

# Development of Material Training of Infographic Video Using Adobe Premiere Cs6 in Nonformal Education

Mulyadi Rusli<sup>1\*</sup>, Faiza Rini<sup>2</sup>, Jasmir Jasmir<sup>3</sup>, Suryawahyuni Latief<sup>4</sup>, Chi-Win Fun<sup>5</sup>

<sup>1</sup>Universitas Nurdin Hamzah Jambi, Indonesia

<sup>2</sup>Universitas PGRI Sumatera Barat, Padang, Indonesia

<sup>3</sup>Universitas Dinamika Bnagsa, Jambi, Indonesia

<sup>4</sup>Universitas Nurdin Hamzah Jambi, Indonesia

<sup>5</sup>National Dong Hwa University, Taiwan

\*Email: e-mail: mulyadi@unh.ac.id

Submitted: 2022-01-31. Revised: 2022-04-19. Accepted: 2023-01-25

**Abstract.** The perkumpulan alam hijau (A-HI) is a form of non-formal education that organizes various training activities and is located in Jambi City. One form of training held is infographic video-making training. So far, the training activities given to students are the delivery of material through power points. The final results of the training activities provided by delivering material through power points are not optimal. Therefore, it is necessary to carry out media development solutions in the delivery of training materials using adobe flash premiere cs6. This study aims to develop a medium for delivering material for making infographic videos based on adobe premiere cs6 using the analysis, design, development, implementation, and evaluation (ADDIE) model. The results showed that the training material for making infographic videos using adobe premiere cs6 was effective as shown by the results of an assessment conducted by multimedia experts based on three aspects, namely display, operation, and interaction. The percentage of the results of the assessment of the three aspects is 91%, with the highest percentage being in the operational aspect at 93% and followed successively by the interaction aspect (92.20%), and the display aspect at 87.40%. Meanwhile, the assessment carried out by the training participants was seen from four aspects, namely benefits, appearance, interaction, and independent learning. The percentage of the four aspects of an assessment is 88.10% with the largest percentage being in the interaction aspect, which is 92% and the lowest percentage is in the independent learning aspect, which is 80%..

**Key words:** Development material, training, ADDIE, Adobe Premiere Cs6

**How to Cite:** Rusli, M., Rini, F., Jasmir, J., Latief, S., & Fun, C. W. (2023). Development of Material Training of Infographic Video Using Adobe Premiere Cs6 in Nonformal Education. *Journal of Nonformal Education*, 9(1), 87-96.

**DOI:** <http://dx.doi.org/10.15294/jne.v9i1.42286>

## INTRODUCTION

According to the Law of the national education system law number 20 of 2003, education is a form of learning activity held with full awareness and preparation so that educational goals can be realized. Non-formal education is one of the providers of education that aims to improve the skills and competencies possessed by individuals through a series of activities that are following the needs and job opportunities that exist in the community (Coombs, Prosser, & Ahmed, 1973: 9-13; Olcott, 2013). Non-formal education is a form of activity in the implementation of distance education, community education, adult education, vocational training apprenticeship, and out-of-school education, which is designed to meet the needs of the community (Hoopers, 2006; Rogers, 2007).

One form of activity program organized in non-formal education is a training program, which is a program that is given in a certain duration of time according to the needs of trainees. Training is an activity to acquire, improve, and develop competencies, productivity, discipline, and skills (FERENCE, 1982; Tannenbaum & Yulk, 1992; Salas, Tannenbaum, Kriger, & Smith-Jenttsch, 2012; Philips & Philips,

2016; Latief, 2020). The success of training activities is influenced by several factors including teaching staff (Kraft, Blazar, & Hogan, 2018; Blazar & Kraft, 2017; Devine, Meyers, & Houssemand, 2013; Ellerani & Gentile, 2013; Cordingley, 2005) and learning media (Puspitarini & Hanif, 2019; Dwijayani, 2019; Kozma, 2016; Carter, 2006). In line with the development of technology, the implementation of training programs continues to strive to find training activity practices that can support training activities and improve results by utilizing technology (Sarigöz, 2019; Kirkwood, & Price, 2014; Jung, 2010, de Freitas & Griffiths, 2008).

