

## **Designing Cartoon as a Supplementary Material for English Structure Subject**

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### **Abstract**

Cartoon comes from an Italian word ‘Cartone’ meaning a large paper. It is designed not only as the media to describe daily activities, but also to entertain, criticize, provoke, and even to teach people. A lot of studies have been conducted regarding the implementation of cartoon in classroom or outside classroom context. It is proven that cartoon gives some positive attitudes in teaching students. However, the knowledge in how to design and utilize the cartoon based on teachers’ and/or students’ needs should be revealed. This article allows teachers and students to know the process and the basic principles of how a cartoon for learning is designed in the context of English Structure class. The method used in this study is design and development research. The result of this study is a cartoon entitled “The Tragedy of Jayaprana” which promotes the narrative text as the topic of the learning.

**Keywords:** cartoon, cartoon designing, cartoon for learning, English structure, narrative

## A. Introduction

Many studies have been conducted regarding teaching by using cartoon or other animated illustration such as comic, cartoon, and movie, as the teaching aid. The studies show some positive attitudes toward students' performance in language learning, especially in their grammar competence. An experimental study by Arikan & Taraf (2010) focusing on the usage of cartoon in an English lesson revealed that an experimental group which was treated by using cartoon in English lesson showed an excellent result in vocabulary and grammar competencies than the controlled group. A cartoon is created not only for children but also for all ages including adult. High school or college students inevitably need to access images in their daily life. It clarifies that age is not a barrier for cartoon to have its audience. Piaw (2012) conducted an experimental research about reading by using a cartoon to students with average of age 20.2. The result of the research reveals that the students' reading rate increases. Student's motivation toward reading also increases with a significant result, students can master the complicated ideas after reading a text by using cartoon.

In the Faculty of Education, Sampoerna University, English structure (ES) course is a mandatory course for students who take English Language Teaching major and it is held in the second semester. This course aims to increase students' skills, knowledge, understanding, and accuracy of English structure whose materials focus on grammar and structure of the English language. The materials used in ES are mostly in the form of e-book, PDF and PPT which also employ some pictures or illustration in their pages/slides. However, ES does not promote cartoon which has a positive impact toward the students. Thus, this study comes up as the design research which offers a new material for teaching English grammar and structure.

Since this study is a design research, the focus of this study is only on the designing of a cartoon as a supplementary material for university students. Therefore, there is no experimental study conducted in this research to measure students' performance after having the cartoon as their supplementary material. In other words, it only focuses on the design process and its validation, and not on the implementation.

The cartoon is beneficial not only to entertain, but also to teach students in a different way (Wyk, 2011). It offers a fun and meaningful teaching and learning experience. However, creating cartoon which converts a text material to become cartoon is not as simple as drawing pictures. Designing cartoon for teaching and learning needs some basic processes and principles. Thus, this study is trying to give ideas on how a cartoon as a supplementary material for university students is designed, and to show a complete set of examples of a cartoon design.

Cartoon is the amount of pictures telling story regarding social matter such as jokes, politics, people thought or recent event (Fairrington, 2009). As time goes by, cartoon is also used as one of the media in the teaching and

learning process. There are some aspects to discuss regarding cartoon in general and in the educational field. They are the genre of cartoon, the elements of cartoon, the implementation of cartoon based on previous researches and other literatures, the design of educational cartoon, and the teaching of grammar with cartoon.

Cartoon Story Maker is the chosen software to support this study. This software is easy to use, it is already completed with some characters and background, and some other features such as: balloons, captions, the choice of publishing, etc. This software is free and downloadable and computer friendly, which means that it does not need a huge memory or a fancy computer specification to download. The extension of the file when it is published is also user friendly. Its extension is html and pdf, so all computer users can use this software.

There are some concepts of cartoon designing in educational field as a supplementary teaching and learning material. The first three concepts come from Kabapinar (2005) based on his study to some students in a science class. The effective cartoon as a teaching and learning material can be a tool to find out students' ideas without being affected by ideas of others, it can provide a purpose for practical work, and fix students' misconception. Another concept is stated by Kabapinar (2005) which stated some concepts of cartoons as a teaching material. The concepts are: the amount of text in the cartoon which has to be as minimal as possible, the cartoon presents a real life situation, and the content of the cartoon should be credible and scientific since it aims for teaching and learning.

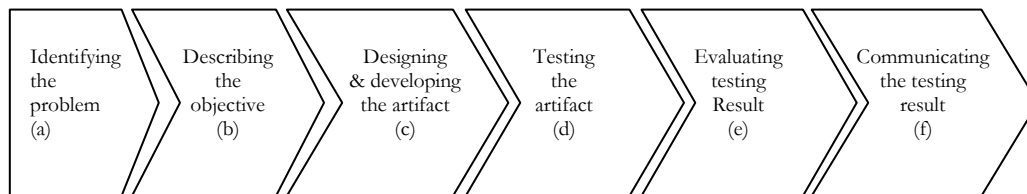
Considering cartoon as a teaching and learning material, Bell and Gower as cited in Tomlinson (2003) stated that in designing a teaching and learning material, the author needs to compromise that the material should meet the practical need of teachers and learners and it should match the realities of publishing material. Second, Tomlinson (2003) tells about the course book as one of the materials designed to be flexible to capitalize on teachers' capacity for creativity. Third, Fauzan (2014b) stated that teaching materials should be developed to make the students have the ability to communicate in English in academic and nonacademic situation. Forth, Fauzan (2014c) also stated that an appropriate teaching material became one of the important keys of the improvement of the students' English ability. So there are other two main points to be considered in designing a cartoon as a teaching material. The first, cartoon is possible to be created, published, and used by teacher and/or students; and the second, cartoon can support teachers' creativity in teaching.

