

CHAPTER IV

RESULT AND DISCUSSION

4.1. Result

The research results are in the form of a bilingual handbook entitled “PETA (*Panduan Efektif Tata Alur*) Thomas Karsten”, designed to support beginner guides in conducting museum tours in English. This guidebook focuses on the main collections at the Thomas Karsten Building of the Sonobudoyo Museum and includes communication guidelines, one-minute tour scripts, helpful phrases, and a glossary and vocabulary list.

The research uses the Research and Development method by Borg and Gall (1983) from 10 stages simplified into 8 stages, namely research and information collecting; planning; developing preliminary form of product; preliminary field testing; main product revision; main field testing; final product revision; and disseminating and implementing.

4.1.1. Research and Information Collecting

The research and data collection phase aimed to analyze the urgency, constraints, and needs of beginner guides at the Sonobudoyo Museum, specifically the Thomas Karsten Building. This phenomenon was discovered based on several information collection methods employed by the researchers, namely:

1. Observation

Observations were conducted during the researcher’s approximately three-month internship program. These observations involved beginner guides interning at the Sonobudoyo Museum. The observations revealed several recurring challenges encountered by the beginner guides while carrying out their duties, including:

- a. Observations revealed significant communication barriers in developing historical narratives. Beginner guides often struggled to translate Indonesian narratives into English, even though they had mastered the guiding material.
- b. In the initial stage of the guiding test or pretest, it was found that beginner guides had not yet mastered basic hospitality and operational techniques such as the inability to open the tour professionally, incorrect standing or blocking positions, and the inability to respond to spontaneous questions from the audience.
- c. There is a tendency for beginner guides to avoid direct contact with foreign tourists when the tourists need further information regarding general information or collections and beginner guides tend to divert to other colleagues without using appropriate hospitality sentences.
- d. When researchers assisted stakeholders in testing the English language skills of beginner guides, they found obstacles in the form of nervousness which resulted in difficulty in constructing cohesive sentences, making the historical message conveyed difficult to understand, as well as a lack of understanding of cultural terms in English used when guiding.

Overall, the observation results indicate that beginner guides at Sonobudoyo Museum face challenges in three main areas: English communication, guiding and hospitality skills, and self-confidence when interacting with foreign visitors. These challenges affect their ability to deliver museum narratives effectively and respond to visitors in professional guiding situations. Therefore, practical learning support is needed to help beginner guides improve their communication competence,

guiding techniques, and confidence in conducting bilingual museum tours.

2. Interview

At this stage, the researchers interviewed different sources, namely beginner guides and stakeholder. The interviews were conducted in Indonesian to ensure accurate results and clear information, thereby avoiding miscommunication.



Figure 4.1 Interview with the first group of beginner guide



Figure 4.2 Interview with the second group of beginner guide

The first round of interviews was conducted with four beginner guides to identify on-site challenges and user needs. This stage involved two groups of two participants each for time efficiency, and information was obtained that showed substantial similarities. Informants admitted to frequently experiencing anxiety when starting introductions or opening tours. Furthermore, there was a phenomenon of “blank” when explaining the collection due to an inability to structure narrative sentences, often leading to diverting the conversation or moving on to other collections without a smooth transition. Informants felt more comfortable using one-way communication to build initial confidence, as their role in checking visitor tickets tends to be one-way. Informants felt the available materials were too long and had difficult language structures, making it difficult to translate their mastered guide narratives into English due to limited vocabulary and understanding of cultural terms. Limited learning time made informants desperately need concise reference materials that still contained the information they needed for guiding, such as tour opening procedures, concise narrative examples from the main collection, additional unique facts to enrich the storyline, and a list of frequently used vocabulary.



