CHAPTER 3

RESEARCH METHODOLOGY

This chapter addresses some methodological elements in conducting the research in analyzing the interpersonal choices afforded to the writer/illustrator in creating engagement between the reader and the represented participants of the digital book *Mouse deer and Crocodile* by Qajoo Studio and investigating how the interpersonal choices engage children into reading the digital book. The elements in this chapter consist of preliminary study, research problem, research design, research site and participants, data collection and data analysis.

3.1. Preliminary Study

The preliminary study was conducted one week prior to the main research. It is aimed to measure participants' reading speed, their frequency of using digital device and their interest in reading. Further, this preliminary study was also employed to obtain information from the parents' participants.

Interview was chosen as the preliminary research design to obtain the following information: participants' frequency of using digital device and their interest in reading. Meanwhile, to measure participants' reading speed, the researcher asked them to read the Mouse deer and Crocodile text. There are three participants involved in this study. They all were fifth graders from two elementary schools in Bandung. These three participants were researcher's private students. Therefore, doing research on them is easy and felt natural.

Below are question items used to obtain the information about participants' frequency of using digital device and their interest in reading. Some of the items that were asked to obtain information about participants' interest in reading were adapted from Wigfield & Guthrie (1997) and Guthrie (2004).

In-depth interview (Gadget usage frequency)

- 1. Do you know gadget?
- 2. What do you know about gadget?
- 3. What gadget do you have at home?
- 4. How many times per day do you use gadget?
- 5. What kind of activity do you usually do when using gadget?
- 6. Have you ever read a digital book through your gadget?

In-depth interview (Reading interest)

- 1. What do you usually do in your spare time?
- 2. Do you like reading?
- 3. What was the title of the last book you read?
- 4. What kind of story do you like to read?
- 5. How many times per week do you read books?
- 6. How many books do you read per week?
- 7. If you were given a very challenging yet interesting book, what will you do?
- 8. Do you often read with your parents?
- 9. Do you often go with your parents to a library?

Meanwhile, the following are question items used to validate the participants' answer and to obtain information from the participants' parents regarding their children's reading interest. Some of the items are adapted from Wigfield & Guthrie (1997) and Guthrie (2004).

In-depth interviews

- 1. How often does your child read?
- 2. What kind of book/topic is preferred to read by your child?
- 3. Do you often accompany your child during reading time?

Betnadeta Ririn Yuliani S, 2017 ENGAGING CHILDREN THROUGH LANGUAGE, PICTUTER AND animation Universitas Pendidikan Indonesia | repository.upi.edu | perpustakaan.upi.edu

- 4. Do you often go to a library with your child?
- 5. Does your child often read independently?
- 6. Does your child often read books or topics other than her subjects at school?
- 7. How often does your child play with gadget?
- 8. Did you know that you can provide your child with digital books through your gadget?

Those aforementioned question items were translated into Bahasa during the actual interview. However, the answers both from participants and their parents were translated into English when they were presented in this current research. The results of the interview were compiled into participants reading profile (see 3.2. Description of Research Participant). Meanwhile, the results of participants' reading speed became the guidance to arrange the phases of the study (see section 3.3. Phases of the Study).

3.1.1. Description of Research Participants

Regarding to the aims preliminary study that have been mentioned in the previous section, the data of participants' frequency of using digital device and their interest in reading was compiled into the description of research participants. The descriptions below are useful to support the reasons of selecting the particular participants and to support the data for answering the research question regards the way digital interactive book entitled "Mouse deer and Crocodile" engages children into reading.

1. Hana (First participant, henceforth R1)

Hana was a very energetic young girl. She was very excited when she was introduced to the digital book. She could not stop talking about how exciting she was only by seeing the cover of the digital book. Hana is one of a 5th grader from one private elementary school in Bandung.

