



CATHARSIS 11 (1) 2022
50-59

p-ISSN 2252-6900 I e-ISSN 2502-4531

Catharsis: Journal of Arts Education



<http://journal.unnes.ac.id/sju/index.php/chatarsis>

Development Of Papua Contextual Drama Scripts Based on Digital E-Comics in SMP Negeri 3 Manokwari

Merry Christune Sarce Romainum[✉], Muhamad Jazuli, Agus Cahyono

Email: merrychrmainum@students.unnes.ac.id

Universitas Negeri Semarang, Indonesia

Received 28 December 2021, Accepted 22 February 2022, Published 31 May 2022

Abstrack

In the era of revolution 4.0 to 5.0, changes and developments in science are growing. It has an impact in all areas of development, from politics, economics, to the world of education. In the world of education, teachers must carefully prepare adequate media and learning models according to the development of education. Revolutionary education 4.0 is known as 21st-century learning, a digital learning system. Digital learning is a challenge for schools in Papua. Therefore, this research presented a digital-based learning media solution. This research employed the development research of Dick and Carey (2021), which follows six stages of research. This study has examined the level of validity and reliability of expert reviews. The research resulted in developing learning media for Papuan contextual drama scripts based on digital e-comics for SMP Negeri 3 Manokwari class IX students. The experts have reviewed the product with a total of 4 experts. The results reviewed by experts have produced valid validity and reliable reliability for Papuan contextual drama script products. They are believed to help learn Cultural Arts in Papuan schools.

Keywords: Drama Script Development, Papuan Contextual, Digital E-comic

DOI : <https://doi.org/10.15294/catharsis.v11i1.57691>

INTRODUCTION

Technology development in education is known as educational technology, namely innovation and learning facility. Learning in the era of technological advances focuses on changing learning. In line with that, Wahyuni et al. (2018, p. 2) stated that using science and technology in the learning process can assist teachers in delivering teaching materials. In addition, information technology has become an important part and is a major need in the world of education. Almost all educational institutions use communication information technology as their main support activities in each education unit (Alam et al., 2020, p. 624). Digital-based innovative learning is a product of the industrial revolution 4.0, where advanced digital devices are developing rapidly in the current phase (Dewannata et al., 2021, p. 118).

Taking a perspective from the current development of advanced technology, education is also increasingly developing on technology-based learning, which has become the learning style of the 21st century. The teachers can no longer remain silent and remain in their comfort zone as learning demands grow (Sugiarto, 2020). The less creative and non-renewable learning media are a challenge for 21st-century learning. That is why the current teachers are required to understand technology properly so that the learning process can be conducive. The teaching and learning process is a communication process (Sugiarto, 2019). In its activities, communication is established between educators and students. The educators are communicators who provide information or knowledge to students who, in this case, act as communicants (Maheasy, 2014, p. 6). In the learning process, the students' interests also must be encouraged. In line with this, Hilgard and Slameto (Wicaksana et al. 2020, p. 49) stated that learning interest is a sense of interest, attention, and more desire that a person has to learn.

Several challenges in 21st-century learning have become educational problems in

the industrial era 4.0. However, it is no less important than theatre learning in learning Cultural Arts in schools, which has problems, especially schools in Papua, which culturally have many local stories but have not been managed as a learning medium.

The learning process is inseparable from the educational value during the teaching and learning process, where the learning has an important meaning in achieving the goals that can shape humans into fully human beings (Mukhlisin et al., 2020, p. 59). It has become a basic point of view in learning media development. Regarding learning, theatre learning in Papuan schools is minimal and is caused by the lack of creative, interesting, and practical learning media. In addition, producing meaning in theatre learning refers to a system involving a combination of verbal and non-verbal symbols (Radhiah & Jazuli, 2019, p. 121).

