonesia. Pendidik cenderung hanya menerima kebijakan – kebijakan yang dibuat seakan – akan tidak memikirkan peluang dan tantangan yang akan dihadapi. Pendidikan bahasa yang termasuk di dalamnya merupakan pembelajaran bahasa dan sastra Indonesia yaitu salah satu bagian penting dari kurikulum di setiap jejang satuan pendidikan(Lida & Eliya, 2019).

The 2013 curriculum is known to have been specifically designed related to the formulation of student competency needs in the form of core competencies (KI), namely the domains of attitudes, knowledge, and skills (as reinforcement in the Content Standards of the 2014 Ministry of Education and Culture Regulation)(Khair, 2018).

The achievement of competence is closely related to the learning process that has been implemented. Therefore, teachers must plan learning according to the demands of the curriculum by using a supportive learning model so that students' abilities can be encouraged to conduct research and use a scientific approach, and can produce contextual work, either in groups or individually.(Khair, 2018).

However, there are several problems in learning Indonesian in achieving the specified competencies, such as the research conducted by Winarti, 2016, namely there are several problems related to learning to write, filling out forms. Among them are the difficulties of students to write or fill out forms, namely the lack of interest of students to read textbooks. In addition, the difficulty of the teacher in explaining the writing material or filling out forms, thus losing the touch of sensitivity to reactions in students and not giving enthusiasm in learning to write and read.(Winart, 2016).

Whereas filling out forms is contained in basic competencies 3.6 and 4.6, namely 3.6 observing the instructions and the contents of the text of the form (registration, membership card, sending money via bank/post office, curriculum vitae, etc.) and 4.6 filling out the text of the form (registration, membership card, remittances via bank/post office, curriculum vitae, etc.) which must be

achieved by the student. So that learning innovation is needed so that the competencies that have been set can be achieved by students.

In the current digital era, it is known that technology is developing very rapidly. This of course has an influence in various fields, of course it has an impact on the field of education. Technology is used in the field of education to facilitate the process of learning activities. Teachers are known as facilitators to direct students when learning activities take place, but teachers are not the only source in learning(Kurniawan, Kuswandi, & Husna, 2018).

Video media is the most popular information technology media and can reach the wider community. It is known that video media is included in audio-visual media, Azhar (in Vannisa, 2017) argues that "Teaching through audio-visual is a media that is produced and the use of material that is absorbed by hearing and sight and does not entirely depend on understanding words or symbols that are used in the learning process. similar"(Vannisa Aviana Melinda, I Nyoman Sudana Degeng, 2017).

Learning video or also called audio-visual media, is known as multimedia which has elements that include sound, images, motion and text. Regarding audio-visual, according to Arsyad (in Yulis, 2015) stated that "Audio-visual is a depiction or visualization of the narrative of learning material and packaged briefly". Thus, it can be seen that learning videos are learning media that contain sound, images, motion and text that are packaged briefly, densely and clearly(Purwanto & Rizki, 2015).

Novisya (2019) stated that the use of video is known to be a solution that is relevant to the development of teachers in the current era for

train students in applying technology and in mastering the material. In line with this opinion, it can be seen that using video can improve student learning outcomes. In addition, videos can also be opened at any time by students and the use of videos in learning can help teachers in providing real problems in the classroom based on everyday

life and can provide convenience in analyzing, providing evidence of the problems given. It is also known that according to Silberman (in Novisya, 2019) that learning through video can increase memory from 14% to 38%(Novisya & Festiyed, 2019).

Vannisa (2017) suggests that research results show that teaching and learning activities are more effective and easier when assisted by audio-visual or video facilities, it is known that 11% of what is learned occurs through the sense of hearing, while 83% through the sense of sight. In addition, it is stated that a person can only remember 20% of what is heard, but can remember 50% of what is seen and heard(Vannisa Aviana Melinda, I Nyoman Sudana Degeng, 2017). According to Hidayati and Zakirman (in Dira, 2017) stated that 91% of students admitted that learning using video can help students understand the material being studied.(Novisya & Festiyed, 2019).

However, the competence of teachers in making learning videos is still low. (Lestari, 2019) stated "When all teachers are asked to do activities in the form of making innovative learning videos. The results obtained are that all teachers only make learning videos by recording their respective learning activities using a cellphone camera with camera mode, namely video. This result according to (Lestari, 2019) is not as expected in the form of innovative learning videos. Because there is no animation, text, and supporting images in the video. It is observed from the following statement that in general the competence of teachers is still low in making innovative learning videos(Sustainable, 2019).