Based on the information that Hana given via preliminary interview, she showed a positive attitude toward reading activity. She likes to read in her spare time but not a voracious reader. She prefers to read comic books than any other book selection. However, she could not mention the last title of the comic book she read. In one month, she reads two comic books. According to her parents, Hana only reads comic when she is done with her school assignments.

Hana was good with English subject in school. According to her parents, she always gets score above 80. However, Hana never reads any kinds of book written in English except her school textbook.

Related to the frequency of using digital devices, such as smart phone, tablet or iPad, Hana confessed that she plays with it only once a week. She does not own a digital device. She only uses her parents' smart phone. Every time she borrows her parents' smart phone, she only uses it for playing games or taking pictures. She does not know that her parents' smart phone can be used as a reading device too. In addition to this, her parents also do not aware that there is a children's book that can be read via digital devices.

2. Aurel (Second participant, henceforth R2)

Aurel is a quite shy little girl. Although, she is shy, she is quite cooperative with the researcher by trying to answer all the questions given to her. When she was introduced to the digital interactive storybook, Aurel did not show any sign of excitement. However, when the researcher told her that there are some games inside the it, she became excited.

Aurel is a 5th grader in one of a private elementary school in Bandung. Aurel and Hana are schoolmates, but they are not classmates. Aurel admitted that she likes to read in her spare time. However, based on the interview with her parents, it was found that Aurel only read school's textbook during her study time. Meanwhile, reading books for fun was

only done several times. Surprisingly, Aurel can perfectly remembered the last book's title that she read. It was an English book entitled Princess and The Dragon. According to her parents, Aurel's English skill was average. Her English score at school was normal. It only matched the minimum score requirement.

Correspond with the digital device usage, Aurel can be categorized as an enthusiast digital device user. She uses digital device 2-3 times per week, in each playing time for 1 hour. Aurel is used to play with her parents' digital device. She uses it for playing games, watching videos or just taking pictures. Aurel stated that she did not know that there were books available for her age on digital devices. However, Ariel's parents actually acknowledge that there are children's book available on digital device yet since they do not have credit cards to purchase the books, they prefer to buy Aurel traditional books.

3. Bunga (Third participant, henceforth R3)

Bunga is a friendly little girl. She was so excited when she was introduced to the "Mouse deer and Crocodile" digital interactive storybook that she kept on babbling about the funny book's cover.

Bunga is a 5th grader on a private school in Bandung that is different from the previous participants. Bunga admitted that she liked to read, particularly online comics. Her parents also admitted that their daughter is a fanatic comic reader. This statement was also proven by her ability to eloquently mention several comics' title that she has read.

Regarding with her English skill, her parents confirmed that her English skill was average. This was proven by her average score in English subject at school.

Meanwhile, regarding the digital device frequency usage, Bunga can be categorized as a digital fanatic since she used it almost every day. It was happened likely because she has her own digital device. However, Bunga

did not allow to bring her digital device to school nor played it before she finished her homework. Bunga actually acknowledged that there are digital books available online for children, yet it was unlikely possible for her to purchase the digital books. She should ask her parents' help. In the other hand, her parents also knew that there are digital books available online for her child's age. Unfortunately, they do not have credit card to purchase those digital books.

3.1.2. Phases of Study

After talking about participants' reading interest, their contact with digital device, researcher tried to examine participants' reading speed. To measure participants' reading speed, the researcher gave them an English text in amount similar with the original text. Furthermore, the text that was given to the participants was also entitled Mouse deer and Crocodile. The text contained 500 words and their reading speed was 20 words per minute. Reading speed was measured in word per minute by the formula – total words divided by total seconds times 60. When the reading speed of each article was calculated, the tow reading speeds were added and then divided by 2. Thus, the researcher decided to divide the "Mouse deer and Crocodile" digital interactive storybook into three sections.

