

CHAPTER III

METHODOLOGY

3.1 Methodology

Research and Development (R&D) is a systematic research approach used to develop, validate, and improve products through a structured process. This method is commonly applied in educational and creative fields to produce products that are not only theoretically grounded but also practically applicable. According to Borg and Gall (1983), R&D integrates research activities with product development to ensure that the resulting product has undergone evaluation and refinement before implementation.

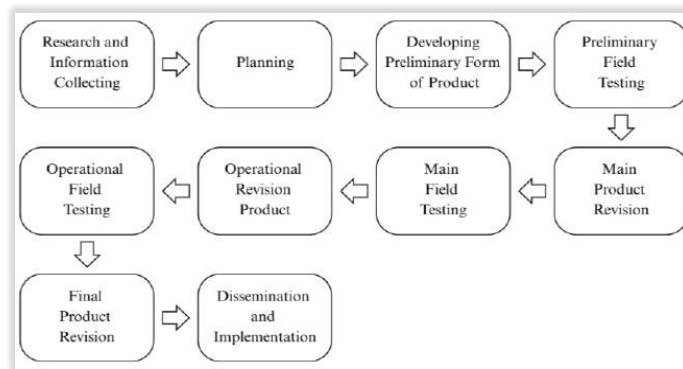


Figure 3. 1 Research and Development Steps

Furthermore, Borg and Gall (1983) explain that the R&D process consists of ten major stages: research and information collecting, planning, developing a preliminary form of the product, preliminary field testing, main product revision, main field testing, operational product revision, operational field testing, final product revision, and dissemination and implementation. These stages emphasize that product development should be conducted iteratively, allowing improvements to be made continuously based on evaluation and feedback obtained throughout the development process.

3.2 Research and Development Project

Research and Development (R&D) entails a systematic strategy employed for the design or confirmation of educational products, such as curricula, instructional resources, or learning media. Borg and Gall (1983) assert that the R&D approach intertwines the research process with product innovation to ensure that the outcomes are rooted in robust theoretical foundations and have undergone empirical verification. This methodology is widely applied in educational research to formulate creative solutions that proficiently address real world issues faced in the teaching and learning landscape.

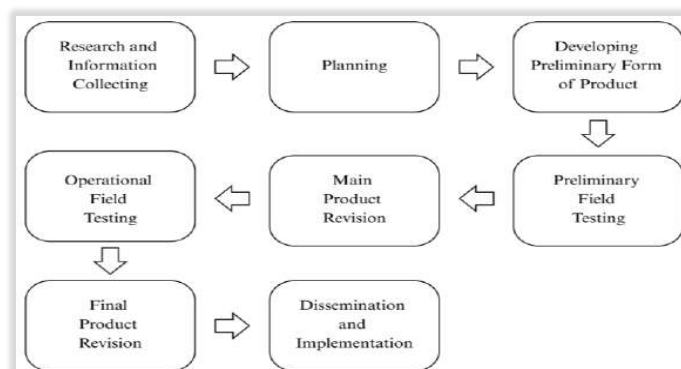


Figure 3. 2 Adaptation Research and Development

In this study, only eight of the ten stages of the Research and Development method were carried out. This limitation is due to the relatively small scale of the project and the fact that it has not yet been directed toward mass production. According to Sugiyono (2019), research and development procedures can be adapted to research needs without compromising the fundamental principles of product development. Therefore, this study adapts the stages most relevant to the development process of a short film as a tourism promotion product.

1. Research and Information Collecting

At the research and information collecting stage, the researcher obtained relevant data through several techniques, including literature study, observation, questionnaires, and documentation related to the development of the short film. The first step was gathering information about tourism destinations in Semarang Regency. From several available options, the researcher selected Fort Willem I and Rawa

Pening Lake in the Ambarawa area as the research locations for the short film production. These two destinations were selected because they represent historical and natural tourism attractions that can support the visualization and message delivery of the developed short film. Fort Willem I was chosen as one of the primary locations due to its historical significance as a colonial heritage site and its distinctive colonial architecture, which provide educational value while strengthening the visual and narrative elements of the film (Nurmala & Arafat, 2024). Meanwhile, Rawa Pening Lake was selected because of its natural landscape and tourism potential, which offer strong visual appeal and support audiovisual tourism promotion (Retnowati, Suryanto, Purwanto, Haryanto, & Widyanto, 2020). To support the data collection process, the researcher also conducted surveys and interviews with a tour guide at Fort Willem I and observed the environmental conditions and tourism activities around Rawa Pening Lake. The methods used by the researcher are described as follows.