Based on a previous study by a Cultural Arts teacher at SMP Negeri 3 Manokwari, the theatre arts learning materials were in the Cultural Arts textbook. However, they were rarely implemented because teachers were confused about delivering the media and how to manage the classes for the learning. In addition, the COVID-19 pandemic requires the students to study from their homes. It adds to the problem of how the students can learn the theatre performances. According to Aisyatur Radhiah et al. (2017, p. 109), learning theatre arts is a mixed arts learning which includes the elements of other arts such as literature, fine arts, architecture, music, and dance.

Theatre learning in Papuan schools requires media that can maximize the learning later. Furthermore, Wijaya et al. (2020, p. 68) stated that media is a tool that can stimulate the students to think, try and work together in solving problems. It can also be used as a learning tool to facilitate them in understanding the concepts taught. In a learning process, the role of media is quite important to facilitate the learning process, to convey the learning messages to students, and the teachers usually use teaching aids in the form of pictures,

models, or other tools (Ramadhani, 2020, p. 78).

One of the media that attract students at the intermediate level is comics. Comics are a popular medium for learners aged 11-15 because they display stories accompanied by interesting pictures (Wahyudin et al., 2020, p. 2). In line with that, Wicaksono et al. also stated that one of the learning media that can generate interest and innovation in student learning is comics. Visual media contains pictorial images with a coherent and clear story, making the students understand the media content easier (Wicaksono et al., 2021, p. 533).

The basic principle of comics, namely images with attractive colors, is the main reason for choosing digital comics as learning media to be developed. Although there are many digital media, digital comics are suitable for junior high school students who like visual images. The reason for choosing digital comics is also strengthened by the research of Hosler and Boomer in Subroto et al. (2020, p. 135), which stated that nowadays, some educators have been using comics in the classroom for more than 60 years. They start to realize the power of comics and make it a medium of learning in teaching practice. Wright and Sherman in Subroto et al. (2020, p. 135) also argued that comics appeal to school-age children because general students feel comfortable combining information in visual and text forms in comics. Ozdemir's opinion is further strengthened in Subroto (2020, p. 135) that children often choose comic over traditional texts because it offers visuals, images, and other arts along with words and dialogue.

Some of the media created are not popular for students in terms of performance motivation, and media development has been carried out in several subjects. For learning the Cultural Arts, the learning media must be adapted to the times. The Papuan contextual drama scripts based on digital e-comics are present as a stimulus for students because the drama script is digitally innovated and adapted to the context of the environment and students'

lives so that they would be more interested in the learning object.

METHOD

This study used the development research design proposed by Dick and Carey (2001), which views instructional design as a system that considers learning a systematic process. The stages used were planning, development, evaluation, and process management. Therefore, the current research had nine steps, but the researchers only used six steps: 1. Analysing the need to determine the objectives; 2. Formulating specific objectives; 3. Developing the assessment instruments; 4. Developing the learning materials; 5. Designing and developing formative evaluations, and 6. Revising learning.

The data source was obtained from the previous study conducted at SMP Negeri 3 Manokwari, West Papua, with interview techniques addressed to the class IX teachers. In addition, the data sources were obtained based on the validation results of 4 experts, namely digital experts, art education experts, linguists, and practitioners (artists/humanists of Papuan story scripts). Another data source was from the book *Cerita Kota Emas* by Ishak Samuel Kijne. The data analysis technique used qualitative data, which was taken from the results of interviews, and quantitative data from the results of the expert validation sheet.

RESULT AND DISCUSSION

Papuan Contextual Drama Scripts Based on Digital E-comics in Theatre Learning for Class IX Students at SMP Papua

The form of learning media development that will be developed is a Papuan contextual drama script based on digital e-comic for the short theatre learning material in class IX SMP. This learning media needs to be developed due to several factors consisting of 1) the development of digital-based learning or XXI learning, 2) the learning during the Covid-19 pandemic, 3) character learning, and 4) cultural

learning. These factors support the development of Papuan contextual drama script media based on digital e-comics. In addition to the factors mentioned above, this media needs to be developed because there are some obstacles to theatre learning in Papuan schools.

