

# Development of Learning Videos Using Doratoon Application in Theme 7 Subthema 1 Class IV SDN 173301 Lumbantongatonga

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**Abstract.** This study aims to (1) produce learning vids that are suitable for use in the tutoring and literacy process in class IV, (2) determine the practicality of learning vids developed on theme 7sub-theme 1 literacy 5, (3) determine the effectiveness of learning vids developed on theme 7sub-themes 1 literacy 5, (4) Learning vids developed can ameliorate pupil learning issues on the theme 7sub-themes 1 literacy 5. The type of exploration used is Research and Development (R&D) using the ADDIE model which consists of Analysis (Analysis), Design (Planning), Development (Development), perpetration (perpetration) and Evaluation (Evaluation). The subjects of this exploration and Development (R&D) are the fourthgrade scholars of SDN 173301 Lumbantongatonga, totaling 14 people and 1 schoolteacher of the fourth grade of SDN 173301 Lumbantongatonga. The data analysis fashion in this study is quantitative data attained from questionnaires given to material experts, media experts, preceptors and questionnaires for fourth grade scholars of SD 173301 Lumbantongatonga and qualitative data attained from interviews, responses and suggestions from material validators, media and preceptors. The results of the study show that (1) the feasibility test by material experts is included in the "veritably eligible" criteria with the accession of 96.66 confirmation results. Meanwhile, media experts entered the "veritably eligible" criteria with 96.92 confirmation results. From the results of the assessment of material and media experts that the criteria were 'veritably applicable' with an average chance of 96.79, it can be concluded that the validated literacy videotape product is doable to use. (2) In the practicality test by education interpreters, it's included in the "veritably practical" criteria with the accession of 95.38 confirmation results. (3) The effectiveness test through the test of pupil learning issues against the literacy videotape is carried out by conducting pre-test and post-test trials. In the pre-test without using literacy vids, the average value of scholars was 52.86 and in the post-test the scores of scholars increased after using literacy vids using the doratoon operation with a normal of 92.87.40.01(56.91).

**Keywords:** Learning videotape, Doratoon, Learning issues

## 1 Introduction

Developments in colorful aspects of life are presently veritably rapid-fire, one of which is progress in the field of wisdom and technology. These developments give rise to colorful kinds of challenges, including challenges for the development of education. AECT (Association of Educational and Communication Technology) in 2004 stated that "Learning

Technology is the study and ethical practice of easing literacy and perfecting performance through the creation, use and operation of technology processes and coffers." Presently, the world of education is making great use of technological developments as a means to help the literacy process, especially stimulating scholars' attention and interest. Interest is a satisfying foundation for the success of a literacy process Simbolon,N. [24]. Factors that impact scholars' Interest in Learning. The tutoring and literacy process in seminaries is veritably different and occasionally preceptors have limitations in recycling information and interpreting literacy in class, especially abstract literacy, making it delicate for scholars to understand literacy. This will snappily make scholars less enthusiastic about sharing in the tutoring and literacy process, performing in a lack of understanding of scholars concepts. However, for illustration scholars are late for class, frequently daydream, If literacy isn't veritably intriguing it'll affect in scholars' low amenability to learn. This can have an impact on pupil learning issues. preceptors play a veritably important part in literacy, because preceptors have the capability not only to transfigure experience and give part models, but also to inspire implicit and good character [1]. In reality, numerous abecedarian academy preceptors witness obstacles in invention and development of learning media in the classroom. According to Gerlach (2007), learning media includes people, accouterments, outfit or situations that produce conditions for scholars to gain knowledge, chops and stations. There are lots of learning media available using audio media, visual media and audiovisual media [17]. Learning video tape media can be distributed as a type of media Audio Visual Aids (AVA) or media that can be seen and heard. Grounded on compliances made in class IV at SDN 17330 Lumbantongatonga in thematic literacy, they've noway used literacy vids (learning media), the literacy media used is print media similar as film land which are published and also pasted on cardboard and displayed in front of the class as well as the tutoring and literacy process. The bones that take place tend to use lecture styles, giving assignments and asking questions. Occasionally preceptors only use handbooks as a companion for preceptors and scholars to learn and the lack of varied and creative literacy media makes scholars less active and not numerous scholars give feedback on the assignments the schoolteacher has delivered. So it has an effect on pupil learning issues, this can be seen from the data on the diurnal grades of class IV scholars at SDN 173301 Lumbantonga Theme 5 subtheme 1 literacy 1 in table1.1.