## **B. Research Methodology**

Based on Richey & Klein (2007) the type of this research is a design research which creates a product based on some theories and previous researches instead of making a new theory. Based on this, the method and

strategy to conduct the research will be derived. It is the common methods employed in Design and Development Research by Richey & Klein (2007).

There are a number of steps in Design and Development Research but the common steps from Ellis & Levy (2010) are used. The steps are: a) identifying the problems; b) describing the objective; c) designing and developing the artifact; d) testing the artifact; and e) evaluating the results of testing; and f) communicating those results. Following is the illustration of the steps that is used in this research:



**Figure 1:** The 6-phase design and development research (Ellis & Levy, 2010)

The first step to do is identifying the problem. The problem of this research is the absence of the material which is in the form of cartoon in ES course for university students. Design research is usually conducted because there are complex problems that need an urgent tool to be developed or there is an absence of workable method in a certain context (Ellis & Levy, 2010). In this research, the problem is about the absence of a tool in a subject. However it does not mean that the existing tools or methods or teaching and learning strategies are not workable. This study is merely to offer a new teaching aid called cartoon and assess the possibility of the cartoon to be applied in classroom context.

The next step is describing the objective. As mentioned above, this study is generally conducted to offer a new teaching tool. However, the main objectives are to seek how the cartoon for university learners is designed and what it will look like.

It is then followed with designing and developing the artifact. After the researcher formulates the problem and the objectives of this study, designing step is conducted. Based on Ellis & Levy (2010), there are some factors that the researcher needs to consider in this step, such as:

- a. Building conceptual framework, including system functionalities and requirements
- b. Analyzing the alternative solutions and designing a system architecture
- c. Creating prototype
- d. Testing and evaluating the artifact

This step is to measure the validity of the product whether it is applicable in the context described or not (Ellis & Levy, 2010). Commonly, the method to test and evaluate the artifact, involving a direct observation

from pilot studies (Ellis & Levy, 2010) and indirect indicators from surveys, questionnaires, interviews, and other observations (Richey & Klein, 2007). Here are some indicators need to be considered in testing and evaluating the artifact:

- 1) Establish the ways in which the product does and does not meet the functionalities and requirements identified for it...
- 2) ...by using accepted, literature-supported processes...
- 3) ...in order to ensure acceptance of the value of the artifact.

Meanwhile the piloting of this project uses expert review method and direct observation to the end target users.

e. Communicating the testing results

This is the final step functioning to show the results of the study. Based on Ellis & Levy (2010), there are four types of conclusion that are drawn in this study taken from Richey & Klein (2007) as follows;

- 1) Indicator for a new theoretical construct.
- 2) Inspiration for developing new hypothesis, identifying new variables, and expanding insight into a richer explanation of already discovered causal relationship.
- 3) Better understanding of design process itself.
- 4) Discovery of heuristic and broadly applicable principles regarding design, development, or use of a tool or model.

The participants of this research are university students, a design expert and a subject matter expert. The population is Faculty of Education (FoE), Sampoerna University students. For a need analysis or preliminary study, the students who participated are 5 of 6 students, cohort 2013 who had learned and joined English Structure (ES) class. They joined ES class for one semester and already passed the class. For Test or Piloting step of this study there were 5 of 12 students of 2014 cohort. The students of 2014 cohort are chosen because they are the target end users of the cartoon. They are chosen based on a lecturer's recommendation from Versant test, an English proficiency test issued by Pearson which is held in Sampoerna University by Institute of Languages and Communication (ILC). They represent English competence from the lower, the medium and the higher competence. The next participants are experts on design and subject matter. The expert is a lecturer with a Ph.D. in Education and has some experiences in cartoon development for learning and another lecturer with a Master in Education and has been teaching English structure for 3 years 6 months.

There are two steps used in the data collection techniques; before and after designing steps. In before designing step, the data are collected from the

preliminary study to identify the problem and the objective of the study. To identify the problem, the researcher collects the data from the students of Faculty of Education intake 2013 who had joined English Structure class. These data functions to identify the objective of the research and to determine the topic of the cartoon based on the student's choice. After that, other data are gained from the subject matter experts regarding the material that would be converted to the cartoon. In this step a library study will also be conducted to support in arranging the research objective and in designing the cartoon. After designing, data from test and evaluation step are taken in this section. The results of piloting test and evaluation with the end target users and experts are obtained.

In order to collect the data, the researcher distributes a questionnaire to each participant. There are three types of questionnaires distributed to the participants. The first type is distributed to Sampoerna University students to gather the information about their needs, lacks, and interests of English Structure course. The second type of questionnaire is distributed to the English Structure lecturers and the third is given to the design expert. The questionnaire distributed to students is aimed to gain the preliminary data of the teaching and learning context in English Structure class. Meanwhile the questionnaires distributed to the experts are aimed to obtain some feedback and suggestion toward cartoon designing as a supplementary material for an English course.