One of the learning media that can be used today is to utilize multimedia technology. Multimedia technology is a technology that applies parts of an interactive computer in the form of graphics, text, video, sound, and animation in conveying messages. The use of multi-media technology is to improve comprehension or memorization, multimedia usually combines more than one type of media, such as text (alphabetic or numeric), symbols, graphics, photos, audio, video, and animation (Guan, Song, & Li, 2018) and improves expression and comprehension, it supports oral instruction with the use of static and moving images in the form of visualization technology (Alemdag & Cag-

iltay, 2018; Chen & Liu, 2008). Multimedia technology refers to the hardware and software required to develop and run multimedia applications (Kapi, Osman, Ramli, & Taib, 2017) for example using PowerPoint and Canva.

Referring to the description above, it can be concluded that the training activity program is one of the programs held to improve the skills and competencies of trainees within the established time. In this activity, the role of instructors and the media is very important to improve the training outcomes of participants. One form of technology used is multimedia technology such as PowerrPoint and Canva.

The perkumpulan alam hijau (A-HI) in organizing a training program for making infographic videos has used multimedia technology in delivering training materials for making infographic videos. However, based on the results of observations and preliminary interviews with participants of training activities in green nature nonformal education, the use of power points as a medium for delivering training activity materials has not provided maximum results in training activities in making infographic videos. Delivering the material in this way according to the participants of the exercise it difficult to understand the making of infographic videos, so at the end of the training many participants have not yet understood the making of infographic videos.

Therefore, researchers develop media in delivering training on making infographic videos using adobe premiere cs6, which is software used in video editing, creating images, audio, and video (Madcoms, 2022) and making training activities more interactive, interesting, efficient, and effective (Budoyo, Kissaka, &

Mtebe, 2017; Widiastuti & Susiana, 2018). Therefore, the purpose of this study is to develop media in the delivery of infographic video-making materials in non-formal green nature units of Jambi City.

**METHOD**

This study employed the research and Development approach, which is a research method to produce certain products and test it effectiveness of the products produced (Sugiyono, 2014) by referring to the ADDIE model (analysis, design, development, implementation, and evaluation). In general, the development research method aims to develop and produce a product and test the effectiveness of the product (Trust & Pektas, 2018).

Researchers made preliminary observations and collected several data related to infographic video-making activities that had been held or attended by trainees. Based on the data that has been collected, researchers carry out product development in this case media, conduct testing, and evaluation of the media developed. Building this medium refers to the ADDIE model (Allen, 2017; Hess & Greer, 2016; Davis, 2013; Branch, 2009; Peterson, 2003) because this model is widely used in the development of learning media (Spatio, Kazanidis, & Pange, 2022; Drljač, Latinović, Stanković, & Cvetković, 2017; Durax & Ataizi, 2016; Davis, 2013; Jones & Davis, 2008)

The stages in the ADDIE Model begin with analyzing user needs, designing products according to user needs, developing the product, implementing it, and evaluating the resulting product to test its effectiveness. Figure 1 is an overview of research procedures using the ADDIE model.

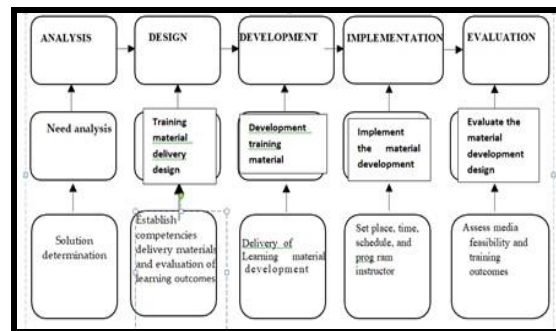


Figure. 1. Stage of ADDIE Model

In this study, researchers followed each activity procedure as shown in figure 1, and conducted an assessment of the products that had been produced using the assessment techniques found in table 1 to test the quality of the software and focus on software functionality (Ahmad, Boota, & Maso, 2014; Rahardi, 2014).

Five research steps are using the ADDIE model developed by Branch (2009), as follows:

**Analysis**

The main activity at this stage is to analyze the problems faced in the training activities for making infographic videos on A-HI, where so far the infographic video material has been carried out using power points and lecture methods.

