

Developing Drawing-Cartoon Class Assisted by Google Classroom in Gold Pencil Community

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Abstract

This online drawing-class research and development in Gold Pencil Community will answer the problems during this time. Gold Pencil has a regeneration mission, but they also have some constraints, such as time limitation and the lack of teaching material based on competency in implemented-learning activities. The aim of this research and development is to produce an online-learning design that suits to Gold Pencil needs. This research uses Sugiyono's 10-steps model. These steps contain of (1) potency and problems, (2) data collection, (3) product design, (4) design validation, (5) trial use, (6) product revision, (7) product trial, (8) design revision, (9) product revision, and (10) production. The steps mentioned are modified into 3 main steps, namely planning, development and testing. The result of this research is an online-learning design of drawing cartoon assisted with Google Classroom for beginner cartoonists. This online-learning design can help Gold Pencil Community to realize the mission of regeneration through learning activities. The results of this research and development also can be another community's alternative, especially for people who want to explore cartoon.

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INTRODUCTION

Semarang city has an excellent potency in cartoon field. There are several cartoonists from this lumpia city. They also tone up print and online mass media. They even participate in international exhibitions and contests. Semarang city also gets capital-cartoon nickname in Indonesia because of its contribution of developing cartoon (Arif, 2020). The cartoonists in this city learn and do their creative process through community activities. Cartoon-learning activity in Semarang basis on workshop community. However, that workshop wasn't designed systematically and sustainably. That workshop also did not base on competency designed structurally.

Gold Pencil Cartoonist Community is one of the growing communities in Semarang. Gold Pencil was founded by senior cartoonists Jitet Kustana, Suratno, and several cartoonists in Semarang for regeneration mission. The regeneration program was conducted by several targeted cartoon learning activities. At the first year, Gold Pencil collaborated with several schools in Semarang, such as SMP Negeri 17 Semarang, SMP Islam Terpadu PAPB Semarang, SD Islam Terpadu Bunayya, and SMP Negeri 42 Semarang. Gold Pencil offered a drawing cartoon extracurricular program. In other hands, Gold Pencil also promoted intensive class for junior and senior high school students for five months. This class had been equipped with Basic Competencies formulated for beginner cartoonists. The first class was began on December 23, 2018, and there were six participants joined, 2 participants form junior high school students and four participants from senior high school students (Prehanto & Aprily, 2021).

Beside intensive class, Gold Pencil also organized *Semarang Cartoon Camp*. That program was designed as creative camping workshop. Aside containing of educational drawing-cartoon materials, *Semarang Cartoon Camp* also became a moment for familiarity. The first *Semarang Cartoon Camp* was held on October 6-7, 2018, at Griya Pawening Jati, Wonolopo,

Mijen, Semarang City. 36 participants from students and public joined this program. They came from various regions, such as Semarang City, Salatiga, Kendal, Kudus, Jepara, and Yogyakarta. They received cartoon materials, such as (1) drawing characters, (2) caricature drawing techniques, (3) coloring techniques, (4) motivation, and (5) drawing along with predetermined themes for two days.

Gold Pencil members assumed that *Semarang Cartoon Camp* is students' most favorite program. This assume matchs with participants' testimony related with their impressions and suggestions during joining this program. They just complained program time duration. For them, two days and one night was not enough to learn about cartoon comprehensively. In other hand, this program was not supported by material based on competency.

The second *Semarang Cartoon Camp* was held on July 27-28, 2019. There are 39 participants joining this program. The second camp was equipped with slide for teaching materials. Gold pencil member adjusted time duration program referring to the first camp evaluation. Although there were improvements from the previous program, teaching material and time allocated for this program were still not enough. Learning to draw cartoons needs more time to practice and guide. Gold Pencil manager hopes that *Semarang Cartoon Camp* can be a sustainable program. So that, they needs improvements for the next better program.

The obstacles faced by Gold Pencil can be resolved by long-distance learning using information technology. Long-distance learning utilizes internet designed to facilitate learners with variety backgrounds. Bambang Warsita (2011: 15) said that long-distance learning is a learning model which gives students a freedom learning without being tied by space and time. The uses of information technology allows mentors to present teaching materials in multimedia form (Wibawanto, 2017). Using technology in learning activities is one of the efforts to resolve the problem of boring study (Trimurtini et al., 2019).