In data analysis, the researcher elaborated how the data are analyzed. The first data, the questionnaires were obtained from intake 2013 students. The result of this questionnaire is to determine the topic used by the researcher in designing the cartoon. Learners are asked the three most difficult grammar subjects and based on the answers, the researcher will categorize by using tally. To analyze the collected data, the researcher uses qualitative approach. In other words the collected data are described in narration. Here are the details of the data analysis in this study:

#### *1. Identify the problem/ research and information gathering*

The data were taken from six students of FoE 2013 who already took ES course and the result was that they had difficulties in learning a narrative text. The students were required to choose three topics of the subject which needed to be supported by cartoon. The students were also required to answer some questions regarding teaching and learning condition in the ES class.

#### *2. Test and evaluation*

In this step, there were three data obtained. The first was from the design expert, the second was from the subject matter expert and the last was from the target end users. Following are the detail of the procedure in obtaining the data.

##### *a. Subject matter*

- 1) Discussing the questionnaire
- 2) Revising the questionnaire

- 3) Consulting the cartoon (focusing on grammar and the instruction)
  - 4) Revising the cartoon
  - 5) Collecting the questionnaire
- b. Designer
- 1) Discussing the questionnaire
  - 2) Revising the questionnaire
  - 3) Consulting the cartoon (focusing on graphic)
  - 4) Revising the cartoon
  - 5) Collecting the questionnaire

### 3. *Target end user*

This step was aimed to see the feasibility of the cartoon used to the target students. In this step the researcher used the cartoon and a handout to check students' understanding regarding the content of the cartoon. According to Ellis & Levy (2010) the method of testing and evaluating the product of design and development commonly use a direct observation and some indirect indicators from surveys, questionnaires, interviews and other observations.

## **C. Findings**

From the answers of the questionnaire, it was found that ES was a fun learning. Students enjoyed the course and they understood the materials. ES implemented some teaching materials such as text, book, journal, worksheet, and song lyrics. The course did not use any kind of cartoon or comic in teaching and learning process. Students thought that by using cartoon in the class, the learning can be fun and it would be helpful in understanding the concept. From 11 topics offered in the questionnaire, two of five students chose the topic 'The use of grammatical feature in the narrative and description text'. Meanwhile the others chose different topics such as Direct and Indirect Speech, Modal Auxiliaries and Conditional Sentence. The reason the two of the students chose 'The use of grammatical feature in the narrative and description text' as the topic because "this topic fits best for cartoon and will help students to understand more about the topic", and "the grammatical features are complicated". Student A chose this topic because she did not remember about what she has learnt from it and she wanted the cartoon to emphasize the type of the story in narrative and descriptive text. Meanwhile student B remembered the things that she learnt from the topic such as the characteristic of narrative and descriptive text, but she wanted the cartoon to emphasize the grammatical/ language features.

The researcher asked for a material of the topic to English Structure lecturer who is also the expert of the subject matter in this research. Based on the material, it is found that there are several subtopics taught in the topic such as the genre of narrative text, the structure of narrative text, the use of past tense and the use of conjunction. From various sub-topics of narrative text, the

researcher decided to focus on giving an example of narrative text rather than explaining about narrative. The reason to focus on giving the example of narrative is because this cartoon enables students to recognize and analyze the text before going into the lesson. So, this cartoon has an objective to enable students in analyzing the grammar features and characters of the narrative text.

After deciding the objective of the cartoon, the researcher chose myth as the genre. The myth is entitled 'The Tragedy of Jayaprana' which is taken from a book by Terada (1994), 'The Magic Crocodile and other Folktales from Indonesia'. This story is chosen because it is not a familiar story taught in school. The story is a myth because it is related with Balinese belief about kindness to other mankind.

## 1. Designing

### a. The story

The story was taken from a book entitled *The Magic Crocodile and Other Folktales from Indonesia* written by Alice M. Terada telling about the Balinese's belief in crime. The title of the story is *The Tragedy of Jayaprana*. In the story there are several characters named Jayaprana, The King, Ni Layonsari, I Sawunggaling (the guard), The King's Wives, Ni Layonsari's family, and The Servants. In the story, the dialog is found limited, most of the story is narrative. The researcher as the designer will create some dialogs to emphasize the story. Following is summary of the story before it is converted to a cartoon.

#### 1) Orientation

On Bali Island, a long time ago a terrible epidemic swept through a village and caused many deaths including Jayaprana's parents and sisters. Jayaprana was still a little boy when he was left orphan. One day the king visited the village in order to cheer and help the survivors. He met I Jayaprana, a handsome and polite boy. The king took him to the palace and took care of him as his favorite employee.

#### 2) Complication/problem

- a) When Jayaprana reached the age of twenty-five, the king asked him to marry somebody and Jayaprana chose a girl named Ni Layonsari whom he just met. The king was pleased and made a festive party. Ni Layonsari was the most beautiful bride the king had ever seen. The king started to like Ni Layonsari and wanted to take her as his own wife.
- b) He asked his private guard named I Sawunggaling to help him get Ni Layonsari. The king ordered I Jayaprana to go to Terima Gulf with forty soldiers to get killed by I Sawunggaling.
- c) I Jayaprana got stabbed by I Sawunggaling and died.
- d) Some soldiers buried Jayaprana's body because they respected him and regretted his death.