**Table 1.** Daily Value Data for Class IV Students at SDN 173301 Lumbantongatonga

Lesson	MOH	The number of students	Students complete	Students do not complete
Indonesian	60	18	7 38,8%	11 61,1%
IPS	60	18	6 33,3%	12 66,6%

Based on table 1.1, it can be concluded that the value of learning outcomes in theme 5, Subtheme 1, learning 1, which was completed, exceeded those in Indonesian language lessons by 7 students or around 38.8% of 18 students and in social studies lessons by 6 people or around 33.33% of 18 students. This shows that students still do not meet the KKM score. According to Cheppy Riyana [7], learning videotape media are media that displays audio and illustrations containing learning information similar as propositions, procedures and knowledge generalities to help understand literacy material. The advantage of videotape media in literacy is its capability to display moving images and sound which is a special magnet because scholars are suitable to use further than one sense to absorb information.

Grounded on an interview with the homeroom schoolteacher for class IV at SD 173301 Lumbantongatonga, he said that the schoolteacher hadn't yet used literacy videotape media, due to preceptors' limitations in using technology similar as laptops and projectors to display literacy vids. The schoolteacher also explained that he hadn't been suitable to develop or introduce media in the form of learning vids because he felt it was relatively delicate to make. Piecemeal from that, the schoolteacher said that so far the literacy that took place only used print media in the form of film land published and also pasted on cardboard and occasionally only using handbooks. Regarding the significance of developing literacy media in the form of vids, the schoolteacher said that the need for learning vids was felt to be veritably necessary because at SDN 173301 Lumbantongatonga they had noway used literacy vids. Piecemeal from that, the schoolteacher also explained that if learning vids were used, scholars would more understand the literacy material being presented, because in the literacy vids there would be intriguing robustness, film land and audio related to the material which could increase scholars' memory, provocation and curiosity so that they could foster activeness in the literacy process [18].

## **2 Research Methods**

The type of exploration used in this exploration is Research and Development or Research and Development (R&D). The R&D system is exploration used to produce certain products and test the effectiveness of these products [24]. According to Gay, Mills, and Airasian in the book *Quantitative & Qualitative Educational Research Methodology* [8] "the main thing of exploration and development in the field of education isn't about formulating or testing propositions but developing effective products for use in seminaries. According to Setyosari [22] "R&D includes: (1) The process and implications of certain designs and development efforts, (2) People who implement or evaluate learning development designs or activities can review the process at once, (3) designing research, development and evaluation processes for learning that include all components or only some of them [18].

Grounded on the explanation over, it can be seen that Research and Development are exploration to develop a product using methodical way so that the product produced is tested for effectiveness and validated. This exploration and Development (R&D) was carried out at SDN 173301 Lumbantongatonga who is located in Lumbantongatonga Village, Siborongborong District, North Tapanuli Regency. The exploration period is from April to May 2022. The subjects of this exploration and Development (R&D) are 14 class IV scholars at SDN 173301 Lumbantongatonga and 1 class IV schoolteacher at SDN 17330 Lumbantongatonga.

The development model is a method of finding and developing a product systematically, so that the results of product development have high use value. The development model used in this exploration is the ADDIE development model which has steps Analysis, Design, Develop, perpetration and estimate [2]. At the analysis stage, the conditioning carried out include requirements analysis, class and material analysis and pupil analysis. At the analysis stage the main ideal is to dissect the requirements for developing literacy vids. Needs analysis is an analysis of problems or data at the academy where the exploration is conducted. Class and material analysis is an analysis of the class used by seminaries to dissect the introductory capabilities to be achieved. Pupil analysis is an analysis of the characteristics of scholars who

are exploration subjects so that they can find results to problems. After carrying out the design process for the literacy videotape, according to the ADDIE development model, the coming stage is developing the literacy videotape. At the development stage, several stages are carried out, videlicet developing the media according to the design that has been created, validating the media and accouterments developed to determine the felicity of the literacy media that has been developed and revising the media in agreement with suggestions from material expert validators and media experts [3].