**Design**

At this stage, design preparation is carried out to verify the development of the material by establishing training competencies, training media, and evaluation of training results. Establishing training competencies is a reference related to the content of the material used in the designed training media. Establish the right training method with the use of designed media which is carried out with the following steps: 1) establish a media design by making diagrams, 2) create a storyboard, and 3) a video prototype. As well as designing the determination of evaluation of training results using training media. This design is still conceptual and will underlie the subsequent development process.

**Development**

The development stage is the realization stage in the preparation of instruments and media design. In-

struments that have been made at the design stage are validated by judgment experts. And for media that has been designed in the design stage, it begins to be developed based on information obtained from the analysis stage by conducting a video prototyping stage. Media compilation is created using Adobe Flash CS 6 with action script 2. In addition to the preparation of media, testing of the media developed is also carried out. Testing is carried out by media experts and material experts to assess its feasibility. In addition, at this stage, suggestions are also obtained given by experts and teachers to improve the media that has been compiled.

**Implementation**

At this stage, media that has been developed and has been declared feasible by experts is then piloted in real situations in the classroom. This stage is carried out to determine the assessment of media when used directly by users and test user responses to learning media. In addition, at this stage, validity and reliability tests are also carried out. The suggestion is then used as a basis for revising learning media.

**Evaluation**

The evaluation stage is a stage to measure the ability of trainees' learning outcomes after the development of training materials. To find out these results, written tests, and practical tests are used. Before the written test is carried out, the trainees study the material and practice the existing tutorials on material development with adobe premiere cs 6 first. Once done. Retrieval of test scores using formative evaluation which means evaluation.

**Table 1.** Quality testing of display development training materials infographic video creation

Testing activities	Expected Results	Conclusion
Picture sign in page system	Picture sign in page system log in	
Sign in Image user page	Sign in page new user registration	
Sign in image Admin page	Sign in image admin home	
Sign in image head page room	Image head page room home page	
Images log in page participant	The participant's home image	

Source: Ahmad, Boota, & Maso, 2014; Rahardi, 2014

**RESULTS AND DISCUSSION**

Based on the purpose of the study is to carry out training materials for making infographic videos using adobe premiere cs 6 with the principle at the stages in the ADDIE model and test the quality of its use from media experts and trainees. The results obtained from the research have to be supported by sufficient data.

Based on the results of the analysis of training needs for making infographic videos in the green

nature association (AHI), the material presented by the instructor is still in the form of a PowerPoint with direct explanations, so that the results of the training activities have not been maximized, it can be seen that there are still many trainees who do not understand making infographic videos, as can be seen from the data in the field from 20 participants only 8 participants understand making graphic videos. Therefore, researchers develop infographic video creation materials by designing using adobe premiere cs6.

**Display design and material development for making infographic videos**

1. Display the main menu page

The display and implementation of the development of training materials for making infographic videos with adobe premiere begin with the appearance of a cs6 premiere splash page that will appear momentarily and then display the main menu. The material menu display is divided into two parts, namely at the top and on the left side of the display. On the left side, there is a choice of material 1 to material 10. The menu display of infographic video training materials using adobe premiere cs6 can be seen in figures 2 (a) and (b) below:

Figure 2(a)

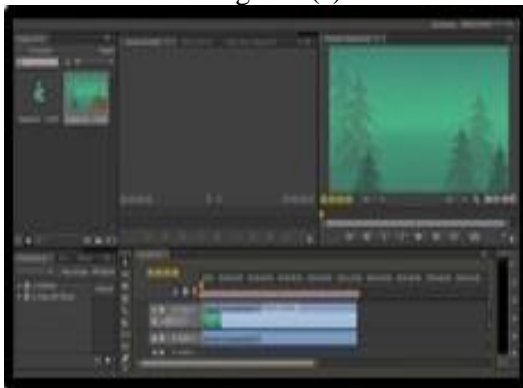
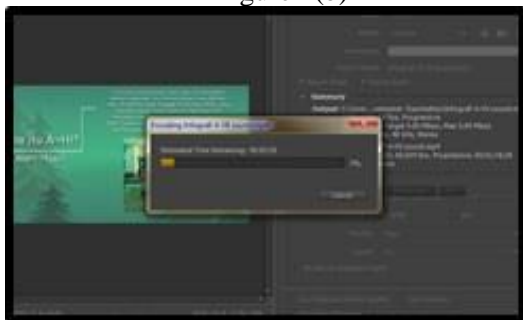