Khasanah (2016) evaluation on the implementation of long-distance learning development program at IAIN Walisongo showed a positive response from the students who participated in online learning. This indicates that demographic characteristics are strongly influenced activity in Learning Management System (LMS), and students' LMS use is influenced by instructors use of LMS. The empirical results show a positive relation between student and instructors' use of LMS.

Today, educational institution and communities have practiced long-distance learning. There are two types of long-distance learning platforms: Learning Management System (LMS) and Learning Content Management System (LCMS) (Prawiradilaga, 2016). Google Classroom is one of the famous free platforms for long-distance learning. Google developed this platform to assist anyone to manage their class and to deliver materials for evaluation (Subkhan et al., 2021).

Google Classroom is easy to use (Barus, 2021). Mentors are able to create online classes with customize name which was prepared before. Furthermore, mentors can invite participants via email or share class code (Judge, 2016). In addition, Google Classroom is integrated with other Google digital platforms also, such as YouTube, Google Drive, Google Docs, and so on (Arif, 2021). This condition allows mentors to present teaching materials in varied forms. Based on Ventayen evaluation results (2018), Google Classroom is highly recommended to support long-distance learning.

Sutrisna's research (2018) shows that Google Classroom has several advantages for learning activities. The advantage found by Sutrisna is the convenience of accessing applications. Google Classroom also makes mentor easy to manage materials, to give assignments, and to give score efficiently. Al-Marouf & Al-Emran (2018) students who rely on Google Classroom can use this technology in their own smartphone to improve the educational system—referring to some of the previous research results, the use of Google

Classroom as practical online-learning support for the learning of various learning subjects.

The problems faced by Gold Pencil in drawing-cartoon class drive the researchers to research and to develop online-learning design of drawing cartoon. Cartoon is a humorous visual response. Cartoon characters are fiction created to present social comedies and witty (Wijana, 2004). Cartoons are divided into two types: verbal and non-verbal cartoon. Verbal cartoon is a cartoon which uses verbal elements such as words, phrases, and sentences, discourses, and funny pictures that provoke the reader to laugh and smile. At the same time, non-verbal cartoon is a cartoon that utilize illustrations or witty visualizations only. And also there are three types of famous cartoons in the media: editorial cartoons, gag cartoons, and comic strips (Fairington, 2009).

Referring to several research results, online learning can be a solution to resolve the obstacles of learning implementation. Choosing online learning to support cartoon learning is very appropriate to look at students' characteristic who were involved in *Semarang Cartoon Camp*. The participants were familiar with smartphone. The smartphone is adequate as an online-learning tool. Using smartphones in online learning can connect mentors and participants a part (Awalia et al., 2021). Digital teaching materials compiled in Google Classroom make participants' learning easier to understand. It can build participants' self-learning initiative (Auliya & Suminar, 2016). This research and development are important to do, so that Gold Pencil drawing-cartoon class can be in right way to regenerate beginner cartoonists.

This research aims to develop an online-learning design of drawing cartoon. The product development consists of content components, methods, and evaluations. As far as researchers' observation, the development of online drawing-comics class is still a few. This condition can be an opportunity and a challenge for Gold Pencil.

This research complements previous studies on online learning. The development of cartoon drawing materials is something new and

has not existed before. Apart from being an urgent need for Gold Pencil to be developed, online classes are an innovation so that the sustainability of Gold Pencil is well maintained.

The results of this research and development can help the Gold Pencil Cartoonist Community to implement a regeneration program by drawing-cartoon learning. The results of this research are very useful for the society, especially for creative people who want to explore the art of cartoons. It can be an alternative option of learning methode.