Based on these problems, it can be seen that there are still shortcomings in the development of language and literature learning activities, especially Indonesian language learning. There are other learning alternatives that are in great demand by students today, namely through the use of digital startups that are starting to develop a lot in Indonesia. Digital startups in Indonesia are dominated by payment and transportation service providers. However, there is a digital startup in the field of education that is

developing very rapidly, namely Ruangguru(Lida & Eliya, 2019)

Ruangguru is known to be a digital startup built by Belva Devara and Iman Usman in 2014. The concept of Ruangguru is known simply by bringing together tutors and students in a virtual world in the form of an application. As part of educational activities, Ruangguru has provided innovations that have attracted the attention of education actors. Ease of access, completeness of materials, and fun and easy-to-understand learning made Ruangguru popular very quickly(Lida & Eliya, 2019).

Ruangguru has received various awards both from within and outside the country for the learning innovations that have been carried out so that it has provided benefits for various parties, including educators, schools, parents, the state, and of course students. The users of the Ruangguru application also continue to increase significantly, both from students and teachers(Lida & Eliya, 2019).

Ruangguru in its learning activities uses learning videos packaged in one application. This is certainly something new and interesting. So that in line with the problems above, researchers are interested in examining the learning video entitled "Form Itu Apa Ya" which is a learning video contained in the Ruangguru application which explains the form material to find out the physical design of the learning video in accordance with the information design framework of the Carliner model.

RESEARCH METHODS

This study uses a qualitative approach and content analysis methods. The researchers in this study used the Carliner model of information design theory framework. The researcher uses the content analysis method to find out the physical design in the learning video regarding the form material in the Ruangguru application entitled "Form Itu Apa Ya" and draws conclusions from the results of the analysis. With the following steps:
1) Select the content to analyze.
2) Creating a physical design format for learning videos on the sixth grade elementary school form material in the Ruangguru application so that the data

selection works systematically. Then by creating an analysis format to help make it easier to enter data.

3) Determine the next unit and category of analysis, it is necessary to determine the level at which the researcher will analyze the learning video that has been selected.

4) Defines a set of rules for keywords.

In considering the "learning video design" category, the researcher decides which designs to code the physical category (accessibility, visibility, timing).

5) Determining research indicators in accordance with theory

The researcher traces the indicators that will be used in researching the instructional videos and records all relevant data in the appropriate categories. Following the coding rules of the researcher, the researcher must examine each article in the research sample. The researcher recorded the characteristics of each of the indicators mentioned, along with all words and phrases related to the indicators used to describe the research results.

6) Analyze learning videos and draw conclusions

After determining the indicators is complete, the collected data is examined to find patterns and drawing conclusions in response to research questions.

7) Validation (verification)

Validating (verification), namely drawing conclusions which is an act of determining the accuracy of the data by means of peer discussion and re-checking, conducting expert judgment in the field of experts. (Anonymous, 2020).

RESULTS AND DISCUSSION

This research uses the content analysis method with the information design framework of the Carliner model. This physical design is known to be about driving the reader or the user's view of relevant content. For this reason, issues such as access, display capability (for example, video resolution), and time (for example, narration speed). Usability issues at this level can

prevent viewers from gaining access to information(Morain & Swarts, 2014)

Based on the results of research conducted on physical design in the learning video entitled "Form Itu Apa Ya" using the Carliner model information design framework. Analyze the physical design of learning videos in terms of accessibility, visibility, and timing. The results of these studies, including:

1) AspectAccessibility

Accessibility i.e. videos can allow viewers to focus on areas of the screen that are relevant to the given instructions(Morain & Swarts, 2014).

Accessibility in the Ruangguru application has 7 stages to be able to watch learning videos. In the initial screen in the Ruangguru application, users must enter their email and password to start learning in the Ruangguru application.

Table 1

No	Type	Information
1.	Easy access to videos	There are several stages to being able to open a learning video entitled "Form Is What Yes" in the Ruangguru application

Source: Primary data, 2021.

Users can also log in with their facebook or gmail account. In the main view of the Ruangguru application, there are several choices of features that can be accessed by users including the study room, test room, and brain academy features. Researchers focus on the features of the study room in which there are learning videos, practice questions, and material summaries.

After selecting the Study Room feature, the user selects the class and curriculum that suits their needs. The researcher focuses on class VI, the Revised Thematic 2013 Curriculum which is the basis for the research. Then, the user selects the class and curriculum, then the user selects the subjects they want to study. In this case,

the researcher chose Indonesian language as the focus of the research.