- e) On the way back to the palace, many soldiers died because they were attacked by tigers and snakes when the sky suddenly turned dark. Only ten of them survived and reached the palace.
- f) The soldiers reported to the king and to Ni Layonsari that Jayaprana died on the way to Terima Gulf.
- g) However Ni Layonsari did not believe what the soldiers told the king. She insisted that the soldiers tell the truth. The soldiers said sorry to Ni Layonsari and told her the truth.

### 3) Resolution

- a) After the soldiers told the truth, Ni Layonsari was sad and fainted. In her faint she saw Jayaprana and he told her that if the king asked her to marry him, she should refuse and he (Jayaprana) would wait for her in heaven.
- b) One day the king summoned Ni Layonsari and asked her to marry him. Ni Layonsari refused him and killed herself by taking the king's Kris and stabbed herself.
- c) The king was mad. He killed so many people before killing himself. He died.
- d) Some loyal soldiers blamed the people of the passing of the king, so they attacked them, and it caused a war. Only Ni Layonsari's family survived.
- e) Layonsari and Jayaprana were believed to gather in heaven.

## 2. Cartoon Principles

### a. Genre of cartoon

The genre of this cartoon is not included in the three genres of the cartoon that Fairrington (2009) mentioned which is based on its panel. It is not strip cartoon, editorial or gag cartoon, it is a cartoon that consists of one single panel in every page. This cartoon consists of 24 frames or panels, a single panel on every page. However if it is printed to PDF it can be like a strip cartoon but since students are going to use it online, this cartoon cannot be concluded as a strip cartoon.

### b. Elements of cartoon

#### 1) Balloons

Balloons used in this cartoon are mostly rectangle balloons to emphasize the characters' talk. There are some bubble-balloons used to show that the dialog happens in the character's head and they are unspoken. In the end of the story, sharp balloons are used to show the exaggeration from one character. The function is to rise up the tone of the cartoon so the readers can get a different tone from the text.

2) Caption

The feature of caption in the cartoon is really helpful in facilitating the narrator who is the character at the beginning and at the end of the story. In other words, captions function to show that the cartoon is narrative and it is told by somebody outside the story of the Tragedy of Jayaprana.

3) Characters

In this cartoon, the characters are divided into two categories based on the function and the scene. The first is the story teller to guide the story, and the second is the story characters. There are two story teller characters: a boy and a girl. Their function is to bring the readers into the story and guide the students to read the cartoon as it is instructed.

The second, the story characters are the characters that play in the story of the Tragedy of Jayaprana. There are kid version of I Jayaprana, adult version of I Jayaprana, Ni Layonsari, The King, Soldiers and Tigers. Some of the characters also function as the scene such as the tigers in frame 12 and the soldiers in frame 9.

4) Scene

This story is a Balinese's story, the scenes mostly take place in Bali. Some scenes of Bali such as Bali temples, Bali villages are needed. There are several background pictures needed to represent the scenes. There are some pictures needed as the background such as, the wedding, village, palace, aisle, soldiers, jungle, jungle at night, dead people, and the outside of the palace. In addition, the scene of kitchen is chosen as the representative of a home for the two additional characters (a boy and a girl as the storytellers).

Meanwhile, for the foreground, there are some pictures needed. The first is the main character such as a boy, a girl, Jayaprana figure, Ni Layonsari and The King. The second is the supportive characters such as soldiers and tigers. Also the ornament of wedding is needed to emphasize about the festive wedding party.

### 3. The Software

Cartoon Story Maker v1.1 has some features to support the cartoon making. Starting from the main character, the software enables some characters to be used and this study uses the two of the cartoon main characters. The software also supports the space for users to use the customized or their own designed character by using foreground feature. By using this feature, the users can import the character or other image from the computer or from a USB data. This feature is not only for importing character but also for other image that function as a foreground.

The software also supports nineteen background images for the cartoon. In this project, the user also uses some default backgrounds. However there are so many additional backgrounds needed to support the story. The user uses a feature import background and makes the background images by using drawing applications before importing them to this software.

Caption is really helpful in this cartoon because it is about a narrative story. In a narrative story, narration is really needed to tell the story. In this cartoon, balloon helps to emphasize the story and to bring reader to the plot of the story. In the first and last frames, balloons are used by two characters with the function to bring the readers into the story and to follow the instructions.

The cartoon is published to the html extension as the default extension of the cartoon. It can also be converted to PDF by using feature Print. However there are some difficulties in publishing the cartoon. The text that is displayed on the workspace could be different with the text that is printed into PDF or html. The researcher needs to review the text and edit it if there are some texts that are not displayed when it is printed.

#### **4. Testing and Evaluating the Product**

There are some sessions that researcher had with the experts. The sessions discuss about the problems, the design, until the preparation of piloting the product. After having some sessions, the researcher gave the questionnaire sheets to the experts. The design expert focused on the episodes of the cartoon, character design and background. Meanwhile the subject matter expert focused on the topic, the content of the cartoon, some grammar corrections and the language of the cartoon. This step is aimed to know whether the cartoon is designed properly based on the principle of cartoon designing or not. In addition, this step aims to see whether the cartoon designed meet the objective of the course or not and to see the feasibility of the cartoon to be used in a classroom context.