METHOD

This research uses research and development (R&D) methods. Sugiyono (2013) defines research and development methods as a research method used to produce and to test the effectiveness of specific products. This research will produce and test the effectiveness of product, so that using R&D method. The development of Google Classroom contains of learning syllabus, learning plans, learning media, and instrumental evaluation. This research uses Sugiyono’s 10-steps model. At stage (1) potency and problem, researchers try to map the Gold Pencil potencies and problems in learning activities. Mapping is done by documentation review. In stage (2), data collection, researchers try to analyze Gold Pencil needs of online learning through focus group discussion (FGD). The next step, (3) product design. The initial design development of online learning refers to several FGD recommendations. Furthermore, at stage (4) design validation, the plan of online-learning product is validated by instructional design experts, materials experts, and multimedia experts. In the next stage, (5) The use of the experiment was carried out with 4 people from the Golden Pencil novice cartoonists on March 12-17, 2022 through Google Classroom. Furthermore, the learning design is improved at stage (6), product revision based on evaluation in trial uses step. Phase (7) product trial, the revised product design was retested on a wide

scale involving as many as 9 participants who were openly recruited on 18-23 March 2022 through Google Classroom. Stage (8), design revision refers to the implementation of product trial before. Furthermore, in (9), revising online-learning design. In the last stage, (10) production, the developed product result is ready to be applied in a real drawing-cartoon learning.

RESULTS AND DISCUSSIONS

Potencies and Problems

Gold Pencil Cartoonist Community has dedicated developing cartoon in Semarang City. Regeneration in learning activities becomes a priority program. Gold Pencil has devised some learning program of drawing-cartoon, such as extracurricular, intensive class, and Semarang Cartoon Camp. Based on mapping results of Gold Pencil cartoon-learning information, the researchers gets this information.

Table 1. Mapping Results of Gold Pencil Cartoon Learning

	Exist	None
Basic Competencies	✓	
Syllabus and training program plan	✓	
Teaching	✓	
Material structure or content	✓	
Learning facilities and infrastructure		✓
Module		✓

As a community, Gold Pencil has already had a good planning. This community is supported by senior cartoonists who have the capacity as a mentor. They are Jitet Kustana, Suratno, Danny Yustiniadi, Sugianto, Djoko Susilo, Kustiono, Aji Mei, Sukriyadi and others.

For learning practice, Gold Pencil borrowed the secretariat of the Alliance of Independent Journalists (AJI) of Semarang City on Jalan Nakula 2 Number 5 Semarang City. Gold Pencil learning activities so far have also not been supported by adequate teaching materials. This becomes a challenge and an opportunity for Gold Pencil to develop online learning design. What Gold Pencil has right now can be their first supplies.

Data Collection

Data collection of developing online-learning design needs were collected from focus group discussion (FGD). This FGD involved gold pencil members and external elements such as educational practitioners. FGD participants consist of 9 Gold Pencil member. There are Jitet Kustana, Sugianto, Sukriyadi, Djoko Susilo, Adi Prehanto, Kustiono, Dias Safira, Mela Pauziah and Sujendro Hery Nugroho. FGD produced six recommendations to develop online class of

drawing-cartoon. (1) graduate profiles, (2) competencies, (3) learning media, (4) learning methods, (5) technology used, and (6) learning assessment.

Product Design

Based on the FGD formulation results on Gold Pencil online-learning needs. Than online-learning design of drawing cartoon is developed as the following table

Table 2. Gold Pencil Online Learning Design

Basic Competencies	Understanding cartoon definition and its types, and also elaborating cartoon history Preparing tools and equipment for drawing cartoons Practicing how to make a cartoon characters
Learning Media	Tutorial video Pocket book
Learning Methods	Online discussion and self-learning
Learning Platform	Google Classroom
Learning Assessment	Tests and Portfolios

Design Validation

Researchers adopted SPADA Indonesia’s evaluation instrument to measure the worthiness of online-learning design of drawing cartoon. The instrument consists of 6 items including assessment of the intrinsic and contextual quality of learning content (Wibawanto, 2019).

The validation of Gold Pencil online-learning content involves three validators. There are instructional design expert Adi Prehanto as first validator, material expert Sujendro Hery Nugroho as second validator, and multimedia expert Sugianto as third validator. The results of content validation are listed in the following table.