The underlying reasons were based on four factors. First, their reading speed was 20 words per minute, which means they need at least 20-25 minutes to finish the story. Second, at least there were 3 up to 5 vocabularies per page that cannot be understood by the participants. Three, every page of the digital interactive storybook consists of animated interaction that is needed to be completed by the participants – it takes about 3 minutes to finish it. Fourth, the private session only lasts for 1 hour. Based on these considerations, the researcher created the following phases of study:

No	Phases	Date	Activities	Duration
				5

Betnadeta Ririn Yuliani S, 2017

ENGAGING CHILDREN THROUGH LANGUAGE, PICTUTER AND animation Universitas Pendidikan Indonesia | repository.upi.edu | perpustakaan.upi.edu

		T O		<i>-</i> ·
1	Observation 1 – R1	January, 9	Preparation	5 mins
		2017	Pre-reading/pre-view	10 mins
	Observation 1 – R2	January, 10	While-reading/while-	15 mins
		2017	view (1 st part)	
	Observation 1 – R3	January, 11	Post-reading/post-view	25 mins
		2017	Closing	5 mins
2	Observation 2 – R1	January, 16	Preparation	5 mins
		2017	Pre-reading/pre-view	10 mins
	Observation 2 – R2	January, 17	While-reading/while-	15 mins
		2017	view (2 nd part)	
	Observation 2 – R3	January, 18	Post-reading/post-view	25 mins
		2017	Closing	5 mins
3	Observation 3 – R1	January, 23	Preparation	5 mins
		2017	Pre-reading/pre-view	10 mins
	Observation 3 – R2	January, 24	While-reading/while-	15 mins
		2017	view (3 rd part)	
	Observation 3 – R3	January, 25	Post-reading/post-view	25 mins
		2017	Closing	5 mins

Table 3.1. The phases of the study

3.2. Research Problem

The purposes of this study were, first, to identify the interpersonal meanings afforded by the illustrator/author in the digital interactive storybook entitled "Mouse deer and Crocodile" by Qajoo Studio. Second, this current study also tried to observe how the interpersonal choices in the digital storybook entitled "Mouse deer and Crocodile" by Qajoo Studio engaged children into reading the story. Based on these purposes, the present study endeavored to address two research problems:

1. How is the interpersonal meaning realized through the verbal, visual and animated elements in "Mouse deer and Crocodile" digital interactive storybook by Qajoo Studio?

2. How does the interpersonal meaning realized through the verbal, visual and animated elements in "Mouse deer and Crocodile" digital interactive storybook by Qajoo Studio engage children into reading the digital storybook?

3.3. Research Design

Corresponding to the purposes and the research questions of the study, this study employed a descriptive qualitative study. There were several reasons employing descriptive qualitative study in this current study. First, this study tried to reveal how people conceptualize their understandings (Stake, 2010). In this study specifically, author/illustrator's understandings of enacting interpersonal relationship between represented participants and prospective readers through verbal and visual elements employed in the digital storybook. Second, the qualitative study was particularly suitable to deal with critical problems of practice and to extend the knowledge base of various aspects of education (Merriam, 1998). This study deals with children's reading engagement which is considered as one of critical problems of education in which teacher, parents and school always try to promote reading and develop lifelong reading habits (Doiron, 2011). Third, this study was carried out in a natural setting where children do not even know that they are being studied. To perform a study in a natural setting is, indeed, one characteristic of qualitative study. (Frankel & Wallen, 1990; McMillan, 1992; Cresswell, 1994; Silverman, 2005; Alwasilah, 2008). Fourth, this study tried to gain an in-depth understanding of how interpersonal choices can engage children into reading a digital book.