There are two things that should be considered in the cartoon designing based on the discussion with the design expert. The first is about the size of the characters, the second is about the episodes. Based on the discussion, the size of the characters can be created as a big picture to emphasize the power of the one who is talking or as the sign of foreground of the cartoon (Fairrington, 2009). However some of the characters were too big, so the researcher needed to resize them. Figure 4.5 shows a big character as the foreground and some small characters as the background which are created smaller to emphasize the foreground.

The second thing that should be considered is the length of the episodes in each frame. Before revising, the total number of the frames is 16, but there are some frames having too many dialogues and are needed to be separated into two or three frames. The frames that should be separated into two frames are frames 2, 4, 7, and 8. Meanwhile the frames that should be separated into three frames

are frame 9 and 10. After the frames are separated, the total of the frames become 24. The other thing that should be considered is the background of the cartoon which should represent what is being told in the story. For example, the story tells about an event in the village, and then the background should represent the village. Figure 4.6 shows how a background is changed to represent the story. The image which consists of trees and houses with green as the dominant color is used to represent the image of a village.

The last step is piloting the cartoon to the target end users. The students who participated in this piloting step were the representation of 2014 students. They were chosen based on the last Versant Test (an English Competence test). There were five from six students participating in this step. Two of them got the highest score, the other two were in the middle and one got the lowest score.

This step is aimed to describe in what ways the cartoon meets or fails to meet the requirements. The requirements of cartoon based on Kabapinar (2005) are cartoon as a tool to find out students' ideas without being affected by others, to fix students' misconception and to produce language. In this step, the researcher used a handout to check students' understanding toward the cartoon. The handout is adapted from oackdome.com which is usually used to check student's comprehension toward narrative stories. The handout can show the students' response toward the cartoon and determine whether the cartoon is feasible to be used or not.

Before using the handout, the researcher also discussed it with the expert of subject matter whether it is a valid instrument or not. The expert agreed upon the instrument because there were some questions that required students to write some elements of story based on their reading. The first is students need to write the title of the story. The second, the students need to write the characters existing in the story. The third, students have to write the setting where the story happened. The forth, they need to write the conflict of the story and the solutions of the conflict. In conclusion the expert agreed that this handout could help to check students understanding regarding the story.

After the handout was agreed by the expert, the researcher set the instruction of the learning. In the piloting session, students entered the class and worked in pair with each pair at least having one laptop. The class was not like a regular class. The students were given about sixty minutes to work on the cartoon. Students were required to open the html file of the cartoon and read it. While reading, students were required to analyze the cartoon by using the handouts. Students needed to jot down the grammar features (past tense & conjunction) and the summary of the cartoon. Following are the result of the students' work toward the cartoon.

a) The past tense found

Students were required to write the past form of the verb without writing the complete sentence. It is to make them easier in working and also to

minimize time consuming in writing the sentences. Student A found seven words, they are was, swept, died, left, grew, up, asked and were. Student B found three words: asked, left and refused. Meanwhile student C found six words: asked, refused, experienced, went, cried and reported. Student D found twenty words: was, asked, died, raised, grow, reached, refused, met, could, went, experienced, realized, spilled, witnessed, cried, walked, attacked, called, appeared and toppled. Lastly, student E found three words: was, read and swept.

- b) The conjunctions found  
Students found many conjunctions on the cartoon. Student A found two conjunctions: 'and' and 'but'. Student B found three conjunctions: 'then', 'farther on' and 'suddenly'. Student C found two conjunctions: 'then' and 'suddenly'. Student D found six conjunctions: 'whereas', 'but', 'so', 'then,' 'suddenly' and 'and'. Meanwhile student E found three conjunctions: 'suddenly', 'but' and 'and'.
- c) Handout questions and answers
- 1) What is the title of the story?  
This is the first question in the handout. The researcher made a mistake in creating the title of the cartoon. It was supposed to be 'The Tragedy of Jayaprana' but the researcher wrote only 'Tragedy of Jayaprana'. So, the five students wrote the title 'Tragedy of Jayaprana'. So, technically the students wrote the right answer based on the cartoon.
  - 2) Where are the settings?  
In this second question, students have several different answers although they worked in pairs. It is found that student A got three settings of places upon the cartoon: kitchen, forest and Bali. Meanwhile student B got Palace, Terima gulf and Bali Island. Student C also found three settings: Bali Island, Village and Terima gulf. Student D found three places: Bali, village and wood/forest. Lastly student E only wrote one place which is Bali.
  - 3) Who are the characters?  
In this third question, students wrote the same characters such as I Jayaprana, The King, Layonsari, I Sawunggaling. However student D has one extra character that the other did not mention. She wrote soldiers.
  - 4) What are the problems that exist in the story?  
In this fourth question, there is a problem because not all the students wrote the answer. There are only two students who wrote the answer, student B and student D. Student B wrote "when the king wants Ni

Layonsari as his wife. The king asked I Sawunggaling to kill I Jayaprana.” Meanwhile student D mentioned that the problems are jealousy and cowardice.

5) What is/are the solution(s)?

Student B and D are the only ones answering the question. Student B wrote “Ni Layonsari suicide. King angry and killed several people and suicide.” Student D wrote “by killing each other/oneself”.