a. Observation

Observation is a systematic description of events, behaviors, and artifacts within the selected social setting for study (Marshall & Rossman, 2016). In this study, the researcher conducted observations at two tourism destinations in Semarang Regency, namely Fort Willem I and Rawa Pening Lake. The first observation was conducted at Fort Willem I, a historical building from the Dutch colonial period. The location was visited directly to observe the environmental conditions, atmosphere, and visual elements that could support the production of the short film. Furthermore, observations were also conducted at Rawa Pening Lake to identify visual potential and natural scenery that could be utilized in the short film production process.

b. Survey

The researcher also conducted a survey to obtain more specific data and information. To ensure the accuracy of the data, the researcher directly visited the two research destinations, namely Fort Willem I and Rawa Pening Lake. At Fort Willem I, the researcher observed various parts of the historical building to understand the environmental conditions and the visual potential that could be

utilized in the short film production. The researcher also determined specific areas of the building that would be used as filming locations by considering their aesthetic value and suitability for developing the storyline.

In addition, the researcher examined technical aspects such as lighting, location layout, camera angles, and other elements that could influence the film production process. Observations were also conducted at Rawa Pening Lake to identify the potential of natural scenery, environmental atmosphere, and visual elements that could support the narrative needs of the short film. This stage was important to ensure visual consistency and the smooth production process of the short film. Furthermore, the researcher also interacted with site managers or related parties at the research locations to obtain additional relevant information.

c. Documentation

In this study, documentation becomes one of the most important stages. The researcher collected various data and information through video recordings, photographs, and audio recordings at the research locations. This process was carried out to support the subsequent stages, as all documentation results would serve as the basis for producing the short film.

2. Planning

Planning was carried out after all data and information had been obtained through the research and information-collecting stage. According to Leedy and Ormrod (2015), a statement of purpose should clearly describe the objectives of the research and outline the steps that will be taken in the study. In this research, the planning stage focused on preparing the short film production process, including developing the storyline, writing the script, creating the storyboard, determining the production schedule and budget, selecting the team members involved, and assigning their respective responsibilities in the project.

3. Developing a Preliminary Form of the Product

After the planning stage was completed, the researcher proceeded to the stage of developing the preliminary form of the product. In this stage, February 2026 was selected as the time for filming. The schedule was arranged based on the availability of the production team and the talents involved. The researcher considered that a five-

day filming period would be an effective and efficient duration to support the production of the short film.

4. Preliminary Field Testing

In this study, the preliminary field testing was conducted on a limited scale by involving an expert as the evaluator. The researcher requested a supervisor who has expertise in the relevant field to assess the short film that had been produced. The evaluation process included the suitability of the material, linguistic characteristics, and aspects of short film production. The criteria used to determine the expert are presented in Table 3.1.

Table 3. 1 Expertise Criteria

Field of Expertise	Criteria	Subject
Material Expert	Media and Linguistic Aspects	Aditya Nur Patria, S.Hum., M.App.Ling.
Media Expert	Short Film Display Aspects	Aditya Nur Patria, S.Hum., M.App.Ling.

5. Main Product Revision

The revision phase aims to improve the product based on feedback and recommendations from the supervisor. The improvements include content, language elements, and visual presentation to ensure that the product quality meets the expected standards. Through this revision process, the promotional video can be refined and prepared for the next stage.

6. Operational Field Testing

Seventeen viewers participated in the operational field testing after the main product revision. The respondents involved in this study consisted of thirteen employees working in the Jabodetabek area aged between 22 and 40 years old, as well as two respondents who have been working in South Korea and Japan for an extended period and use English in their daily communication. The selection of employees from the Jabodetabek area was intentional, as the storyline of “Leave”

centers on an individual who experiences pressure from a toxic work environment and the fast-paced, crowded lifestyle of the capital city. Therefore, respondents with similar backgrounds were considered more capable of relating to the themes and emotional experiences portrayed in the film and of providing relevant feedback on its narrative and message.

In addition, the inclusion of respondents working in South Korea and Japan was intended to evaluate the quality and comprehensibility of the English subtitles. Since both respondents regularly use English as part of their daily communication in international working environments, they were expected to provide informed assessments regarding the clarity, naturalness, and overall effectiveness of the subtitles in conveying the intended meaning to an English-speaking audience. The questionnaire statements used in this stage are presented in Table 3.2 below.

Table 3. 2 List of Statements

No.	List of Statements
Content Aspects	
1.	The storytelling of the “Leave” short film is easy to understand
2.	Information about the attractions of Fort Willem I and Rawa Pening Lake is well presented in this short film
3.	The duration of the video for “Leave” is sufficient
Audio Visual Aspects	
4.	The “Leave” short film has good image quality
5.	Promotional audio video “Leave” is clear and easy to understand.
6.	The spots of tourist attractions used in the video make me want to visit the place
7.	Every scene of the short film “Leave” has good shooting quality.
Linguistic Aspects	
8.	The background music or sound used in the “Leave” short film matches the visual scenes

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9. The subtitle of the “Leave” short film is easy to understand
 10. The subtitle of the “Leave” short film is clear and easy to read
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The respondents were given a Google Form containing a list of assessment statements. The conclusions of the study were drawn based on the responses obtained from the questionnaire. The evaluation in this test was measured using a Likert scale. According to Batterton and Hale (2017), the Likert scale is used to measure opinions or attitudes toward a particular topic through statements or questions that provide measurable responses. The following are the Likert scale scoring criteria.