Based on a previous study at one of the junior high schools in Manokwari Regency, SMP Negeri 3 Manokwari, the teachers are constrained in imposing theatre learning on students because the creative and digital-based learning media constrain them. Therefore, it is easy for the students to access the materials during the COVID-19 pandemic. Furthermore, SMP Negeri 3 Manokwari has never used comics learning, or drama scripts developed from local digitized Papuan stories, so it is necessary to develop Papuan contextual drama script media based on digital e-comics as one of the foundations or requirements to provide solutions to the constraints of the theatre learning.

Theoretically, the drama script has a textual and contextual concept developed by Marinis (1993, pp. 2–3). It is textually useful for preparing short-duration theatre performances and contextually related to the local Papuan culture, daily life, and language. It aims to learn life's culture and noble values that can be an example for students.

Needs Analysis

Based on the interview, it was found that there had been no e-comic digital learning media used for Cultural Arts learning in class IX students, specifically on short-duration performance material. Therefore, the teachers used the learning resources were only the K.13 curriculum textbooks with revision 2.13 and other reference books related to learning materials in general for the subject of Cultural Arts. Meanwhile, the material for the short-duration theatre performance has never been implemented.

In addition to the information above, there is some information stated by the teachers based on the interview. The teachers are Yanita

Sirupang, S.Pd. and Dian Poluvain, S.Pd. The information includes (1) Cultural Arts Learning Process: The Cultural Arts learning process for class IX students at SMP Negeri 3 Manokwari has been using the curriculum 2013. They also use textbooks and other references related to learning materials. The learning is conducted well with standards on the major objectives of the Cultural Arts subject at the junior high school level. It is for cultivating the aesthetic, artistic, creative, and critical attitude and culture-based students. 2. Obstacles in Cultural Arts Learning: The obstacles faced by the teachers occurred during the covid-19 pandemic when the students learned from home and did not meet face to face. It has made the Cultural Arts teachers at SMP Negeri 3 Manokwari unprepared to implement the lessons in the new system. The unpreparedness comes from the model factor and learning media, especially for the short-duration theatre performances where the teacher is already overwhelmed in implementing this learning material in a normal system. It is added by the lack of subject support facilities such as musical instruments, drama scripts, and other material supporting tools, the lack of students' interest to study, and the learning materials which tend to discuss other cultures outside the student's environment. The solution that has been done is by the school policy for the students to have on-site learning with a regulated system and discipline of health protocols and learning modules, (3) Cultural Arts Learning Needs: The Cultural Arts learning at SMP Negeri 3 Manokwari requires model development and learning media, as well as learning support tools, namely musical instruments, painting tools, sculpting and carving tools, other teaching aids and concept of theatre performances. The learning media used by the teachers are audiovisual and other visual media.

Setting Specific Goals

The Papuan contextual drama script based on digital e-comic has been developed according to the students' learning

environment. It was also adapted to the students' skills. This media is adapted to the learning needs of SMP Negeri 3 Manokwari class IX students. Based on the analysis of the current needs, the specific objectives were formulated into three focuses: 1. Increasing students' motivation to read manuscripts in class IX of SMP Negeri 3 Manokwari, 2. Teaching character building for class IX students of SMP Negeri 3 Manokwari, and 3. Teaching cultural learning for class IX students of SMP Negeri 3 Manokwari. This specific objective has become the foundation of the development of learning media. In addition to being creative, this media can also fulfill the specific goals created.

Developing Assessment Instruments

The assessment instrument proposed to be developed in the short duration theatre performance according to the developed learning media, namely the Papuan contextual drama script based on digital e-comic, is an instrument guided by motivation indicators for reading interest. According to Dalman (Eka Deviana, 2017, pp. 5–6), "Interest in reading is an activity carried out with full diligence in order to build a pattern of communication with oneself to find the meaning of writing and find information to develop oneself intellectually, and it is carried out with full awareness and feelings of pleasure that arises from the person.