On the other hand, this study could also be classified as a case study for several reasons. First, the study was carried out to gain rich descriptive answers to respond to how (Liamputtong, 2009; Yin, 2003) concerning a single specific case within the real-life context (Yin, 2003; Liamputtong, 2009). Second, the study was carried out in 'a small scale, a single case' (Stake 1985 in Emilia, 2005) that has physical boundary, temporal boundary and bounded instance (Nunan & Bailey, 2009). The physical boundary of this case was the participants' home that was used as a place to conduct a private English course. This study was considered to have temporal boundary because this study investigated several reading lesson sessions which had a beginning and an end. The instance in this study was also bounded because this study will only focus on three private English students. This study also was conducted in naturally occurring situation and context without manipulating variables (Nunan & Bailey, 2009). Third, the study employed multiple data sources characterizing a qualitative case study (Yin, 2003; Liamputtong, 2009) including interpersonal choices afforded by the author and illustrator in the digital interactive storybook, observation, students' interview and questionnaire. The multiple data sources are intended to allow for in-depth study (Connole et al., 1993) and to construct the validity of the study (Yin, 2003: 97).

3.4. Research Site and Participants

The main data of the research were the interpersonal choices afforded by the author/illustrator in the digital interactive storybook entitled "Mouse deer and Crocodile" by Qajoo Studio, range from verbal text, still images and animated images. The secondary data of the current research were taken from observation, interview and questionnaire during children's reading time at their home.

Digital storybook entitled "Mouse deer and Crocodile" by Qajoo Studio was chosen because of several reasons. First, this digital storybook was the only 57 Betnadeta Ririn Yuliani S, 2017 storybook from Indonesian start-up company that provides two languages option, including Bahasa and English. Second, this digital storybook has been enlisted as top 10 iOS paid application for children in 2014. Third, using digital storybook can promote children's reading engagement because it provides opportunities for children to socially interact with others, especially parents and it also provides scaffolding which supports young children who are developing emergent literacy skills (Gambrell, 2011; Moody, 2010). In addition to this, Arzubiaga et al., (2002 cited in Jones & Brown, 2011) confirmed that reading material that parents keep in their home greatly influenced the reading engagement of the children. Fourth, this digital storybook]had followed some of the criteria of good children's book including the length of page, the number of words, the various setting, familiar theme, the memorable character and most important the accessibility.

The research was conducted in children's home in Bandung, West Java. The research site was chosen for two reasons. First, as has been mentioned before, the research was performed in a natural setting. Home is a place where children can behave and act as they wish. They do not have to pretend. Further, home environment is also considered as one contributing factor to promote children's reading engagement (Jones& Brown, 2011). Second, the researcher was a private teacher for these children. Thus, the researcher had an easy access to the research site and it made this present research was feasible to be conducted (Bogdan and Biklen, 1998; Silverman and Marvasti, 2008). Third, reading independently is considered as one variable for reading engagement (Wigfield, 2004). Thus, reading independent was easily observed at home environment.

The participants of the research were three children who happened to be the private students of the researcher. These children were selected because of several reasons. First, they were in the same age and gender. All the three participants were 11 years old and they were all girls. Second, they all have been well-adapted to digital technologies. According to the result of the pilot study, all the three participants use their parents' gadget once until twice a week, especially

on weekend. Third, they have rather similar achievements in English subject at their school. Fourth, they all prefer to play with their gadget instead of reading ebook with their gadget. Fifth, their preferences of literature are mostly picture books, comics and magazines or so-called light reading with lots of pictures and images in it.

3.5. Data Collection

This present research was aimed to seek the realization of interpersonal meanings afforded by the author and illustrator in the digital interactive storybook entitled "Mouse deer and Crocodile" developed by Qajoo Studio and to investigate how the realization of interpersonal meanings engaged children into reading.

To seek the realization of interpersonal meanings in the digital interactive storybook, the data were drawn out from the verbal resources which include sentence used in the story and the non-verbal resources which include still-images and animation. This information will be fully explored in section 3.6.1.

Furthermore, in order to achieve a valid and reliable data of children's reading engagement, this study employs triangulation strategy. Triangulation strategy in collecting data for qualitative research, as mentioned by Maxwell (1996), Alwasilah (2011), and Silverman (2012), is the better strategy to make the data valid and reliable. Triangulation strategy in collecting data is defined as the combination way, usually more than one method, of collecting data for research. Therefore, to ensure the validity of data of this research, several methods of data were used for triangulation, i.e. observation, questionnaire and interview.