## **D. Discussion**

### **1. Topic Choice**

The topic was chosen from the students who joined the class which are 2013 cohort students. The topic chosen is grammatical feature of narrative and descriptive text. However, the researcher only focused on narrative text. The focus on narrative text is because the students said that they were sometimes confused about the narrative especially about the grammar feature in it. The Tragedy of Jayaprana story is chosen to represent narrative text because it meets the requirements of a narrative text.

The story is a myth that tells about the Balinese’s belief toward the kindness. As the common structure of narrative shows that this story has the opening which shows the setting and introduces the characters. The conflicts existed in the middle part of the story, meanwhile the resolutions existed in the ending of the story. This story is written by a third person, written in past tense, and the connectors are widely used such as ‘once’, ‘then’, ‘suddenly’, etc.

From the way the story is written, it has a chronological plot which the events are told in order with the help of connectors. In addition, the characters are recognizable such as a king who has power and servants who obey the king, and a beautiful elegant woman which has a role as a chosen wife.

### **2. Designing Process**

After the topic is already chosen, the researcher needs to find how the cartoon can present the topic in a narrative way. Myth is chosen as the genre because it can represent a narrative text. The Tragedy of Jayaprana was taken as a representative of a myth. It is because the story is telling about a belief of the Balinese regarding murdering innocent people which can be categorized as a myth.

In the designing process, the researcher goes through some processes in converting the story into the cartoon. Some episodes are cut from the original story, because if it is not cut, the cartoon is going to be very long and boring. The researcher only presents the most important events in the story to the cartoon without adding another new event or new characters. So, the story in the cartoon is still similar to the original one.

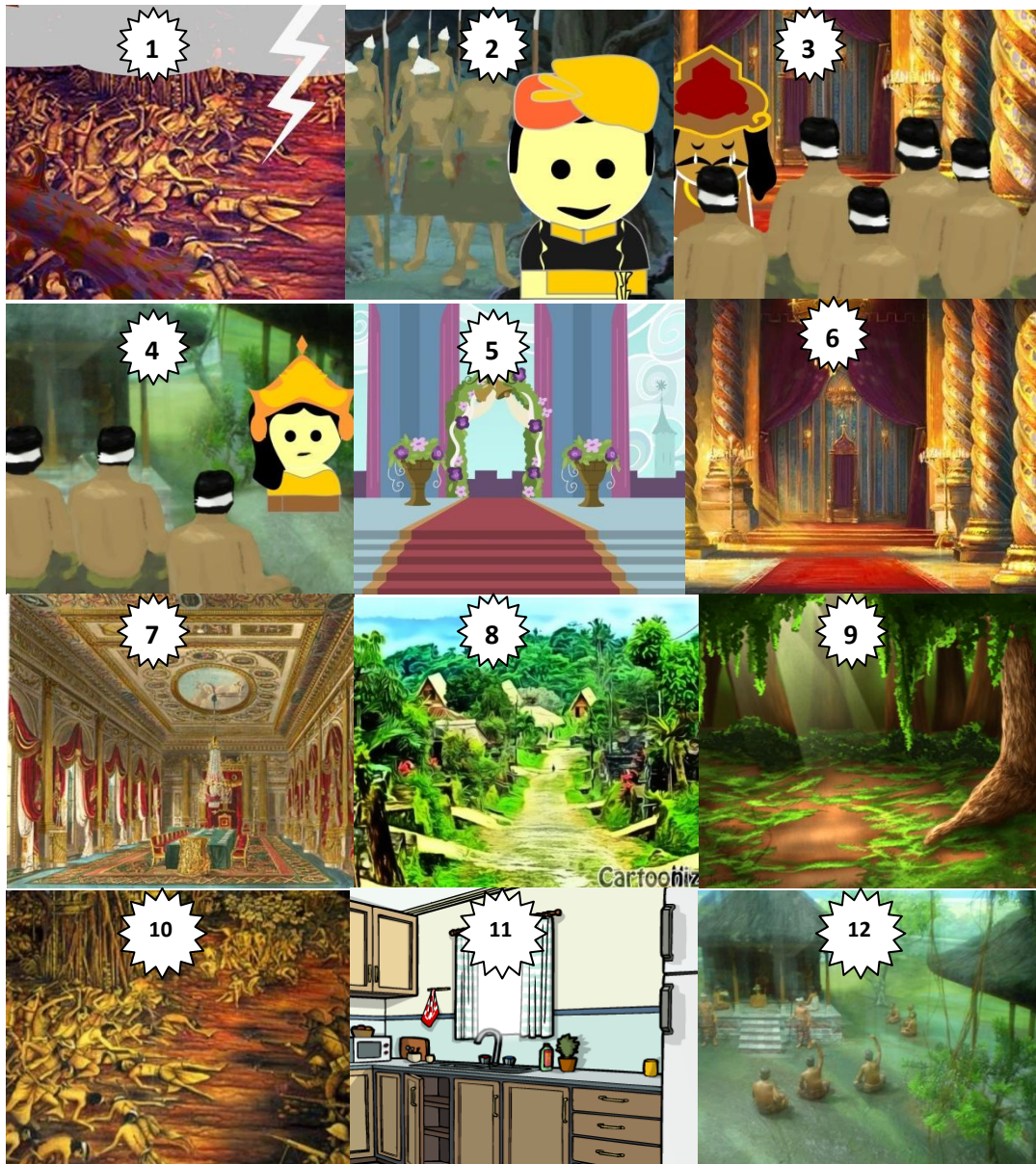
The designing process was starting from converting the story into the episodes of the cartoon. In converting the story to cartoon, the sentences are changed into direct sentences to make the cartoon alive. For example in the text written “One day the king visited the village in order to cheer the survivors. He met I Jayaprana, a handsome and a polite boy”, when it is converted to the cartoon it is converted into some dialogues (Figure 4.11) to illustrate the meeting between Jayaprana and The King.