Table 3. The result of learning content vadidation

Aspects	V1	V2	V3
The learning structure is clear, the topic and subtopics are precise, each topic or subtopic has an introduction, explanation, and summary.	4	4	3
Content is presented communicatively and completely. Content is linked to the other related document to enrich the materials.	3	4	3
The type of learning object (text, images, audio, video, animation, simulation) is selected based on learning outcome needs and characteristics.	3	4	4
All references used in the learning are listed, for online references equipped with links to facilitate participants.	3	4	2
There is a glossary listed terms with explanation, lists of notations and symbols, especially those often referenced.	4	4	2
The visual display is clear; the text is easy to read, and the graphics are precisely labeled and free from optical interference.	3	4	4
Total Value	20	24	18
Percentage	83.3%	100%	75%

Based on eligibility criteria, 83,3% is classified to worthy criteria with a good predicate, 100% is classified to worthy criteria with a great predicate, and 75% is classified to worthy criteria with a good predicate. So that, based on instructional design expert, material expert, and multimedia expert consensus, Gold Pencil online-learning of drawing cartoon is worthy to use

The First Trial Use

The first trial use or limited trial was participated by 4 participants from Gold Pencil members who were still relatively beginners. Participants are obtained on a closed registration in the internal Gold Pencil community. There are the result of pre-test and post-test of limited trial class.

Table 4. First Pre-test and Post-test Test Score

Name	Pre-test	Post-test
AR	50	80
HA	40	100
RS	70	100
RK	60	90

Table 6. N-Gain

	<i>Pre-test</i>	<i>Post-test</i>	N-Gain	N-Gain (%)	Categori
	50	80	0.6	60	medium
	40	100	1	100	high
	70	100	0	0	low
	60	90	0.75	75	high
Average	55	92.5	0.587	58.75	medium

The assessment of portfolio refers to three points: (1) anatomy or reflection, (2) line quality, and (3) the details of the character parts. There are the results of mentor’s assessment of drawing-cartoon participants.

The mentor said that cartoon characters created by drawing-class participants generally has been compatible as cartoon criteria. He gives special notes in every part of character which participants need to notice.

Product Revision

Based on the first phase trial experience, the researchers revise the product referring to

The pre-test and post-test results of the limited trial class were tested using a paired t-test of two samples through the SPSS program.

Table 5. Paired Sample Test

	Sig. (2-tailed)
Pair 1 Pre-test – Post-test	0.015

The significance test for the t-test utilizes a sig (2-tailed) column where the default is 95% with 0.015 score. The magnitude of this score is below 0.05 (meaning t.s 5%) or Sign. $0.015 < 0.05$. Based on t-test analysis results, the implementation of online learning is effective to increase participants drawing-cartoon knowledge.

To find out the resulting increase, an N-gain calculation is carried out with the following results. It is known, the average N-gain is 0.58 with a medium categorization of values. Meanwhile, the interpretation of the effectiveness of N-gain is at a percentage of 58.75% which can be interpreted to be quite effective.

mentors and participant suggestion. There are two main revisions: website links addition for cartoon examples and the meeting schedule adjustment with the material which will be discussed.

Phase 2 Trial

The second phase of the trial involves more participants. The participants were free recruited since March 11-17, 2022. There were 13 participants registered. However, the four of them are unable to join. Then the participants join drawing-cartoon online class for a week with three-times virtual face-to-face meet. There

are participants' pre-test and post-test result on the second phase of the trial class.

Table 7. Second Pre-test and Post-test Scores

Name	Pre-test	Post-test
AZ	80	90
AA	80	100
EI	100	100
HA	40	100
LM	70	90
MA	50	90
MT	10	80
MF	40	100
WM	60	80

The pre-test and post-test results of the limited trial class were tested using a paired t-test of two samples through the SPSS program.

Table 9. N-Gain

	<i>Pre-test</i>	<i>Post-test</i>	N-Gain	N-Gain (%)	Category
	80	90	0.5	50	Medium
	80	100	1	100	High
	100	100	0	0	Low
	40	100	1	100	High
	70	90	0.67	67	Medium
	50	90	0.8	80	High
	10	80	0.78	78	High
	40	100	1	100	High
	60	80	0.5	50	Medium
Average	58.89	92.2	0.69	69.4	Medium

Portfolio was assessed by Kustiono mentors and Jitet Kustana in work discussion session. The work discussion of cartoon characters refers to three main things: (1) anatomy or reflection, (2) the line quality, and (3) the character-parts details.

Generally, all of the participants drawing skill grows significantly. All participant has no cartoon characters when applying this class, but after joining this class, they have their own character, although there are some weaknesses to be corrected.