3.5.1. Acquisition of Interpersonal Meaning in The Digital Interactive Storybook (Main Data)

The data that were used to seek out the realization of interpersonal meaning afforded by the author and illustrator in the interactive digital storybook entitled "Mouse deer and Crocodile" developed by Qajoo Studio were comprised of verbal, images and animation. There were two steps to collect the main data for this present study. First, the digital interactive storybook was downloaded via application store. Second, the digital interactive storybook was read. During reading the story, the researcher recorded every animated element occurred in each page to collect the animation data, wrote down every verbal text to collect the verbal data, and screenshot each page to collect the image data.

3.5.2. Observation

Observation is one method to collect data which could not be collected by questionnaire and interview (Maxwell, 1996). The observation in this current research was conducted three times for each child. It was conducted in each child's home in which the researcher acted as researcher and observer. Observations was also applied to know the meanings, events, actions or process being done by the participants (Alwasilah, 2006). In this current study, the observation technique was applied to obtain the data of children's behavioral reading engagement.

During the observation, the researcher utilized three procedures of viewing/reading digital interactive storybook (Stoller, 1992; Tomalin, 1992; Wallace, 1992)namely pre-reading/pre-view activity, while-reading/while-view activity, and post-reading/post-view activity. In these stages, the student engagement indicators proposed by Jones (2009) were incorporated.

In the pre-reading/pre-view stage, researcher observed children's attention toward the researcher's explanation regarding the digital interactive storybook they are going to read which can be seen from their eye gaze, body 60

Betnadeta Ririn Yuliani S, 2017

posture and facial expression. In the while-reading/while-view stage, the observation focused on participants' body language, consistent focus or attention and fun and excitement. Finally, in the post-reading/post-view stage, the researcher observed children's behavioral and cognitive engagement toward the story presented in the digital interactive storybook in terms of their verbal participation in the discussion, their ability to complete the questions orally as well as their confidence when retelling the story.

3.5.3. Questionnaire

Questionnaire is used to get the data of children's emotional engagement and to support the observation data (Alwasilah, 2011). Questionnaire was administered to the three participants. The type of questionnaire used in this current study was a mixture from open-ended and close-ended type. This type of questionnaire is chosen to make the participants able to give a complete and truly a free answer as well as certainty to their position (Fraenkel& Wallen, 1996). The aspects which were included embraced the children's reading engagement and children's reading enjoyment. The questionnaires were written in Bahasa to ensure the participants' complete understanding of the items.

The questionnaire data were gained in three steps (Bernhardt &Geise, 2009). First, the questionnaires were distributed to the participants individually. Second, the questionnaires were taken after being filled by the participants. Third, the questionnaires which had been answered were collected and submitted to the researcher.

3.5.4. In-depth, Semi-structured Interview

The data of this study was also obtained from the interview. The qualitative research interview is described as a "conversation with a purpose" (Burgess, 1984 cited in Richards, 2009: 191) or "an interaction between two people, with the interviewer and the subject acting in relation to each other and reciprocally influencing each other" (Kvale, 1996: 35).

Further, the interview allowed the researcher to obtain not only the unexpected insights but also the spontaneous responses for the questions were used in Bahasa. It helped the researcher to gain a deep and richer information from the participants. By interviewing, the participants could express their ideas more freely and coherently. While interviewing, the researcher had the option to ask the participants to clarify what they said, to request further reasons for their conclusion and to ask for specific questions about what might have influenced their thinking.

The interview was conducted at the beginning and the end of reading session program to gain more information about children reading emotional engagement. The interview was a semi-structured which enables the researcher to get all the information required while at the same time permitted the participants to probe some aspects in depth (Richard, 2009: 186).

The interview was followed by all participants and was conducted individually. Questions available in the interview were used to answer the second research questions. The aspects including children's reading behavior, children's feeling toward the digital interactive storybook.