Developing Learning Materials

The development of digital-based Papuan contextual drama scripts has been developed based on the basic competencies and learning objectives. The basic competence of theatre learning consists of 1. Understanding the musical drama and/or operetta according to concepts, techniques, and procedures; 2. performing musical plays and/or operettas according to concepts, techniques, and procedures. The learning objectives are divided into 6, namely: 1. Identifying the modern theatre performances; 2. Describing the steps of a short duration theatrical performance; 3. Exploring the preparation of staging, staging,

and post-staging; 4. Designing the work of production management and artistic management; 5. Communicating the design of the performance in the form of a short duration theatre performance; and 6. Evaluating the results of the performances.

The form of development is the innovation of classical drama scripts into modern forms with an e-comic system (Sugiarto, et.al, 2021). The drama script developed also refers to the local Papuan context and provides elements of moral learning. Related to moral learning, Buchori et al. stated that strengthening moral education or character education is very relevant in the current context to overcome the moral crisis that has hit our country. The crisis can be seen in the increase in promiscuity and the rampant level of violence against children and adolescents (Buchori & Setyawati, 2015, p. 371).

Furthermore, the drama script utilizes local stories and the Papua Malay language to provide practical understanding for students. The following is a form of script fragment from classic to digital comics.

Table. 1 Forms of Drama Scripts for Digital Comics

Penggalan Naskah Drama	Digital Komik
<p>Babak 1: Mimpi Ke Kota Emas Taman Bunga Tom: “Regi, ko tahu apa yang sa suka?” Regi: “Apa yang ko suka Tom?” Tom: (<i>wajah berseri-seri penuh semangat</i>) “sa menghayal punya sayap supaya sa bisa terbang Regi, sa mo terbang ke sana, ke kota terang itu. Sa percaya Tuhan yang baik ada tinggal di sana. Aduh sio kalau seandainya sa bisa masuk ke sana oo pasti sa senang skali.”</p>	

Reviewing the Papuan Contextual Drama Scripts Based on Digital E-comics

The results of the development product in this research are in the form of a Papuan contextual drama script digital e-comic. It is a product of innovation from classic scripts to modern scripts with dialogue and images. The advantage of the resulting development product is that it is made following 21st-century learning, namely the digital age because this drama script can be accessed via students' smartphones. Smartphones as digital media and communication have facilitated many people to access information and entertainment, including stories in the form of digital comics (Swandi et al., 2020, p. 719). The drama script contains the value of character education that can provide moral learning for the students because there is a moral message at

the end of each scene. The results of this development are also from local content, namely Papua. The content is taken from the short story of Papua, namely the story of Kota Emas by Ishak Samuel Kijne, who tells about the culture and daily life of the Papuan people.

The story of Kota Emas has 25 sub-titles. However, the researchers process several core stories until the climax and end of the story during its script writing. The subtitles of the story consist of: (1) *Kota Emas* (City of Gold), (2) *Babi Hutan* (Boar), (3) *Celaka* (Cursed), (4) *Berdamai* (Peace), and (5) *Di Dalam Kota* (In the city). The main characters of this story are two teenage boys named Tom and Regi, who are best friends and have a dream of going to the city of gold. The drama script was analyzed conceptually using the theory from Marinis about reading semiotics textually and contextually. As for the script's construction, it follows the dramaturgical construction, which has five working steps described in the previous explanation.

The drama script analyzed from the Papuan short story Kota Emas is then made as an e-comic that includes pictures and dialogues. Therefore, the drama script is more modern and digitized in the form of a simple link, namely a Google Drive link, to make it easily accessed by class IX students. The form of the drama script becomes an e-comic with the selection of bright and attractive images adapted to the preferences of the age of the students. Making e-comics using comics creation services from Hobbiton Komik on an online store site with a processing time of 1 month for three story chapters containing 50 story images.

The drama script design consists of 3 acts consisting of several supporting parts, which are the characteristics that distinguish the drama script from others. Those parts are the front cover which contains the title and cover image; the presentation stage, which contains a brief explanation of the learning media and gratitude expressions; the act summary, which contains an explanation of the contents of the acts; and the title of the acts and the moral message that is placed at the end of each round

so that the students can learn to take the moral meaning of what they read and will perform later. It is an advantage because all students can learn the character education and local content. The followings are some pictures of the digital e-comic based on Papuan contextual drama script products.