Design Revision

Referring to the second trial experience, there are no significant obstacles. Based on

Table 8. Paired Sample Test

	Sig. (2-tailed)
Pair 1 Pre-test – Post-test	0.004

The significance test for the t-test utilizes a sig (2-tailed) column where the default is 95%, with 0.004 score. The magnitude of this score is below 0.05 (meaning t.s 5%) or Sign 0.004<0.05. Based on the results of the analysis through the t-test there is a significant difference between the *pre-test* and *post-test* results.

To find out the effectiveness, an N-gain calculation is carried out with the following results. It is known, the average N-gain is 0.69 with a medium categorization of values. Meanwhile, the category of interpretation of the effectiveness of N-gain is at a percentage of 69.4% which can be interpreted to be quite effective.

mentors and participants' critics and suggestion in the performance of drawing-cartoon online class, this class was going on its way (good). However, half of the participants highlighted class time duration. The participants recommend that online class is better held in the weekend, because all of the participants have their activities in weekday. Because of that reason, there is no revision in online-learning of drawing cartoon.

Production

The last online-learning design of drawing cartoon revision becomes the final design which is ready to be implemented in Gold Pencil Community. This design is still limited for Basic

Competencies of drawing-cartoons for beginners. There is the overview of Gold Pencil drawing-cartoon online learning designs.

Discussion

Research and development of this online-learning design are very important to support Gold Pencil Community to implement the regeneration program. Apart from being a solution for the obstacles faced so far, online-learning design has become a necessity. Gold Pencil potency really supports a better developing drawing-cartoon learning according to the demands of the times.

Researchers used the research and development method in developing online learning to draw cartoons. The research and development use Sugiyono's 10-step model. Researchers sort these steps into 3 main steps, namely (1) planning, covering potential and problems and data collection, (2) development, covering product design, design validation, and design revision, and (3) testing, including product trials, product revisions, usage trials, product revisions, and revisions. This research and development resulted in the design of online learning to draw cartoons for novice cartoonists.

The design has passed three times validation test: instructional design experts, materials experts, and multimedia experts. According to all expert consensus, this learning design has a worthy predication, so that it can be used in a real online class. The first and second trials result show that this online-learning design is effective to increase participants drawing-cartoon skill.

The effectiveness of online learning design to draw cartoons assisted by Google Classroom is relevant to the research of Aditya (2018), Gunawan & Sunarman (2017) which states that the use of Google Classroom is effective for carrying out learning.

The presentation of the material digitally in the form of video tutorials will make the participants enthusiastic as found by Kuncahyono et al. (2019). This is relevant to what Batubara & Batubara (2020) suggests that the tutorial videos are specifically designed to

deliver learning materials. Through video tutorials, the practical stages of drawing cartoon characters are easy for participants to follow.

The use of portfolios in skill assessments becomes an authentic document that shows participants' success in participating in online learning to draw cartoons. As Prawiradilaga et al. (2016) said, the success of participants in learning can be seen from the achievements achieved.

This research and development produce online-learning design of drawing cartoon which match to Gold Pencil needs. This design does help Gold Pencil to realize of regeneration mission by learning activities. By providing this online-learning design, the society especially creative people can access drawing-cartoon learning without place and time constraint

CONCLUSIONS

This research and development are driven by Gold Pencil needs and problems in carrying out cartoon drawing learning. The product of this research and development is online-learning design of drawing cartoon supported with Google Classroom for beginner cartoonists. This learning design uses pocketbook and video tutorials integrated with Google platform. The learning method of this class uses online discussion and self-study. The learning assessment uses tests and portfolios. Based on the validation results by instructional design experts, material experts, and multimedia design experts, this product is ready to be used in a real drawing-cartoon online class. And based on the results of the first and second trials, this online-learning design of drawing cartoon is effective to be practiced by Gold Pencil participants.

The results of this research and development are useful for novice cartoonists as an alternative to learning cartoons. The online class of drawing cartoons is useful as a regeneration program. For other researchers, the results of this study can be a reference for further research.

This online learning design for drawing cartoons is still only an initial design. Further

development is needed to produce a good design. The researcher recommends that mentors and managers of the Gold Pencil cartoonist community take advantage of the online learning design for drawing cartoons that has been developed as an option in carrying out cartoon learning. Mentors and managers of the Gold Pencil cartoonist community can develop an online learning process with the same process and pattern. This cartoon drawing online learning design is limited to beginner classes, but can be developed for advanced classes.

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