Figure 2(b)



**Figure 2.** Display the main menu page

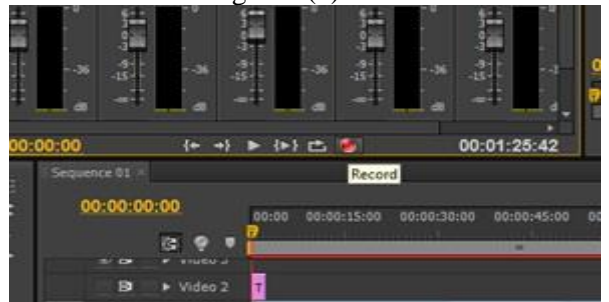
2. Display competencies page

It can be seen in the image (a) and (b) the appearance of the menu after the user clicks the mouse on the selection button. The first option is the competency page which is used to display key competency information and specific competencies from the infographic video creation training materials with adobe premiere cs6.

Figure 3(a)



Figure 3(b)



**Figure 3.** Display competencies page

3. Display material 5 pages

The second option in the top menu is a reference used to display reference information that can be used to learn training materials for making infographic videos with adobe premiere cs6. In the material menu, there are ten options used to display training materials for making infographic videos using adobe premiere cs6. The material consists of various media such as text, images, animations, and videos. In material 5 (five) or material that discusses sorting, at the beginning of the discussion use text as shown in figures 4 a and b.

Figure 4(a)



Figure 4(b)



**Figure 4.** Display material 5 page

As seen in the image above the sorted material on page 1 uses text and images. The sort material consists of 12 pages that discuss as many as five widely used sort methods. To switch pages users can use the button available at the top right of the page.

4. Display animation page

At the end of each discussion of each sorting method will be shown an animated example of each method. An example of an animated display of the sort selection method can be seen in figure 5.

Figure 5(a)



Figure 5(b)



Figure 5: Display animation page

5. Display video material page

In addition to text, images, and animations, some materials that use videos material that uses video material that discusses graphs. The display material can be seen in figure 6.

Figure 6(a)

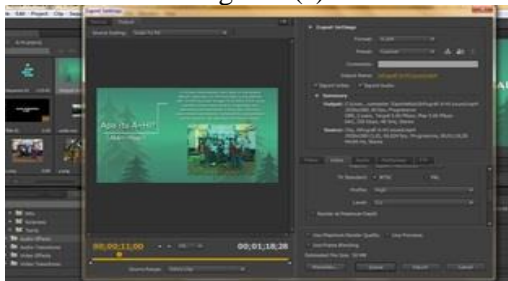


Figure 6(b)



Figure 6. Display video page

6. Display evaluation pages

After studying all the materials, in the development of training materials for making infographic videos with adobe premiere cs6, there is an evaluation page. On the evaluation page, there are questions in the form of multiple choices with choices a, b, c, and d. each question has its weight which will be totaled on the last page of the evaluation or after the user answers the question up to the last page as shown in figure 7

Figure 7(a)



Figure 7(b)

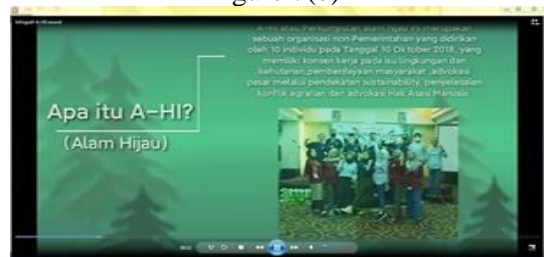


Figure 7. Display evaluation pages

From the display of the material development page for making an infographic video, a quality test of the display presented in table 2 was carried out.