Figure 2: Converted story

In this cartoon all elements such as balloons, captions, characters and scenes are used maximally. The cartoon also uses two types of balloons, spoken balloon and thought balloon to give a lively impact. Spoken balloons are used to express the character’s talk in a normal and exaggerating ways, for example to show surprise, screaming, anger, etc. Meanwhile a thought balloon is also used in several panels in the cartoon. As the function, the thought balloon is used to express the thought of the characters.

The next element used is caption. It is used to tell the plot of the story to support the scene of each frame. The captions stand as the narrator of the story to guide the readers into the story. The next basic element of cartoon used is images that consist of background, foreground and characters. The background is created to tell the setting of the story. In the story, the settings of the place are in Bali, somewhere in the forest called Terima Gulf, the forest where people died, the forest at night, the palace, the wedding, and so on. Following are background images in the cartoon that represent the story which are made by Adobe Photoshop and Corel Draw with Google image help.



**Figure 3:** Backgrounds and foregrounds

The images are taken from various websites by the help of Google search engine. The keywords used are ‘Village cartoon’ for the image number 8, ‘Balinese cartoon’ for image number 12, ‘Wedding cartoon’ for number 5, ‘Palace cartoon’ for image number 6, ‘Forest cartoon’ for number 9, and ‘Colonize cartoon’ for number 10. The images chosen are manipulated by adding some effects or another image to present what is being told in the story. The example of manipulated image is image number 1 which is taken from image number 10. Besides background, the researcher also creates foreground along with the background such as in image number 2. The background of image



number 2 is a big tree in the dark as a sign that the setting is in the forest at night. Meanwhile the foreground is a picture of some men with the headwear as a sign that they are the Balinese knights. The character is also included as foreground because it is located after the background.

Overall, the images for backgrounds, foregrounds and characters are designed by using Adobe Photoshop, Corel Draw with the raw images taken from various free websites. The images are manipulated by joining two or more images into one image, for example images 1, 2, 3 and 4. Meanwhile some images are taken from the default cartoon images in the software such as the image number 11. In this case, technology helps the researcher to create the cartoon without drawing the images manually. Technology has proven to help the researcher solve the inability of drawing problem because there are alternative ways in creating images.

After designing, the researcher published the cartoon. There is a default publishing extension from the software which is .html extension. This extension makes the cartoon accessible from any kinds of devices such as PC, laptop, tablet and smartphone. This cartoon can also be printed into PDF file or printed as a hardcopy. However there is a weakness in publishing matter, the texts in the balloons are unstable. If the cartoon is printed to PDF or hardcopy, there will be some missing texts or some text sizes become smaller or bigger. In this case, the researcher or the designer has to be more patient and thorough. The researcher needs to recheck the whole text before it is presented to the consumer or to the end of cartoon target readers.

### **3. Evaluation**

The design expert is given the complete designed cartoon to evaluate whether the cartoon is designed properly based on the principles of cartoon designing or not. The expert is a lecturer with a Ph.D. in education and has an experience in cartoon development for learning. Following are the details of the expert's evaluation toward the cartoon.

The expert stated that the cartoon has met the objective of the learning, the characters in the cartoon have represented the story, and the backgrounds used have portrayed the setting of the story. The expert also said that the cartoon is understandable and the texts in the balloons and captions function well. The color composition, the images and the whole elements of the cartoon are well collaborated. So it supports readers in reading the cartoon. Framing or cutting episodes are already organized properly.

However in the process of designing, the researcher has some inputs from the expert such as the images created should be smoother and looked more interesting by using Adobe Photoshop or Corel Draw. For example in Figure 4.15 in picture 1, the image of Jayaprana is created in 2D and it makes the quality of the picture not interesting and not make any sense. Meanwhile in picture 2 the image of Jayaprana was made in semi 3D to make it more interesting and make

sense. In picture 1 the image of Jayaprana is flat and not quite good meanwhile in picture 2 the image is edited by adding some curves in the face part to make it better.

The next input refers to the cut of episodes. Some panels consist of too many episodes or events of the story. The expert recommended that the researcher needs to separate the episodes into two or three panels. Figure 4.17 shows a picture with too many episodes and after being given input by the expert, the panel is changed and separated into two panels in Figure 4.18.