Figure 1. The Cover of Drama Script



Figure 2. Stage



Figure 3. The Example of Act Summary



Figure 4. The Example of the Content



Figure 5. The Example of Moral Value

Furthermore, four experts reviewed the e-comic, which is in line with the statement of Edwin and Emil (2018, p. 3) that stated if the development of digital-based learning media produced by the researchers is given to the experts for research and validation. If there are some errors or things deemed inappropriate, a revision will be made until valid results are obtained. The validators (experts) are listed in Table 4.1 below.

Table 2. Data Validators

Experts	Competence	Description
Expert 1	Academics	Art Digital Media Expert
Expert 2	Academics	Art Education Expert
Expert 3	Academics	Linguist
Expert 4	Practitioner	Cultural Practitioner

The four experts were asked to assess the Papuan contextual drama script based on the digital e-comics developed by the researchers. They would see the suitability of the drama script with the domain to be measured.

After the revision was completed, the expert would give an assessment, which was then analyzed for validity and reliability. The validity analysis used the Aiken formula, while the reliability analysis used the Ebel formula. It is in line with Subay (2020, p. 115), who stated that validity based on the expert agreement could be determined using the index proposed by Aiken. The results of the analysis of validity and reliability based on expert judgment are as follows.

Expert Validity

Expert validity is a requirement that must be met in an instrument in order to have high credibility (Jazuli & Alam, 2020, p. 499). The Papuan contextual drama script based on digital e-comic was assessed by four experts on three aspects, namely content, construct, and language, where the three aspects consist of 20 rules. The results of the validation of Papuan contextual drama scripts based on digital e-comics from experts on the material aspects obtained an average percentage of 91.25% for five rules. Learning materials are suitable, conform with learning objectives, conform with basic competencies, contain educational values character, and conformity to the local Papuan context. As the e-comic has fulfilled all the rules, developing drama script media based on digital e-comic learning theatre material is declared feasible as cultural art learning media. Furthermore, regarding the validation results of e-comic digital-based drama scripts for the media construction aspect from experts, an average percentage of 93.9% was obtained on eight rules related to helping the students understand, display of designs, and colors that match, ease of use, presentation of illustrations, image layout, media attractiveness, the size suitability of the image, and the image clarity displayed. Therefore, it was declared suitable for Cultural Arts learning. The results of the validation for the language aspect from the experts obtained an average value of 92.1% of 7 rules related to the sentences used do not contain double meanings, use clear letters, use communicative language, language style

according to students' understanding, use signs correctly, the correct use of upper and lower case letters, and use the language of local Papuan context. Therefore, it is declared as feasible as digital-based cultural art learning media.

If it is seen from the validity value of the Papuan contextual drama script based on the digital e-comic of each rule and refers to the Aike category, with a validity value of < 4 , the learning media developed has invalid validity criteria. Then, if a validity value is 0.4-0.8, the developed media has moderate validity criteria, but if the validity value reaches > 0.8 , then the developed media has very valid criteria. Therefore, the Papuan contextual drama script based on digital e-comic has met the validity criteria based on expert assessment at a value of > 0.8 , which means that it is very valid. It is also suitable to assist the learning of Cultural Arts for class IX students, specifically for digital theatre learning.

After the validity analysis was completed, the reliability was analyzed based on expert judgment, as explained by Nugroho et al. (Subay, 2020, p. 116), which explained that the next step after knowing the validity analysis was to calculate the reliability of the instrument through the level of consistency agreement between raters.