3.6. Data Analysis

As clarified previously, this present study employed Mood analysis of Systemic Functional Grammar theory in order to uncover the contribution of tenor on the realization of interpersonal meanings in the verbal modes employed in the digital interactive storybook. Mood analysis covers the analysis of speech function, Mood types and Mood structure (Eggins, 2004). However, the Mood analysis used in this study only focused to speech function and mood types.

Further, to uncover the contribution of tenor on the realization of interpersonal meanings in the visual modes employed in the digital interactive storybook, this current study employed the theory of grammar of visual design

proposed by Kress and van Leeuwen (2006). The grammar of visual design covers engagement which is realized through gaze act, involvement which is realized through horizontal angle, intimacy which is realized through shot sizes and power which is realized through vertical angle. Meanwhile, to seek out the realization of interpersonal meanings in the motion/animation modes, this current study employed the theory of interpersonal meanings in action (Kendon, 1976; Martinec, 2001).

3.6.1. Textual Analysis

Textual analysis aimed to analyze the interpersonal meaning realized through verbal modes. The verbal modes were categorized based on their mood types (declarative, imperative, and interrogative) used by the author to transmit interpersonal meaning to the readers. Within the SFL framework, choices of mood are available to free independent clauses, that is, those that have a verb acting as predicator (Halliday, 2004). This implies that major, free clauses can have a mood-residue structure and in turn can be established as either declarative, interrogative or imperative. The clauses involved in a paratactic projection with the verbal process, *say*, which reproduce in direct speech the words uttered by the main characters, was also counted for mood selection. However, bound clauses with a finite verb have a mood element in their structure, but cannot choose for mood type. So, the non-finite clauses, -that clauses, conditional and other subordinate clauses of time, minor clauses and the idiomatic expressions that the story contains do not select for the mood types. Those clauses will be counted in the table below:

Table 3.2. The Category of Speech Function

Categories	Absolute values	Values in percentages
Statement		

Betnadeta Ririn Yuliani S, 2017 ENGAGING CHILDREN THROUGH LANGUAGE, PICTUTER AND animation Universitas Pendidikan Indonesia|repository.upi.edu|perpustakaan.upi.edu

Question	
Offer	
Command	

(Guijarro, 2011: Halliday, 1994)

Below are the characteristics of each speech function:

- 1. Statement: this speech function is identified when the meaning is giving information to the interlocutor. The form of this speech function usually appears in a declarative form.
- 2. Question: this speech function is identified when the meaning of the utterance is demanding information from the interlocutor. The form of this speech function usually appears in an interrogative form.
- 3. Offer: this speech function is identified when the meaning is giving or offering goods/services to the interlocutor. The form of an offer usually appears in a polar interrogative form.
- 4. Command: this speech function is identified when the meaning of this utterance is demanding the interlocutor to do something. The form of a command usually comes in the form of imperative without any affix on its verb.

3.6.2. Visual and Animation Analysis

The visual and animation analysis were analyzed by classifying them into four categories: engagement (gaze), involvement (horizontal angle), power (vertical angle) and intimacy (social distance). Analyzing visual and animation data is aimed to seek out the interpersonal meaning realized through visual and animation elements featured in the digital interactive storybook.

As has been mentioned previously, the interpersonal meanings can also be created through the visual elements. The visual elements featured in the digital book will be distinguished by focusing the analysis on the interactive features that proposed by Kress and van Leeuwen (2006) and Martinec (2001). The interactive features that will be use to analyze the visual elements are shown in the table 3.2. below:

Image	act	and	Social	distance	Horizontal	angle	Vertical angle and
gaze			and intim	acy	and involver	ment	power
Offer		Close-up		Frontal		High	
Demand			Middle sh	nots	Oblique		Medium
		Long sho	ts			Low	

Table 3.3. Interactive features in visual elements

(Kress & van Leeuwen, 2006)