Figure 4: Episode before editing

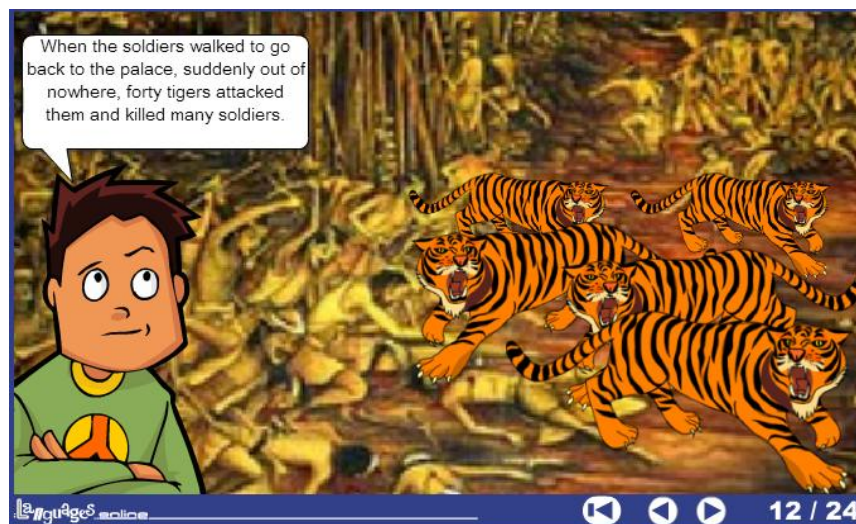


Figure 5: Episode after editing

In conclusion, the inputs from the expert are accepted by the researcher and the researcher edited the panels based on the expert's input. After the cartoon was edited, the expert agreed that the cartoon is ready to be used because the images represent the story better. For example the image of

Jayaprana is given a headwear as the symbol of a Balinese man. In addition, the episodes and the amount of the text in each panel are also good and ready to be reviewed by the end user.

The next evaluation conducted to subject matter expert is to make sure whether the cartoon meets the objective of the course or not. It is also to see the possibility of the cartoon to be used in classroom context. In this step, the expert is a lecturer with a Master degree in education who has experience in teaching university level in English Structure course for 3 years and 6 months.

Based on her evaluation, the cartoon meets the objective of the learning which the students need to know and analyze the narrative text. The content of the cartoon is also appropriate to the curriculum used in the course. She told that the cartoon is possible to be used in classroom context and it is flexible to be used based on the teacher's creativity. The expert also said that this cartoon can cater students' need in a fun but meaningful learning. However there is a recommendation to simplify the text to make the cartoon more interesting.

The last evaluation conducted to the target end users is aimed to see how the cartoon can be used in the classroom context. Based on the findings, it shows that the cartoon is possible to be used in the classroom. The students were given the cartoon and the problems to answer. Since the time given was limited, some of them did not answer well. Basically, the students could analyze the grammatical features such as conjunction and past tense but in the next activity which they had to answer the problems and the solution of the story, three of them did not answer it. However the other two students answered the questions but they were wrong in answering them. This could be because of the limited time given or some other extraneous variables.

Based on the findings regarding the evaluation to the end users, the cartoon might be a little complicated if the time that students have is limited. To deal with this problem, the cartoon can be used in flipped learning class; so, before coming to the class the students should read the cartoon in their home or outside the classroom. However further study is needed to know the effectiveness of cartoon used in the real context of the classroom or outside classroom.

Based on the evaluation from the experts and the end users, there are some points needed to be highlighted in designing the cartoon. The first is the elements of cartoon to consider especially in putting the text on to the cartoon. The second is the cutting of the episodes and the sufficient length of the text in each panel. The researcher also made some improvements toward the cartoon based on the experts' inputs. The significant example is the amount of the panels which increase from sixteen to twenty four panels because there are some episodes needed to be separated.

#### **D. Conclusion**

This research aims to see how a cartoon as a supplementary material for university learners is designed and how the collaboration of graphic/picture with the text looks like. The findings and the discussions answer the first question. The cartoon design starts from choosing the topic and the story, drawing the images, publishing the cartoon, until evaluating the cartoon to the design experts, subject matter experts and to the target end users.

How the collaboration of graphic/picture with the text look like is answered by the published of the cartoon. After being evaluated by the experts, the cartoon shows that graphic/picture is collaborated with the text to tell a message. In this case, the message is the content of a narrative story. Graphic/pictures illustrate the message and the texts sharpen the message. Based on the experts' evaluation, the texts in the cartoon should not be too many because there are some pictures that help the message conveyed.

The result of this study is the cartoon as the product. The cartoon consists of 24 frames and tells about a myth entitled The Tragedy of Jayaprana. This cartoon as a supplementary material is aimed to introduce one of narrative texts in the form of cartoon. In addition, this cartoon is supposed to stimulate the students to analyze the grammatical features of narrative text. The evaluation result from the experts shows that the cartoon is designed well and possible to be used in the classroom context. Following are the factors which show that the cartoon is well designed:

1. The cartoon meets the objective of the learning
2. The characters used represent the story
3. The background, text, balloons, captions, and other images tell the story
4. The color composition in the cartoon is convenient to support reading

#### **Recommendation**

The cartoon and the way the cartoon is given to the students need to be set. However this research only focuses on the designing process of the cartoon. The process of designing cartoon of English structure course for university students and the prototype of cartoon that is applicable for Sampoerna University students of English Structure course is produced completely. The objectives of this research are fulfilled.

Although the research meets the objective and produces a product, this research might only be a beginning of the Design and Development Research in English Language Teaching department in Sampoerna University. There are some further researches recommended to be conducted regarding the implementation of the cartoon and other researches related to English material designing. A lot of researches show positive attitudes toward the use of cartoon for language study but this cartoon has not been proven to make a better performance for students in learning a foreign language. It shows that further research regarding the implementation of the cartoon might be needed.

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