After choosing Indonesian subjects, there are several choices of learning videos in Indonesian subjects. To learn about the form text material, the researchers chose the topic of sub-entrepreneurship, hard work, fruitful success

After choosing a sub, hard work bears success. Click on the start learning feature on the video titled "Form Is What Yes" then the learning video has started.

2) Visibility Aspect

Visibility is known as the production quality (audio, video, text) is sufficient to create content that is decent to watch(Morain & Swarts, 2014).

Table 2

No	Type	Information
1.	Audio clarity in video	The sound in the learning video contains the voice of the narrator, music, and backsound.
2.	The clarity of the image in the video	There is a choice of video resolution and animated images in the learning video.
3.	Clarity of text in video	Font type, color, and text size.

Source: Primary data, 2021.

a. Audio clarity in video

The audio clarity in the learning video regarding the form text in the Ruangguru application entitled "Form Itu Apa Ya" can be adjusted to the video speed selected by the user. Because the speed in the video affects the audio contained in the learning video. There are 5 speed options in the video, namely 1x (normal), 0.75x (slowed down), 0.5x (slowed down), 1.25x (accelerated), 1.5x (slowed up). So if the user selects 0.5x then the video and audio will slow down, and if the user selects 1.5 x then the sound will be accelerated.

The voice or dialogue of the narrator in the learning video is clear, the narrator's pronunciation in delivering the form material is precise and can be heard well by the user. The narrator's voice in the learning video has 2 parts, there is a voice by displaying the narrator and also using informative speech (voice over), namely learning information is conveyed by the narrator or voice without showing the presenter using simple and easy-to-understand language.

There is background sound or introductory music in the learning video which makes the situation in the learning video more unified. The music used as backsound is instrument music, using a weak volume intensity (soft) so that it does not interfere with the visual presentation and voice of the narrator / master teacher in the learning video.

b. The clarity of the image in the video

The clarity of the images in the learning video regarding the form material in the Ruangguru application is clearly visible. Users can choose the video resolution, namely: 480p / 234 kbps and 720p / 351 kbps. So that the clarity of the image in the video can be chosen by the user. The images contained in the learning videos are in the form of animations, which are sequential images that move quickly to create an illusion of movement. The animated images contained in the learning videos are clearly visible, the illustrations / animations are appropriate or relevant to the description of the material in the video program so that they can explain the form material well because it is able to simplify complex objects.

In the video entitled "Form Is It What It Is" regarding the material for this form, there is an animation that begins with an animation of a reporter interviewing a banana chip entrepreneur named Pak Wahyu, then it is illustrated that several students are

queuing to fill out an entrepreneurship extracurricular registration form. The next picture depicts a form and illustrates a teacher who is teaching about form material. The animated images presented are able to present visuals in accordance with the learning competencies, namely about observing the instructions from the form text (registration and membership cards) and in accordance with the theme, namely the entrepreneurial theme with the sub-theme of hard work bearing success. The layout and color of the animation in the video program contrast, you can clearly see the difference between the foreground from the background, highlighted elements and points. Animated images do not cause misconceptions in the form material presented.

c. Clarity of text in video

The clarity of the text in the learning video is clearly visible, the use of writing (text) both in size, type and color of writing in a proportional program. The type of font used in this learning video 1 is Calibri (body), the size of the text used in the learning video is different, the text in the video title is larger than the text in the others. The use of text is also in bold (bold) and some is not, the use of text in bold (bold) tends to be used in titles and subtitles or parts that are emphasized by the narrator / master teacher in the learning video.

In addition, the color of the text in the learning video is different, namely there is text that is black, white, yellow, white with orange, brown outlines. The color of the text contained in the learning video makes the text more visible and easy to read and the color of the text in the learning video is contrasted with the background color.

In the learning video, there are subtitles or the delivery of dialogue in the form of text in the learning video displayed at the bottom of the screen.

The subtitles are Calibri text (body) with white font color, and black text highlights, the subtitles in the learning video are clearly visible and match what the narrator is saying in the form of voice over.

3) Timing

The expected timing of the video is set quickly to make it easier for viewers to follow the content(Morain & Swarts, 2014)

Table 3

No	Type	Information
1.	Setting the tempo on the download	The tempo in the introduction is divided into two parts, namely the teaser and the opening of the learning video.
2.	Setting the tempo on the presentation of the material	The tempo in the presentation of the material is divided into 7 parts, and each part has a different tempo.
3.	Tempo setting on the cover	The tempo in the closing is only one part, namely the closing of the learning video.