The perpetration stage of the ADDIE development model is to test literacy vids that have been developed and validated by material experts and media experts. At this perpetration stage, the experimenter shows the media that has been developed to the schoolteacher and also asks for an assessment from the class schoolteacher who is the subject of the exploration . After receiving an assessment from the teacher and being declared feasible, the next step is individual trials and small group trials. Individual trials, namely conducting product trials on 4 class IV students and small group trials, namely conducting product trials on 10 class IV students. At the individual trial and small group trial stages, the resulting learning videos will be given to class IV students at SDN 173301 Lumbantongatonga, then they will be given a questionnaire to find out responses regarding the learning videos that have been developed [4]. A questionnaire is a technique or method of collecting data indirectly (researchers do not ask and answer questions directly to respondents). The purpose of distributing questionnaires is to find out complete information about questions from respondents. If the answers given by respondents when filling in the questionnaire do not match the truth then there is no need to worry [30].

In this study, researchers used a questionnaire to validate the learning video media developed. This questionnaire will be given to media experts and material experts. Furthermore, questionnaires will also be given to teachers and students in the implementation stage with the aim of getting responses or responses to the learning videos that have been developed. In this research, the instruments used are questionnaire instruments which will be addressed to media experts, material experts, teachers and also individual test student questionnaires and small group trial questionnaires to determine the suitability of learning videos and consider modifying learning videos to make them suitable for use [27].

### **3 Results and Discussion**

This research was carried out in class IV of SDN 173301 Lumbantongatonga in Lumbantongatonga Village, Siborongborong District, North Tapanuli Regency. This research is a type of development research (*research and development*) which produces a product, namely a learning video using an application *Doratoon* on theme 7 sub theme 1 class IV elementary school. This media development uses the steps in the ADDIE model development research with stages *Analysis* (Analysis), *Design* (Planning), *Level Development* (Development), *Stage Implementation* (Implementation), *Stage Evaluation* (Evaluation). Product feasibility trials are carried out to obtain data and information that will be used to measure the strengths and weaknesses of the product being developed. After creating a product in the form of a learning video, please validate it first with an expert before using it. Valid means in accordance with the way the provisions should be. In this research, the validation process was carried out through validation by media experts and material experts, with validators, namely those who are experts in their respective fields. Media and material

validators are expected to provide input or suggestions for improving learning videos. Suggestions from validators will be used to revise the learning video. If there are deficiencies in the testing, the media must be revised and then retested by experts until there are no further revisions.

The implementation stage of the ADDIE development model is to carry out trials of media that have been developed and validated by material experts and media experts at schools that are research subjects. At this implementation stage, the researcher shows the media that has been developed to the class teacher and carries out an assessment. After receiving an assessment from the teacher and being declared suitable, the researcher will then show the media to 4 class IV students who are research subjects for individual trials and show the media to 10 class IV students who are research subjects for small group trials.

Practically, it can be interpreted that the learning tools developed can help and make it easy to use. This practicality stage was tested on teachers on Thursday 12 May 2022. The teacher who was the respondent at this stage was the fourthgrade teacher at SDN 173301 Lumban Tonga Tonga, namely Mrs. Rosmawati Siburian, S.Pd. Researchers show media that has been developed and validated by material experts and media experts. Then teachers are asked to fill out a product assessment questionnaire which aims to determine the practicality of the media based on the opinions of educational practitioners [5].

So the media practicality result was 95.38% with the criteria 'very practical'. These results were obtained from a questionnaire filled out by the teacher. In the questionnaire it was also discovered that the media developed according to the teacher did not need to be revised, because the media produced was very suitable.

