

## Research Article

# The Effectiveness of Explainer Video Duration as a Delivery of Practical Course Teaching Material in Sipejar

Novian Wahyu Firmansyah\*, Yon Ade Lose Hermanto, Gunawan Susilo, Syaury Bik Nada, Dzulfikar Ardianta

State University of Malang, Malang

**ORCID**

Novian Wahyu Firmansyah: <https://orcid.org/0000-0002-5541-7423>

**Abstract.**

In the current digital era, video media, particularly explainer videos, are increasingly utilized for distance learning. However, student interest in explanatory video media remains low, as evidenced by the fact that only 30% of the number of students who watch explainer videos until the end of the video. This study aims to identify the effectiveness of the duration of learning media through explainer videos in the context of material delivery. Explainer videos are widely recognized as effective form of learning media that uses animation, graphics, and narration to convey information visually and auditively. This study, conducted using qualitative methods, utilized survey and experimental data to evaluate the impact of explainer video duration on student comprehension. Data were obtained through questionnaires completed by viewers who had watched explainer videos of varying durations. In addition, assessments of student understanding were also carried out through tests involving material presented in explainer videos. Teachers and content creators should consider the appropriate duration to maintain the effectiveness of learning through this medium. The results of this study indicate that short and focused explainer videos can help enhance student understanding and maintain optimal concentration levels. It is recommended that explainer videos be presented in an interesting and clear style, with effective narration, and use relevant animations and graphics.

**Keywords:** duration of learning media, explainer video, effectiveness, education

Corresponding Author: Novian Wahyu Firmansyah; email: [novian.firmansyah.fs@um.ac.id](mailto:novian.firmansyah.fs@um.ac.id)

**Published:** 9 May 2024

Publishing services provided by Knowledge E

© Novian Wahyu Firmansyah et al. This article is distributed under the terms of the [Creative Commons Attribution License](#), which permits unrestricted use and redistribution provided that the original author and source are credited.

Selection and Peer-review under the responsibility of the ICADECS Conference Committee.

## 1. INTRODUCTION

Education is one of the important sectors in the development of society and nation. In the era of increasingly advanced information and communication technology, the use of learning videos has become one of the popular and effective tools in supporting the learning process. Learning videos are media that use video technology to convey information, concepts, and learning materials to students or learners. One of the learning media that students can use to learn online is learning videos. According to Busyaeri, et al. (2016) video is an audio-visual media that is in great demand by elementary

**OPEN ACCESS**

school children, for example the type of knowledge and information video that can overcome distance and time limitations, can describe events in a short time, messages delivered quickly and easily, develop students' thoughts, opinions and imagination. Learning videos are very helpful for the effectiveness of learning both online and face-to-face because students can observe in real terms the material presented in the video and when learning online students can repeat parts of the material in the video that have not been understood by students.

Explainer videos present content in an attractive visual form and can increase student comprehension. With a combination of images, animation, and audio, video can help students understand complex concepts more easily. Video expanders allow students to learn anytime and anywhere, provided they have access to a device that plays the video. This gives flexibility to students who have busy schedules or struggle to physically attend classes. Well-produced exponential videos are often more engaging and entertaining compared to traditional teaching methods. This can increase the level of student involvement in the learning process. In explanatory videos, educators can use a variety of multimedia tools such as graphs, animations, diagrams, and practical demonstrations to reinforce specific concepts. This helps students to gain a deeper understanding of the topic being studied.

To become a content designer, one must understand how to make a learning video that is interesting and in accordance with learning objectives, not to get caught up in some Learning Video Misconceptions. The length of the video is long so the experience is lost. The length of video viewing time that exceeds the ideal time limit of an explainer video results in students becoming void of experience. A content creator should consider the length of the video he creates.

## 2. METHOD

This study used qualitative descriptive research method. Moustakas (1994) and Patton (2002) put forward several theoretical views based on qualitative methods, namely phenomenology (phenomenology), symbolic interaction, ethnography (ethnography), heuristics (heuristic investigation) and Hermeneutics (Hermeneutics). The method in this study uses a phenomenological approach. The term phenomenology comes from the Greek word "phenomenon", which means "to show itself". Since 1765, the term has been used in philosophical discussions, particularly Immanuel Kant. But for Hegel, the technical meaning of the term meant "knowledge visible in consciousness". Knowledge here means what a person perceives through his own consciousness or experience, about

how he feels and what he knows. In the phenomenological approach, the researcher seeks to provide a detailed description of the experience of the subject being studied. This involves recording completely and deeply what participants experienced and expressed. Phenomenological research often involves multiple subjects or participants to explore diverse experiences related to the same phenomenon. This helps in understanding the variation of different individuals' experiences.