Figure 4.3 Interview with the stakeholder

A subsequent interview was conducted with a stakeholder on a different day to obtain professional insights and a field perspective. At this stage, the stakeholder confirmed that the field findings regarding the challenges faced by beginner guides in conducting tours in English were accurate. The stakeholder also explained that the Thomas Karsten Building (GTK) was selected as the subject of the pre-tour guide training because it houses the museum's main collection, which serves as the central theme of the entire museum's collection. The interview also yielded several suggestions regarding the development of the handbook, particularly concerning on-site needs, collection descriptions, and historical information to ensure the material remains relevant to tour guiding activities at the Sonobudoyo Museum.

3. Questionnaire

At this stage, a questionnaire was distributed to beginner guides at the Sonobudoyo Museum via Google Forms, with 26 participants responding. The questionnaire yielded valid and structured data and information, with the following details:

Table 4.1 Accumulated Need Analysis Questionnaire Assessment
Scores in Percentage

No.	Statement	Range	Result
1.	Feeling nervous when initiating introductions and small talk with foreign tourists.	63.07%	Agree
2.	The current captions and collection materials in the museum are too long and difficult to explain orally.	65.38%	Agree
3.	Limited vocabulary and fear of grammatical errors, leading to a lack of confidence when speaking English.	76.15%	Agree
4.	Concern regarding spontaneous questions or in-depth discussions from tourists that fall outside the provided material.	72.30%	Agree
5.	The material in the Thomas Karsten Building (GTK) is overly dense, making it difficult to memorize in English.	70.76%	Agree
6.	Higher ease of learning when materials are broken down into key points.	82.30%	Strongly Agree
7.	Finding a concise script (approximately 1 minute per collection) highly beneficial for the flow of the tour.	81.53%	Strongly Agree

No.	Statement	Range	Result
8.	A greater need for simple language (Basic English) rather than overly formal or academic language.	83.84%	Strongly Agree
9.	Higher effectiveness in focusing on one primary collection per room for in-depth explanation rather than providing brief overviews of every object.	72.30%	Agree
10.	The importance of understanding proper strategies and attitudes for handling situations where a guest's question cannot be answered.	82.30%	Strongly Agree
11.	The need for transition sentence examples to assist in moving from one room to another.	80%	Agree
12.	The inclusion of fun facts when explaining collections to ensure the narrative remains engaging for tourists.	90%	Strongly Agree
13.	The necessity of a glossary to prevent translation errors for difficult or technical terms into English.	84.61%	Strongly Agree
14.	A significant need for a list of “safety phrases” (professional responses when unable to answer a question) to handle difficult inquiries professionally.	80%	Agree

Based on the results of the questionnaire from the data collection phase for needs analysis, most assessment components received scores categorized as “Agree” and “Strongly Agree.” These findings indicate that beginner guides experience difficulties in guiding in English. The findings indicate that beginner guides need tools in the form of simple guide materials, practical English expressions, and concise English scripts to support their tasks. The questionnaire results also indicate that beginner guides have low self-confidence when interacting with foreign tourists and need additional phrases to handle unexpected situations when dealing with foreign tourists.

4. Documentation

The documentation phase was conducted by studying notes, minutes, and historical transcripts obtained by the researcher during the internship. These sources contain historical interpretations used as references for the guide materials at the Sonobudoyo Museum. Documentation was also obtained by studying literature sources in the form of a museum promotional book published by the Yogyakarta Cultural Service, entitled “Buku Panduan Museum Negeri Sonobudoyo,” as well as historical sources in the collection captions and taking photographs to be included in the handbook.

Through this process, the researcher obtained historical narratives and collection descriptions from the official Sonobudoyo Museum guidebook and museum captions, which were later used as the primary source materials for developing the historical narration section of the handbook. In addition, photographic documentation of museum collections and exhibition spaces was collected to serve as visual supporting materials in the handbook.