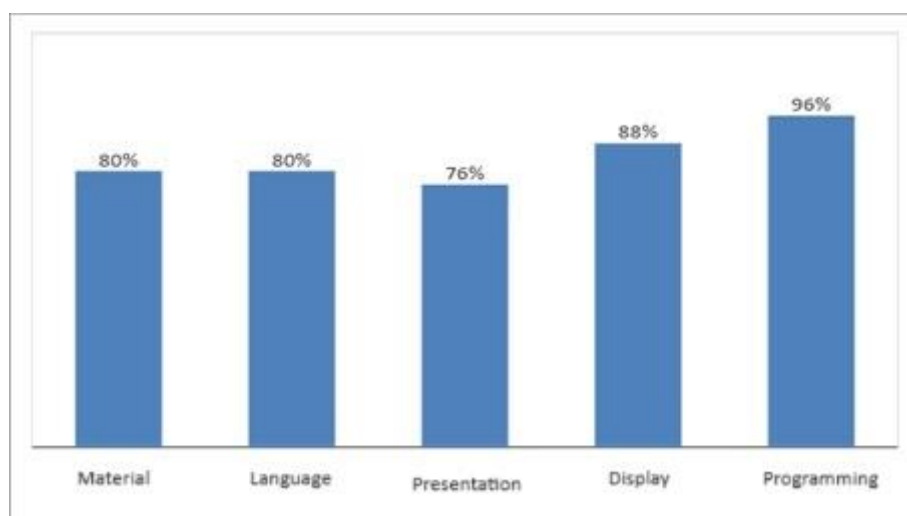


Fig. 1. Media Validation Recapitulation Diagram by Education Practitioners

### 3.1 Results of Learning Video Development Using Applications *Doratoon*

This exploration is exploration and development or exploration and development (R&D). In this study, ADDIE was used. The ADDIE development model has five stages that must be carried out. The five stages in the ADDIE development model correspond of Analysis

(Analysis), Design (Planning), Development (Development), implementation (implementation), and also Evaluation (Evaluation). The first stage is Analysis (Analysis). At this stage what's done is to carry out requirements analysis, learning tools, class and material analysis and pupil analysis. The alternate position is Design (Planning). At this stage a design for a literacy videotape is produced. This stage aims to produce a literacy videotape design that's developed containing literacy material on theme 7 sub theme 1 literacy 5 of PPKn. The third position is Development (Development). At this stage, we make learning videotape products that have been developed and carry out media confirmation and material confirmation, videlicet media validators and material validators to determine the felicity of the media. The fourth position is Implementation (implementation). This implementation stage carries out trials of media that have been developed and validated by material experts and media experts at seminars that are exploration subjects. After entering an assessment from the schoolteacher and declaring it practical, the experimenter will also show the media to scholars for individual trials and small group trials. And to see the effectiveness of scholars' literacy issues using it pre- test and post- test literacy vids that have been developed. The fifth position is Evaluation (Evaluation). The evaluation carried out is in the form of a development evaluation and evaluation of the feasibility of learning videotape products carried out by media experts, material experts, and educational interpreters. also estimate the results of individual trials and small group trials as well as estimate pupil learning issues through tests pre- test and post- test. The final results of the evaluation stated that learning vids were doable, practical and effective for use in abecedarian academy literacy. Grounded on exploration written by Ni Putu Liana Octavyanti & Gusti Agung Ayu Wulandari [15], it's stated that using the ADDIE model can develop learning vids grounded on a contextual approach in fourth grade abecedarian academy mathematics subjects that are suitable for use in abecedarian academy literacy.

### **3.2 Feasibility, Practicality and Effectiveness Results**

- a. The results of the product feasibility data attained from confirmation with Mr. Yakobus Ndona, SS., M.Hum as a material expert which was carried out online on April 21 2022 attained a score of 55 out of a maximum score of 60, performing in a confirmation chance of 91.66. likewise, variations were carried out for the alternate confirmation on May 10 2022, carrying a score of 58 out of a maximum score of 60, performing in a confirmation chance of 96.66 so that it was distributed as 'veritably Eligible'. The results of product feasibility data attained from confirmation with Mr. Khairul Usman, S.Si., M.Pd as a media expert which was carried out online on April 17 2022 attained a score of 54 out of a maximum score of 65 so that a confirmation chance of 83.07 was attained and entered advice from media experts. likewise, variations were carried out for the alternate confirmation on April 28 2022, carrying a score of 63 out of a maximum score of 65, performing in a confirmation chance of 96.92. From the results of the assessment by material and media experts who entered the criteria of 'veritably Applicable' with an average chance of 96.79, it can be concluded that the literacy videotape products that have been validated are suitable for use.
- b. The results of the data attained from responses via an educational guru questionnaire with Mrs. Rosmawati Siburian, S.Pd which was conducted offline

on May 12 2022 attained a score of 67 out of a maximum score of 70 with a chance of 95.38 including the 'veritably Practical' order.