Table 3.4. Interactive features in	n animated elements
------------------------------------	---------------------

	Engag	gement	Mo	Affect		
Р	Body	Body	Willingness/	Tentativeness	Active-Reactive/	
	distance	angle	Unwillingness	/Assuredness	Positive-Negative	

(Martinec, 2001)

3.6.3. Analysis of Data from Observation

Observation was conducted three times for each participant. The analysis of data from observation was conducted with the ongoing activities in the reading session to observe the children's behavioral, affective and cognitive engagement occurred while and after the children reading the digital interactive storybook. Thus, the observation data will be analyzed on going with the process of research

(Frankel & Wallen, 1996). The analysis of data from every observation is consisted of three stages cover preview, while-view and post-view (Stoller, 1992; Tomalin, 1992; Wallace, 1992).

In the pre-reading/pre-viewing phase, the researcher analyzed whether the participants paid attention or not to the researcher's explanation and analyzed whether they were motivated or not to following the reading activity. In this phase, the behavioral engagement is represented by three factors specifically consistent gaze, body posture and facial expression. In the while-view, the researcher will analyze whether the interpersonal built in the digital book fulfill the indicators of student's behavioral and emotional engagement such as positive body language, consistent focus and fun and excitement (positive emotional engagement). In the post-view, the researcher was analyzed children's behavioral and cognitive engagement which was indicated by their verbal participation during the discussion and their ability to answer the questions orally as well as their ability to retell the story. All of these viewing techniques will be analyzed by qualitative method (Frankel & Wallen, 1996; Cresswell, 2003).

To illustrate how the observation data were analyzed, the researcher took some steps (Creswell, 2003). First, the observation data were arranged according to the participants' names. Second, the observation data were presented and analyzed by referring to the reading/viewing stages (Stoller, 1992; Wallace, 1992; Tomalin, 1992; Stempelski, 2002; Koksal, 2004), by referring to the student engagement indicators (Skinner & Belmont, 1993; Jones, 2009) and by referring to the theory of interpersonal meaning (Halliday, 2004; Eggins, 2004; Kress & van Leeuwen, 2009)

3.6.4. Analysis of Data from Questionnaire

Questionnaires were addressed to three participants. Therefore, three questionnaires were obtained and analyzed for exploring the children's emotional engagement while they were reading the digital interactive storybook. The

66

Universitas Pendidikan Indonesia | repository.upi.edu | perpustakaan.upi.edu

analysis of data from the questionnaires was conducted after all questionnaires are collected. The qualitative method (Frankel & Wallen, 1996; Cresswell, 2003) was applied to analyze the data from questionnaires.

All questionnaires data was analyzed in some steps (Cresswell, 2003). First, the questionnaire results were checked in case they were not properly answered. Second, the questionnaire results were coded by arranging them according to the participants' name. Thirds, after the data had been coded, they were interpreted referring to the relevant theories namely student engagement indicators (Skinner & Belmont, 1993; Jones, 2009) and by referring to the theory of interpretonal meaning (Halliday, 2004; Eggins, 2004; Kress & van Leeuwen, 2009).

3.6.5. Analysis of Data from Interviews

The interview section was followed by three participants and conducted individually. Therefore, the interview data was obtained and analyzed for exploring the children's emotional engagement while they were reading the digital interactive storybook. The analysis of data from interview was performed after all interviews are conducted. The qualitative method (Frankel & Wallen, 2003; Creswell, 2003) will be applied to analyze the data from interview.

All interview data was analyzed in some steps (Kvale, 2006; Creswell, 2003). First, the interview data was transcribed. Second, the interview data was coded according to the name of the participant. Third, after the data was coded, the data was interpreted based on the relevant theories namely, student engagement indicators (Skinner & Belmont, 1993; Jones, 2009) and by referring to the theory of interpretent meaning (Halliday, 2004; Eggins, 2004; Kress & van Leeuwen, 2009).