Expert Reliability

Inter-rater reliability was carried out using the Ebel formula. Furthermore, for instrument reliability based on expert agreement, it could be tested using the Anova Two Way difference test with the SPSS 20.0 program and followed by analysis using the Ebel formula (Anwar, 2012 in A. Nugroho, B.S., Djuniadi, D), & Resuilowati, A. 2016: 3), Dewi, N.M, A. L, Sugihartini, N., Kasiman, M.W, & Sunarya, L M. G (2014: 26) which stated that the inter-rater reliability test was analyzed using the formula Ebel (Subay, 2020). The following table 4.4 shows the calculation of the reliability value of expert review.

Table 3. Two-Way Anova Test

Tests of Between-Subjects Effects			
Source	Type III Sum of Squares	df	Mean Square
Corrected Model	15.950 ^a	79	.20
Intercept	1786.050	1	1786.050
Ahli	2.250	3	.750
Pernyataan	4.450	19	.234
Ahli *	9.250	57	.162
Pernyataan			
Error	.000	0	
Total	1802.000	80	
Corrected Total	15.950	79	

a. R Squared = 1.000 (Adjusted R Squared = .)

Based on the Ebel formula analysis, a reliability value of 0.438 is obtained. If the value is about the reliability criteria between raters, the value of 0.438 is in the reliability criteria with the moderate reliability category. Therefore, it can be concluded that the experts agree that the learning media for Papuan contextual drama scripts based on digital e-comics developed can be trusted for theatre learning and will have consistent or relatively stable results. Furthermore, the reliability value has a moderate category, so the learning media has a moderate confidence level, and there is no difference between experts.

CONCLUSION

Based on the description that has been presented, the overall Papuan contextual drama script based on digital e-comics is believed to be used as a digital learning medium that can motivate the students to learn drama and foster their desire for drama performances. Therefore, the learning media for Papuan contextual drama scripts based on digital e-comics is needed to solve the problems in Cultural Arts learning in the 21st century.

REFERENCES

Aisyatur Radhiah, T. K., & Fitri, A. (2017). Pembelajaran Seni Teater Pada Materi Rancangan Dan Persiapan Pementasan Teater Di Kelas IX SMP Negeri 5 Kluet Utara Kabupaten Aceh Selatan. *Jurnal*

Ilmiah Mahasiswa Program Studi Pendidikan Seni Drama, Tari Dan Musik Fakultas Keguruan Dan Ilmu Pendidikan Unsyiah, 2(2), 108–116.

- Alam, S., Totok, S. F., Jazuli, M., & Syakir. (2020). The Role of Information Technology in the Development of Visual Culture Art Education. *International Conference on Science and Education and Technology (ISET 2019)*, 624–628.
- Buchori, A., & Setyawati, R. D. (2015). Development model of character education through e-comic in elementary school. *International Journal of Education and Research*, 3(9), 369–386.
- Dewannata, D. A., □ S. S., & Syarif, M. I. (2021). The Digital-Based Innovative Learning of Music Subject to Cultivate The Character Values of Students During Covid-19 Pandemic. *CATHARSIS*, 10(2), 116–129.
- Dick, W., Carey, L., & Carey, J. O. (2001). *The Systematic Design of Instruction*. Addison-Wesley Educational Publishers.
- Eka Deviana, S. ; T. S. (2017). Korelasi Minat Baca Dengan Hasil Belajar Pada Pembelajaran Bahasa Indonesia Siswa Kelas III SD. *Jurnal Pendidikan Dan Pembelajaran Khatulistiwa*, 6(2), 1–16.
- Jazuli, M., & Alam, S. (2020). From Ritual To Entertainment: The Changing Role Of Barongan Performance Arts. *Humanities & Social Sciences Reviews*, 8(4), 496–506.
- Mahmudah, L. (2014). *Efektivitas Penggunaan Media Komik Terhadap Pencapaian Kompetensi Pembelajaran SKI di SMP Negeri 264 Jakarta* [UIN SYARIF HIDAYATULLAH JAKARTA].
- Marinis, M. de. (1993). *The Semiotics of Performance*. Indiana University Press.
- Mukhlisin, M., Hartono, H., & Lanjari, R. (2020). Jonggan Dayak Kanayatn Dance: Study of Educational Values in The Learning Process in Elementary Schools. *Catharsis*, 9(1), 58–64.
- Nurdiansyah, E., Faisal, E. El, & Sulkipani, S. (2018). Pengembangan media