- c. Product effectiveness can be seen from tests of pupil learning issues on learning vids using the operation doratoon at SDN 173301 Lumban Tonga on theme 7 sub theme 1 literacy 5, on pre-test without using literacy vids, scholars attained an average score of 52.86 and at post- test scholars' grades increased after using literacy vids using the operation doratoon with an normal of 92.87 pupil learning issues endured an increase of 40.01 (56.91). This proves that the literacy videotape uses the operation doratoon theme 7 sub theme 1 literacy 5 succeeded in perfecting pupil learning issues and adding scholars' interest in literacy as well as learning vids using operations doratoon positive enough to be used in literacy and meets the " effective" criteria with a chance of 83.3.

#### **4 Conclusion**

Grounded on the description of the results and discussion of exploration into the development of learning vids using operations doratoon on theme 7 sub theme 1 class IV SDN 173301 Lumbantongatonga, it can be concluded as follows .

- a. This exploration and development process uses the ADDIE model which consists of several stages, videlicet Stage analysis (Analysis), stage Design (Planning), level Development (Development), stage Implementation (perpetration), stage Evaluation (Evaluation).
- b. The feasibility test is validated by material experts and media experts on the vids that have been developed. Grounded on the final assessment of the literacy videotape by material experts, it's included in the " veritably Eligible" criteria with a confirmation result of 96.66. Meanwhile, media experts entered the criteria " veritably Eligible" with confirmation results of 96.92. Grounded on the final score, the literacy videotape developed is in the " veritably Applicable" order with a normal of 96.79, so the media is suitable for use by scholars.
- c. The practicality test was attained from responses via questionnaires by educational interpreters. Grounded on the final assessment of the literacy videotape by educational interpreters, it's included in the "veritably Practical" criteria with a confirmation result of 95.38.
- d. The effectiveness test through testing scholars' literacy issues on learning vids was carried out through perpetration trials pre- test and post-test On pre-test without using literacy vids, pupil scores were attained with an normal of 52.86 and at post- test scholars' grades increased after using literacy vids using the operation doratoon with a normal of 92.87 pupil learning issues endured an increase of 40.01 (56.91). This proves that learning vids have succeeded in perfecting pupil learning issues and adding scholars' interest in literacy and literacy vids using operations doratoon positive enough to be used in literacy and meets the " effective" criteria with a chance of 83.3.