**Table 2.** Quality testing of display development training materials infographic video creation

Testing activities	Expected Results	conclusion
Picture sign in the page system	Picture sign in page system log in	Accepted
Sign in to the image user page	Sign in page new user registration	Accepted
Sign in to the image Admin page	Sign in image admin home	Accepted
Sign in to image head page room	Image head page room home page	Accepted
Images log in to the page participant	The participant's home image	Accepted

Source: Researcher Data Processing

**Quality test of infographic video creation training materials using adobe premiere cs6**

trial materials and expected results are shown in table 3.

Quality trials of using infographic video creation material development using adobe premiere cs6 with

**Table 3.** The result of Usability

Assessment Criteria	Expected Result	Result
Click Competencies Button	Display competencies page	Accepted
Click ButtonReference	Display References page	Accepted
Click ButtonMaterial	Display material page	Accepted
Click ButtonEvaluation	Display evaluation page	Accepted
Click Button Prev / Next	To move page	Accepted
Click Button Play	Play Video/Animation	Accepted

Source: Ahmad, Boota, & Maso, 2014; Rahardi, 2014.

**The results of the validation test for the development of material for making infographic videos for multimedia experts**

the finished design, and then an assessment of the media is carried out in the form of a fill-in questionnaire. The number of experts who gave the assessed four people is shown in table 4.

Validation by multimedia experts learning is carried out with a mechanism to provide the results of

**Table 4.** Results of multimedia expert assessment

No	Assesment aspects	Average score	Percentage
1	Display	4,37	87,40
	Multimedia Dsisplay is interesting	4,1	82,00
	The Material display is easy to understand	4,64	92,80
2	Operational	4,67	93,40
	Menu tools are easy to understand	4,4	88,00
	Navigation tools are easy to use	4,94	98,80
3	Interaction	4,61	92,20
	Multimedia Display is interactive	4,5	90
	Material is easy to use and interesting	4,72	94,40
Total		4,55	91,00

Source: Researcher Data Processing

Table 4 shows that the percentage score of the display facets given by the validator is 87.40%. For

the operational aspect, 93.40%, and for the interaction aspect validators gave a percentage score of 92.20%. Based on the Likert scale of the display, operational, and interaction scores, this learning media can be categorized as excellent and worthy of use as a support for adobe premiere cs6 learning.

#### **Validation results of testing for the development of material for making infographic videos for trainees**

After this learning media received validation

from multimedia experts learning to make infographic videos, the next step was to conduct a trial of material development using adobe premiere cs6 for training participants. The mechanism carried out is to give a questionnaire and ask the trainees to fill it out. The results of testing the development of infographic materials using adobe premiere cs6, it shows that the material presented is interesting and makes it easy for participants to understand the material provided.

**Table 5.** Test results of material development making infografis for trainees

No.	Assessment aspects	Average value	Percentage
1	Benefit	4	90,00
	Material development with the use of adobe premiere cs 6 makes it easier for me to learn	3,90	86,00
	Tutorials make it easier for me to learn to program	4,00	90,05
2	Display	3,80	86,00
	Material development display using adobe premiere cs6 interesting	3,90	92,00
	The material display is easy to understand	3,60	86,00
3	Interaction	3,80	92,00
	Display material development using adobe premiere cs6 is Interactive	3,85	87,00
	Easy to use and interesting materials	4,00	95,00
4	Self -study	3,50	80,00
	Material development with adobe premiere cs6 makes it easier for me to learn independently	3,40	78,20
	Material development with adobe premiere cs6 makes it easier for me to understand the material independently	3,90	95,00
	Total	3,9	95,00
	Average	3,80	88,10

Source: Researcher Data Processing

Table 5 shows the average percentage of assessment criteria consisting of four aspects, namely benefits, display, interaction, and self-study aspects of 88.10%.

The infographic video-making training given at the green nature association (A-HI) of Jambi City which involved 20 trainees was a form of learning activity to improve the skills of trainees following the statement delivered by Latief (2020) given by an instructor. The delivery of material for making infographic videos was previously only using PowerPoints and given explanations by the instructor so the process and results obtained by the training participants in the training activities were not optimal. Therefore, there was a development of training materials for making infographic videos from using power points to adobe premiere cs6 (Ahmad, Boota, & Maso, 2014; Rahardi, 2014). Material development was designed using the stages of the ADDIE method by Branch (2009).