Table 3. 3 Likert Scale Score Level

NO	Criteria	Score
1	Strongly Disagree	1
2	Disagree	2
3	Agree	3
4	Strongly Agree	4

The following formula is used to calculate the cumulative score of the questionnaire.

$$\text{Index} = \text{Total Score} : \text{Total Respondents}$$

The evaluation results of each statement are presented using the formula above. According to Sukardjo (2005), the Likert scale used in this study was modified by the researcher as follows:

Table 3. 4 Likert Scale Score Level

NO	Interval	Criteria
1	1.00 until 1.75	Strongly Disagree
2	1.75 until 2.50	Disagree
3	2.50 until 3.25	Agree

4	3.25 until 4.00	Strongly Agree
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7. Final Product Revision

The final revision stage is carried out to refine the product based on the results of the operational field testing. This process is important to ensure that the developed product has undergone improvements and is ready to be used in accordance with the objectives of the development.

8. Dissemination and Implementation

The final step of this process is introducing the final product to the public. At this stage, the researcher publishes the short film “Leave” by uploading it to YouTube.

3.3 Schedule Planning

The following table presents the overall timeline for the implementation of the research. Each stage of the research is accompanied by a predetermined time frame to ensure that the research process can be conducted in a structured and efficient manner. This schedule is designed as a guideline to support activity planning and facilitate the monitoring of research progress.

Table 3. 5 Schedule Planning

Activity Type	December	January	February	March	April
Research and Information Collecting					
Planning					
Developing Preliminary Form of Product					

Preliminary Field Testing			
Main Product Revision			
Operational Field Testing			
Final Product Revision			
Dissemination and Implementation			

3.4 Cost Planning

The researcher is required to carry out cost planning and budgeting procedures during the research process. All expenses required for producing the short film “Leave” have been calculated, and the detailed budget planning strategy can be seen in Table 3.6 below.

Table 3. 6 Cost Budget Plan

No.	Expense	Cost
1.	Team Consumption	IDR 800,000
2.	Transportation	IDR 300,000
3.	Editing	IDR 280,000

4.	Entrance Ticket	IDR 45,000
	Amount	IDR 1,425,000

3.5 Task Distribution

The development of the promotional video “Leave” was carried out through three main stages: pre-production, production, and post-production. Throughout this process, the researcher collaborated with Restiana Saputra and Diah Syakila Putri to complete the overall production activities. Restiana Saputra primarily contributed during the pre-production stage by supporting concept development, planning, and preparation activities before filming, while Diah Syakila Putri was mainly involved in the post-production stage, particularly in supporting editing and finalization activities. The detailed distribution of roles and responsibilities in the production of “Leave” is presented in the following table.

Table 3. 7 Description Task Distribution

Category	Description
Director: Hazel Radityo Utomo	Monitoring and supervising the production during filming to ensure all activities run according to the planned schedule.
Cinematographer: Hazel Radityo Utomo	Managing camera operations and technical production aspects while ensuring each scene is recorded according to the storyboard and script.
Production Manager: Restiana Saputra Diah Syakila Putri	A person responsible for logistics, finance, and operations, managing planning, budgeting, scheduling, and daily expenses within the project.
Location Manager Restiana Saputra Diah Syakila Putri	Managing all filming location processes, including selection, arrangement, and coordination with location owners to ensure the site meets production needs.

Scriptwriter Hazel Radityo Utomo Restiana Saputra	Developing communicative dialogue, organizing the storyline, and guiding the characters and plot to keep the film’s narrative cohesive.
Storyboard Diah Syakila Putri Hazel Radityo Utomo Restiana Saputra	A storyboard is a visual guide that assists in planning and organizing scenes, allowing the storyline of an audiovisual work to be structured logically and systematically.
Costume and Wardrobe Restiana Saputra Diah Syakila Putri	Managing all aspects of costumes and props used by the actors, including selecting outfits that match the characters, adjusting them to the scenes, and maintaining them during production.
Subtitle Diah Syakila Putri Restiana Saputra	Serving as a visual communication aid that helps viewers understand dialogue, narration, and key information in audiovisual productions effectively.
Editor Hazel Radityo Utomo	The post-production stage is carried out to consistently optimize the quality of the final video, including organizing and trimming clips, adding visual and audio elements, and adjusting color and sound aspects.