Data collection in this development research is carried out through observation, questionnaires (questionnaires), and documentation. According to Sugiyono (2014: 203), observation as a data collection technique has specific characteristics compared to other techniques. This study used structured participant observation techniques. Observations are made using guidelines as an observation instrument. According to Sugiyono (2014: 199), questionnaire is a technique carried out by providing a set of questions or written statements to respondents. The questionnaire sheet consists of several aspects of assessment, comments, and suggestions. This research instrument is in the form of a closed questionnaire. The questionnaire aims to assess the effectiveness of explainer videos based on material aspects, video components, display and presentation, and duration.

The questionnaire was used to collect the opinions of students of practical courses in an explanatory video trial. The data analysis process uses qualitative and quantitative approaches. Data included in the qualitative category came from the comments and suggestions of respondents. Quantitative data came from research questionnaires. The data from the questionnaire are analyzed with descriptive statistics, further converted in qualitative data.

The first step in the study was to design two videos. After generating the video design, the next step is to get feedback from respondents. The data collection techniques used are: 1) pre-test for each video, 2) post test for each video, 3) distribution of questionnaires, 4) observation of student behavior.

Analysis can be done on the results of the pre-test-post test and data analysis from the questionnaire results. Data analysis is carried out using descriptive statistics, calculating averages, calculating percentages, interpreting the results of these descriptive statistics.

### 3. RESULTS AND DISCUSSION

The duration of the explainer video can be a significant factor in increasing students' understanding in practical courses. Here are some aspects to consider:

**Student Study Time:** The length of the video must be adjusted to the student's learning conditions and abilities. If the video is too long, students may experience study fatigue and difficulty maintaining concentration, which can reduce their comprehension. Ideally, learning videos should be long enough to deliver material comprehensively but not too long to interfere with student absorption.

**Material Comprehensibility:** It is important to ensure that the material in the learning video is presented clearly and easily understood. If the video is too short and does not provide adequate explanation, students may find it difficult to understand complex material. Conversely, videos that are too long and long-winded can make students lose focus and do not understand the subject.

**Material Diversity:** The length of a video can be affected by the content being taught. More complicated or comprehensive topics may require longer videos to cover them in depth. Meanwhile, simpler concepts might be conveyed in shorter videos.

**Production Quality:** The technical aspects of the video also play an important role. Well-produced videos, including clear sound, sharp images, and engaging presentations, tend to be more engaging and can aid student understanding.

It is important to remember that the effect of learning video duration can vary between individuals. Some college students may prefer to study with shorter videos while others may be better off with longer videos. Therefore, an effective approach is to mix and match different types of learning sources, such as short videos, longer videos, text, and direct interaction with lecturers or fellow students.

The use of explainer videos in practical courses can be an invaluable tool to improve student understanding, especially if designed wisely and considering various factors that can affect the level of effectiveness.

Based on the pre-test and post-test assessments between the two explanatory videos, it was concluded that there was an increase of 80% in video 2. Thus the material and duration in video 2 are more understandable and in accordance with the wishes of students. Based on the distribution of questionnaires, as many as 85% of respondents suggested that the ideal duration is 5-10 minutes. These results are in line with Brame (2016) suggesting that the average ideal time for video duration is 6 minutes. The results explain that the most important thing to maximize students' attention to explanatory videos is the short duration of the video.

## 4. CONCLUSION

The conclusion of the study of the effectiveness of the duration of explicit videos in practical courses can vary depending on the content, target audience, and learning objectives. To determine the effective duration as follows:

1. Take concentration and attention into account: The average human attention usually ranges from 5 to 15 minutes. If possible, try to divide the material into short segments with a duration of about 5 to 10 minutes to keep participants' attention.
2. Focus on core content: Avoid stalling videos with irrelevant information. Make sure the video focuses on key points and lays out the material briefly, clearly, and efficiently.
3. Adjust to the complexity of the material: If the material is more complex, it may take longer to explain well. But still pay attention so as not to be too long to interfere with attention.

## References

- [1] Akhmad, Busyaeri; Tamsik, U. A. zaenuddi. (2016). The Effect of Using Learning Videos on Improving Science Maple Learning Outcomes at MIN Kroya Cirebon. *AL Ibtida*, 3(20), 116–137.
- [2] Brame CJ. Effective educational videos: principles and guidelines for maximizing student learning from video content. *CBE Life Sci Educ*. 2016;15(4):1–6.
- [3] Patton MQ. *Qualitative Research and Evaluation Methods*. USA: Sage Publication Inc.; 2002.
- [4] Sugiyono. (2014). *Educational Research Methods Quantitative, Qualitative, and R&D Approaches*. Bandung: Alfabeta.