Source: Primary data, 2021.

a. Setting the tempo on the penduhulan, namely:
   1. *teaser*ie at 0 seconds to 0:31 seconds or for 31 seconds
   2. *Opening*i.e. at 0:31 to 0:44 or for 13 seconds

b. Setting the tempo on the presentation of the material

Setting the tempo on the presentation of the material in the learning video for 6 minutes 34 seconds / 394 seconds is divided into 7 parts of time, as follows:
   1. Form settings in general are at 0:44 to 0:55 seconds or for 11 seconds
   2. The function of the form in general is at 0:55 seconds to 1:40 or for 45

  seconds

3. An example of a form (registration form) is at minute 1:40 to 1:47 or for 7 seconds
4. Parts of the registration form are at minute 1:47 to 2:07 or for 20 seconds
5. Details of personal data on the registration form, which is at minute 2:07 to 2:51 or for 44 seconds
6. Shows the process of filling in personal data on the registration form, which is at minute 2:51 to 6:19 or for 3 minutes 28 seconds / 208 seconds
7. Mindmap, which is at 6:19 to 7:18 or for 59 seconds

c. Setting the tempo on the cover, namely:
   Closing at minute 7:18 to 7:28 or for 10 seconds.

CONCLUSION

The physical design of the learning video entitled "Form Itu Apa Ya" in terms of accessibility, there are several stages so that users can open or watch a learning video entitled "Form Itu Apa ya". Judging from the visibility aspect, audio clarity has options so users can choose the audio they need, image clarity has a choice of video resolution so users can choose the clarity of the video according to their wishes, there are interesting animated images in the learning video that support the delivery of material. , the clarity of the text in the learning video has subtitles so that users can understand better what the master teacher says, the type of font in the learning video is Calibri with adjusted text size, the color used in the text in the learning video contrasts with the background color of the video so the text is easy to read. Judging from the time setting, it is included in the proportional time, namely the time that is not too fast and not too long.

THANK-YOU NOTE

During the implementation of this research, many parties have contributed to providing opportunities, motivation, time and thoughts. The author's thanks go to:

1. Mrs. Dr. Art Apriliya M.Pd. As a supervisor I in the preparation of this article.
2. Mr. Resa Respati, M.Pd. As supervisor II in the preparation of this article.
3. All parties who have helped a lot in the process of preparing this article.

BIBLIOGRAPHY

Hsieh, HF, & Shannon, se (2005). three approaches to qualitative content analysis. qualitative health research, 15(9), 1277–1288. https://doi.org/10.1177/1049732305276687

Khair, U. (2018). learning Indonesian and literature (basastra) in SD and MI. ar-riayah : journal of basic education, 2(1), 81.
https://doi.org/10.29240/jpd.v2i1.261

Kurniawan, D., Kuswandi, D., & Husna, A. (2018). the development of learning video media in science subjects about the nature and changes in the shape of objects in class IV Merjosari 5 Malang Elementary School. jinotep (journal of innovation and learning technology) studies and research in learning technology, 4(2), 119–125. https://doi.org/10.17977/um031v4i22018p119

Lestari, Y. (2019). improve teacher competence in making innovative learning videos through workshop activities at SDN 1 Pajuungan in the second semester of the 2018-2019 school year. 6(1), 37–40.

Lida, UM, & Eliya, I. (2019). the role of the digital startup "ruangguru" as a long distance learning method in language learning. edulingua, 6(2), 5–16.

Morin, M., & Swarts, J. (2014). youtube: a framework for assessing instructional online video. 37–41.

https://doi.org/10.1080/10572252.2012.626690

Novisya, D., & Festiyed. (2019). meta-analysis of learning videos in facing educational challenges in the era of the industrial revolution 4.0. journal of physics learning research, 5(1), 49–56.

Purwanto, Y., & Rizki, S. (2015). development of contextual-based teaching materials on set material assisted by learning videos. axioms journal of mathematics education, 4(1), 67–77. https://doi.org/10.24127/ajpm.v4i1.95

Vannisa Aviana Melinda, I Nyoman Sudana Degeng, DK (2017). the development of social media learning video media based on virtual field trips (VFT) in class V SDNU Kraton-Kencong. 3(2), 158–164.

Winart, P. (2016). improve writing skills in filling out forms for the STD cooperative method for grade VI students of SD Negeri 21 Teluk Menurai Sintang. journal of chemical information and modeling, 01(01), 1689–1699.