From the implementation of the development of infographic video creation materials, trials were carried out related to quality testing of the quality of the display of training material development in making infographic videos, the use of material development, and the results of the assessment of the development of infographic video making training media by media experts, and the results of the development test of training media for making infographic videos from training participants. From the results of the study, it shows that the development of training materials for making infographic videos is effective in improving the results of learning activities in the form of training in green nature associations (AHI), namely in terms of image display and quality of use showing the criteria of meeting. This is strengthened by the results of the assessment carried out by multimedia experts based on three aspects, namely display, operation, and interaction.

The percentage of the results of the assessment of

the three aspects is 91%, with the highest percentage being in the operational aspect at 93% and following successively the interaction aspect (92.20%), and the display aspect at 87.40%. Meanwhile, the assessment carried out by the training participants was seen from four aspects, namely benefits, appearance, interaction, and independent learning. The percentage of the four aspects of an assessment is 88.10% with the largest percentage being in the interaction aspect, which is 92% and the lowest percentage is in the independent learning aspect, which is 80%.

From the results and discussions that have been carried out by researchers, the development of infographic-making training materials using adobe premiere cs6 is effective for improving the learning outcomes of trainees in making infographics in the green nature group (A-HI) of Jambi City. Future research can use other models in the development of learning materials and media and further research can also develop training materials using other software, and make comparisons between material development and media.

## CONCLUSION

The development of training materials for making infographic videos using adobe premiere cs6 in the green nature group (A-HI) of Jambi city is effective in improving the final results of training activities which were attended by 20 training participants. This is emphasized by the results of assessments by multimedia experts and trainees, and the development of training materials for making infographic videos using adobe premiere cs6 effectively with a percentage of assessment of 91% by multimedia experts, and 88.10% by trainees.

## REFERENCES

- Alemdag, E., & K. Cagiltay, K. (2018). A systematic review of eye tracking research on multimedia learning. *Computer & Education*, 125, 413-428. <https://doi.org/10.1016/j.compedu.2018.06.023>
- Allen, M (2017). "Designing online asynchronous information literacy instruction using addie model". chapter 4, [online]. available distributed learning: Pedagogy and Technology in Online Information Literacy Instruction, 69. <https://doi.org/10.1016/B978-0-08-100598-9.00004-0>
- Ahmad, N., Boota, M. W., & Maso, A. H. (2014). Smart phone application evaluation with usability testing approach. *Journal of Software Engineering and Applications*, 7, 1046- 1054.
- Blazar, D., & Kraft, M. A. (2017). Teacher and Teaching Effects on Students' Attitudes and Behaviors. *Educational Evaluation and Policy Analysis*, 39(1), 146–170. <https://doi.org/10.3102/0162373716670260>.
- Branch, R.M. (2009). *Instructional design: the ADDIE approach*. New York: Springer.
- Budoya, C., Kissaka, M., & Mtebe, J. (2019). Instructional design enabled agile method using ADDIE model and feature driven development method". *International Journal of Education and Development using ICT*, 15 (1), 221-255.
- Chen, H.Y., & Liu, K.Y. (2008). Web-based synchronized multimedia lecture system design for teaching/learning Chinese as second language. *Computer & Education*, 50 (3), 693-702. <https://doi.org/10.1016/j.procs.2018.04.317>
- Coombs, P.H., Prosser, R.C., & Ahmed, H. (1973). *New paths to learning for rural children and youth*. New York: ICED.
- Cordingley, P. (2005). The role of mentoring and coaching in teachers' learning and development. *Educution review*, 8 (2), 66-73. Retrieved January 13, 2023 , From [https://educationpublishing.com/wp-content/uploads/2019/06/Education\\_Review\\_Vol.1\\_8\\_No.2.pdf#page=74](https://educationpublishing.com/wp-content/uploads/2019/06/Education_Review_Vol.1_8_No.2.pdf#page=74).
- Carter, V. (2006). Do media influence learning? Revisiting the debate in the context of distance learning. *Open learning: the journal of open, distance, and e-learning*, 11 (1), 31-40. <https://doi.org/10.1080/0268051960110104>.
- de Freitas.S., & Griffiths, M. (2008). The convergence of gaming practices with other media from: what potential for learning? A review of literature. *Learning, Media and Technology*, 33 (1), 11-20, <https://doi.org/10.1080/17439880701868796>.
- Davis, A. L. (2013) Using instructional design principles to develop effective information literacy instruction: The ADDIE model. *College & Research Libraries News*, 74 ( 4), 205-207. doi:<https://doi.org/10.5860/crln.74.4.8934>.
- Divine, M., Meyers, M., & Houssemand, C. (2013). How can coaching make a positive impact within educational setting. *Procedia-social and behavioral sciences*, 93 (21), 1382-1389. <https://doi.org/10.1016/j.sbspro.2013.10.048>.
- Drljač, D., Latinović, B., Stanković, D., & Cvetković, Z. (2017). ADDIE model for development of e-courses, Retrieved 10 January, 2023 , From