- pembelajaran berbasis PowToon pada perkuliahan Pendidikan Kewarganegaraan. *Jurnal Civics: Media Kajian Kewarganegaraan*, 15(1), 1–8.
- Radhiah, A., & Jazuli, M. (2019). Dramatic Structure in Teuku Umar Theater Show in Meulaboh City, West Aceh Regency. *Catharsis*, 8(2), 120–126.
- Ramadhani, W. P. (2020). Pengaruh Penggunaan Media Komik Dan Motivasi Belajar Terhadap Hasil Belajar Matematika Siswa SMP. *JUPITEK: Jurnal Pendidikan Matematika*, 2(2), 77–86.
- S, Lijana; Panjaitan, Ruqiah G P; Wahyuni, E. S. (2018). RESPON SISWA TERHADAP MEDIA PEMBELAJARAN KOMIK PADA MATERI EKOLOGI DI KELAS X SMA. *Jurnal Pendidikan Dan Pembelajaran Khatulistiwa*, 7(3), 1–10.
- Subay, R. (2020). *Pengembangan Assesment Tes Higher Order Thinking Skills (HOTS) Peserta Didik Pada Pembelajaran Matematika Kelas VII Berbasis Model Rasch*. Universitas Negeri Semarang.
- Subroto, E. N., Qohar, A., & Dwiyan, D. (2020). Efektivitas Pemanfaatan Komik sebagai Media Pembelajaran Matematika. *Jurnal Pendidikan: Teori, Penelitian, Dan Pengembangan*, 5(2), 135–141.
- Sugiarto, E. (2019). *Kreativitas, Seni, dan Pembelajarannya*. Yogyakarta: LKiS.
- Sugiarto E, Julia J, Pratiwinindya R A, Prameswari N S, Nugrahani R, Wibawanto W and Febriani M. (2019). Virtual gallery as a media to simulate painting appreciation in art learning. *Journal of Physics: Conference Series* 1402(7) 077049
- Sugiarto, E., Kurniawati, D. W., Febriani, M., Fiyanto, A., & Imawati, R. A. (2021, March). Computer-based art in folklore illustration: Development of mixed media digital painting in education context. In IOP Conference Series: Materials Science and Engineering (Vol. 1098, No. 3, p. 032017). IOP Publishing.
- Swandi, I. W., Wibawa, A. P., Pradana, G. Y. K., & Suarkad, I. N. (2020). The digital comic Tantri Kamandaka: A discovery for national character education. *International Journal of Innovation, Creativity and Change*, 13(3), 718–732.
- Wahyudin, A. Y., Jepri, D., Simamora, M. W., Pratiwi, I. W., & Rina, A. (2020). Penggunaan Komik Digital Toondoo Dalam Pembelajaran Bahasa Inggris Tingkat Sekolah Menengah. *Journal of Social Sciences and Technology for Community Service (JSSTCS)*, 1(1), 1–6.
- Wicaksana, I. P. G. C. R., Agung, A. A. G., & Jampel, I. N. (2020). Pengembangan e-Komik Dengan Model Addie Untuk Meningkatkan Minat Belajar Tentang Perjuangan Persiapan Kemerdekaan Indonesia. *Jurnal Edutech Undiksha*, 7(2), 48–59.
- Wicaksono, J. W., Japar, M., & Utomo, E. (2021). Development of Digital Based Comic Media for Primary V-Class Student Learning. *International Journal of Multicultural and Multireligious Understanding*, 8(4), 532–537.
- Wijaya, S. N., Johari, A., & Wicaksana, E. J. (2020). Pengembangan Media Pembelajaran Komik Digital Berbasis Karakter Hero Indonesia Pada Materi Sistem Peredaran Darah. *Didaktika Biologi: Jurnal Penelitian Pendidikan Biologi*, 4(2), 67–78.