## References

- [1] Acep Yonny dan Sri Rahayu Yunus, 2011. *Begini Cara Menjadi Guru Inspiratif & Disenangi Siswa*. Yogyakarta: PT. Pustaka Widyatama
- [2] Agustini, K., & Ngarti, J. G. (2020). Pengembangan video pembelajaran untuk meningkatkan motivasi belajar siswa menggunakan model R&D. *Jurnal Ilmiah Pendidikan dan Pembelajaran*, 4(1), 62-78.
- [3] Akhmad Sudrajat. (2008). *Pengertian Pendekatan, Strategi, Metode, Teknik dan Model Pembelajaran*. Bandung : Sinar Baru Algensindo.
- [4] Arsyad Azhar. (2010). *Media Pembelajaran*. Jakarta: Rajawali Pers
- [5] Aqib, Zainal. (2013). *Model-model, Media, dan Strategi Pembelajaran Kontekstual (Inovatif)*. Bandung: Yrama Widya.
- [6] Budiyo Saputro, M. P. (2017). *Manajemen Penelitian Pengembangan (Research & Development) bagi Penyusun Tesis dan Disertasi*. Aswaja Pressindo.
- [7] Cheppy Riyana.(2007). *Pedoman Pengembangan Media Video*. Bandung:Program P3AI Universitas Pendidikan Indonesia. Dede Rosyada (2008, h. 132)
- [8] Emzir.(2015).*Metodologi Penelitian Pendidikan*.Jakarta:Rajawali Press
- [9] Gay, L. R., Mills, G. E., & Airasian, P. W. (2009). *Educational research : competencies for analysis and applications* (9th ed.). Upper Saddle River, N.J.: Merrill/Pearson.
- [10] Gerlach dan Elly. (2007). *Pengertian Media* :Jakarta. PT. Raja Grafindo Persada.
- [11] Maydiantoro, A. (2021). Model-Model Penelitian Pengembangan (Research and Development).
- [12] Muhibah, S. (2021). Model Video Pembelajaran Berbasis Animasi Sebagai Solusi Belajar Efektif Di Masa Pandemi Covid-19. *Jurnal Pengabdian Dinamika*, 8(1).
- [13] Nasution.(2003).*Metode Penelitian Naturalistikualitatif*.Bandung:Tarsito
- [14] Novita, L., Sukmanasa, E., & Pratama, M. Y. (2019). *Penggunaan Media Pembelajaran Video terhadap Hasil Belajar Siswa SD. Indonesian Journal of Primary Education Penggunaan*, 3(2), 64-72.
- [15] Octavyanti, N. P. L., & Wulandari, I. G. A. A. (2021). Pengembangan Video Pembelajaran Berbasis Pendekatan Kontekstual Pada Mata Pelajaran Matematika Kelas IV SD. *Jurnal Edutech Undiksha*, 9(1).
- [16] Ramli Muhammad.(2012).*Media dan Teknologi Pembelajaran*. Banjarmasin : IAIN Antasari Press
- [17] Rangkuti, I. N., Sitompul, H., & Simbolon, N. (2018). Pengembangan Media Video Pembelajaran Rias Karakter Pada Program Studi Pendidikan Tata Rias. *Jurnal Teknologi Informasi & Komunikasi Dalam Pendidikan*, 5(1).
- [18] Riyanto, M., Jamaluddin, U., & Pamungkas, A. S. (2019). Pengembangan Video Pembelajaran Berbasis Aplikasi Video Scribe Pada Mata Pelajaran IPS di Sekolah Dasar. *Madrrasah: Jurnal Pendidikan dan Pembelajaran Dasar*, 11(2), 53-63.
- [19] Rosyada, Dede. (2008). *Media Pembelajaran*. Jakarta: Gaung Persada.
- [20] Rusman.(2013).*Metode-Metode Pembelajaran: Mengembangkan Profesionalisme Guru*. Jakarta: PT RajaGrafindo Persada.
- [21] Saputro,Budiyo. (2016).*Manajemen Penelitian dan Pengembangan (R&D)*.Yogyakarta:Aswaja Pressindo
- [22] Setyosari, Punaji. (2010). *Metode Penelitian Penelitian dan Pengembangan*. Jakarta: Kencana
- [23] Simbolon, N. (2014).*Faktor-faktor yang Mempengaruhi Minat Belajar Peserta Didik*. Elementary School Journal Pgsd Fip Unimed.
- [24] Sugiyono. (2016). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Bandung: PT Alfabet.
- [25] Sukayati & Sri Wulandari. (2009).*Pembelajaran Tematik SD*.Sleman:Pusat Pengembangan Dan Pemberdayaan Pendidik Dan Tenaga Kependidikan Matematika
- [26] Sukiman. (2012).*Pengembangan Media Pembelajaran*.Yogyakarta. PT Pustaka Insan Madani
- [27] Suryansah, T., & Suwarjo, S. (2016). Pengembangan video pembelajaran untuk meningkatkan motivasi dan hasil belajar kognitif siswa kelas IV SD. *Jurnal Prima Edukasia*, 4(2), 209-221.
- [28] Susliana Rudi &Ce Riyana. (2017). *Media Pembelelajaran*: Bandung. CV Wacana Prima



- [29] Tegeh, I. M., Simamora, A. H., & Dwipayana, K. (2019). Pengembangan Media Video Pembelajaran Dengan Model Pengembangan 4D Pada Mata Pelajaran Agama Hindu. *Mimbar Ilmu*, 24(2), 158-166
- [30] Wulandari, S & Sukayati. (2009). *Pembelajaran Tematik di SD*. Yogyakarta:Pusat Pengembangan dan Pemberdayaan Pendidik dan Tenaga Kependidikan (PPPPTK) Matematika