- [https://d1wqtxts1xzle7.cloudfront.net/52818763/ADDIE\\_Model\\_for\\_e-Learning\\_Sinteza2017\\_corr-libre.pdf?1493142960=&response-content-disposition=inline%3B+filenam](https://d1wqtxts1xzle7.cloudfront.net/52818763/ADDIE_Model_for_e-Learning_Sinteza2017_corr-libre.pdf?1493142960=&response-content-disposition=inline%3B+filenam)
- Durax, G., & Ataizi, M. (2016). The ABC's of Online Course Design According to Addie Model. *Universal Journal of Educational Research*, 4 (9), 2084-2091. <https://doi.org/10.13189/ujer.2016.040920>.
- Dwijayani, N. M. (2019). *J. Phys.: Conf. Ser.* **1321** 022099. <https://doi.org/10.1088/1742-6596/1321/2/022099>
- Ellerani, P., & Gentile, M. (2013). The role of teachers as facilitators to develop empowering leadership and school communities supported by the method of cooperative learning. *Procedia-social and behavioral sciences*, 93 (21), 12-17. <https://doi.org/10.1016/j.sbspro.2013.09.144>
- Ference, E. A. (1982). Human-Ressources Development: Toward a Definition of Training. *Cornell Hotel and Restaurant Administration Quarterly*, 23(3), 25–31. <https://doi.org/10.1177/001088048202300305>.
- Guan, N., J. Song, J., & Li, D. (2018). On the advantages of computer multimedia-aided English teaching. *Procedia Computer Science*, 131, 727-732. <https://doi.org/10.1016/j.procs.2018.04.317>
- Hess, N.A., & Greer, K. (2016). Designing for engagement: using the ADDIE model to integrate high-impact practices into an online information literacy course. *Communications in Information Literacy*, 10 (2), 264-282.
- Hoppers, W. (2006). *Non-Formal Education And Basic Education Reform; A Conceptual Review. In Series On Quality Education For All*. Paris: International Institute for Educational Planning.
- Jones, P., Davis, R. (2008). *Handbook of research instructional system and technology: Instructional design methods integrating instructional technology*. USA: all IGI Global published. DOI: 10.4018/978-1-59904-865-9.ch002
- Jung, I. (2010). Technology innovations and the development of distance education: Korean Experience. *Open Learning: The Journal of Open, Distance and e-Learning* 15:3, pages 217-231. <https://doi.org/10.1080/713688402>.
- Kapi, A. Y., Osman, N., Ramli, R. Z., & Mohd Taib, J. (2017). Multimedia Education Tools for Effective Teaching and Learning. *Journal of Telecommunication, Electronic and Computer Engineering (JTEC)*, 9(2-8), 143–146. Retrieved from <https://jtec.utem.edu.my/jtec/article/view/2645>.
- Kirkwood, A., & Price, L. (2014). Technology-enhanced learning and teaching in higher education: what is 'enhanced' and how do we know? A critical literature review. *Learning, Media and Technology*, 39(1), 6-36. <https://doi.org.10.1080/17439884.2013.770404>
- Kozma, R. B. (1991). Learning with Media. *Review of Educational Research*, 61(2), 179–211. <https://doi.org/10.3102/00346543061002179>
- Kraft, M. A., Blazar, D., & Hogan, D. (2018). The Effect of Teacher Coaching on Instruction and Achievement: A Meta-Analysis of the Causal Evidence. *Review of Educational Research*, 88(4), 547–588. <https://doi.org/10.3102/0034654318759268>
- Latief, S. (2020). Manajemen tenaga pendidik anak usia dini: upaya percepat pendidikan bermutu. Bandung: Manggu Makmur Tanjung Lestari.
- Madcoms, M. (2013). "Kupas tuntas editing video dengan adobe premiere pro cs6". Jakarta: \_\_\_\_.
- Olcott, D. (2013). New pathways to learning: Leveraging the use of OERs to support non-formal education. *International journal of educational technology in higher educational*, 10, 327-344. <https://doi.org/10.7238/rusc.v10i1.1562>.
- Peterson, C. (2003). Bringing ADDIE to life: instructional design at its best. *Journal of educational multimedia and hypermedia*, 12(3), 227-241.
- Philips, J., & Philips, P.P. (2016). *Handbook of Training Evaluation and Measurement Method*. London: Routledge.
- Puspitarini, Y.D., & Hanif, M. (2019). Using learning media to increase learning motivation in elementary school. *Anatolin journal of education*, 4 (2), 53-60. <https://doi.org/10.29333/aje.2019.426a>
- Republik Indonesia. (2003). Undang-Undang Tentang Sistem Pendidikan Nasional No. 20 Tahun 2003. Jakarta: Sekretariat Negara.
- Rogers, A. (2007). *Non-Formal Education Flexible Schooling or Participatory Education?.* Hongkong : Kluwer Academic Publisher.
- Rahadi, D. R. (2014). Pengukuran usability sistem menggunakan use questionnaire pada aplikasi android. *Jurnal Sistem Informasi (JSI)*, 6 (1), 661-671.

- Riduan, W. (2018). *Skala pengukuran variabel-variabel penelitian*. Bandung, IND: Alfabeta.
- Salas, E., Tannenbaum, S. I., Kraiger, K., & Smith-Jentsch, K. A. (2012). The Science of Training and Development in Organizations: What Matters in Practice. *Psychological Science in the Public Interest*, 13(2), 74–101. <https://doi.org/10.1177/1529100612436661>.
- Sarigöz, O. (2019). The effect of educational technologies on manners and sustainability of teacher candidates. *African Educational Research Journal*, 7 (3), 143-152. <https://doi.org/10.30918/AERJ.73.19.024>
- Soepriyanto, Y., Kartika, M. D., Sulthoni, S., & Sumarno, S. (2021). Pelatihan Pengembangan multimedia pembelajaran untuk guru non produktif teknik komputer dan informatika,” *Abdimas Pedagog. J. Ilm. Pengabdian . Kepada. Masyarakat.*, 4, ( 2), 78.
- Spatioti, A.G., Kazanidis, I., & Pange, J. (2023). A Comparative Study of the ADDIE Instructional Design Model in Distance Education. *Information*, 13 (9), 402. <https://doi.org/10.3390/info13090402>
- Sugiyono, S. (2014). Metode penelitian kuantitatif, kualitatif, R & D. Bandung: Alfabeta.
- Trust., T., & Pektas, E. . Using the ADDIE model and universal design for learning principles to develop an open online course for teacher professional development”. *Journal of Digital Learning in Teacher Education*, 34 (4), 219-233.
- Tannenbaum, S.I., & Yulk, G. (1992). Training and Development in Work Organizations. *Annual Review of Psychology*, 43 (1), 399-441. <https://www.annualreviews.org/doi/abs/10.1146/annurev.ps.43.020192.002151?journalCode=psych>.
- Widiastuti, S ., & Susiana, S . (2018). Using the ADDIE model to develop learning material for actuarial mathematics”. *J. Phys.: Conf. Ser.* 1188 012052, 2018. <https://doi.org/10.1088/1742-6596/1188/1/012052>