4.1.2. Planning

4.1.2.1. Product Concept

The handbook in this study is aimed at beginner guides as the target audience. The purpose of the handbook in this study is to serve as a supporting tool to assist beginner guides in learning complex museum guiding material and to increase their confidence in bilingual guiding by presenting practical and concise guidance and narrative. The development focuses on the Thomas Karsten Building, which houses the museum's main collections and serves as the primary area assessed in the guide competency test. In addition, this building is the main location where beginner guides are expected to master guiding materials before progressing to other exhibition areas. Therefore, the scope of the handbook was intentionally limited to the Thomas Karsten Building to ensure that the content remains focused, practical, and manageable for beginner guides during the initial stage of their learning process. The handbook was developed based on an analysis of user needs. Consequently, solutions were provided through one-way communication and value-oriented storytelling. The goal was to reduce the user's cognitive load by creating concise and practical handbook content tailored to user needs.

At this stage, the researcher selected an appropriate title for the handbook. The name "PETA (*Panduan Efektif Tata Alur*) Thomas Karsten" was chosen because it reflects the handbook's primary function as a learning guide that helps beginner guides master museum guiding materials and procedures in English. The word "Panduan" refers to the handbook's function as a learning guide, "Effective" describes the handbook's aim to help users learn guiding materials more easily and practically, and "Tata Alur" refers to the organization of materials following the guiding flow at the Thomas Karsten Museum Sonobudoyo, which includes basic communication and hospitality, presenting collection narratives, simple problem-solving, and mastering cultural vocabulary or terms.

The acronym PETA was chosen from the Indonesian word for “map,” which in English stands for “Effective Guiding to Guided Flow,” serving as a symbolic directional guide. In this study, the handbook is intended to serve as a guide for beginner guides in understanding the museum’s guided tour flow and building confidence when conducting tours in English.

4.1.2.2. Handbook Structure

After determining the product concept, the researcher then developed a preliminary table of contents for the handbook, which would later be expanded into a complete draft. The preliminary table of contents for the handbook is as follows:

Table 4.2 Outline Handbook

Handbook Title
PETA Thomas Karsten
Contents
Bab I : Komunikasi dan Keramahtamahan
Bab II : Naskah Satu Menit dan Fakta Unik
Bab III : Frasa Pembantu
Bab IV : Daftar Glosarium dan Kosakata

4.1.3. Developing Preliminary Product

4.1.3.1. Drafting Handbook Content

The handbook’s content was drafted after mapping out the outline during the planning stage. Early mapping involved a needs analysis and initial validation of the material outlined by stakeholders. The mapping was conducted using the PETA Framework for each chapter.

Chapter I discusses basic communication and hospitality techniques, including greetings, intonation control, and body language. This chapter is based on the findings of a needs analysis, which showed

that beginner guides often lack confidence and have difficulty interacting naturally with international visitors. This material is adapted from the book by Andrianto & Kusumah (2023) and tailored to the context of beginner guides. Communication phrases and hospitality techniques were selected based on their relevance to real-world guide interactions typically encountered during museum tours. The inclusion of this chapter aims to help beginner guides boost their confidence in communicating and create more engaging interactions with visitors.

Chapter II then presents the guide script, which provides simplified narratives from the main collections in each museum room using Indonesian and English. The selection of the main collections in each museum was based on the guide needs analysis and initial validation of the material by stakeholders. Bilingual translation of the narrative script was carried out using adaptation, literal translation, modulation, descriptive translation, and reduction techniques. The narrative script also includes linguistic guidance in the form of sound processing techniques.

Chapter III is organized around the communication challenges identified in the needs analysis, particularly those related to spontaneous interactions during museum tours. Many beginner guides have difficulty answering visitors' questions and maintaining a conversation in English. Therefore, this chapter includes simple, ready-to-use support phrases, organized around common on-site situations guides face such as when they encounter difficulties while on a tour, when they receive spontaneous questions about topics they are not yet familiar with, and when communication issues arise on-site. These helpful phrases have been selected and adapted for novice guides using practical and beginner-friendly expressions. This chapter aims to reduce language anxiety and boost the guides' confidence.

Chapter IV is the final chapter in this handbook, containing a glossary and vocabulary list. The primary focus of this study's glossary is to serve as a tool for beginner guides to understand cultural terms used in

museum guides. In its development, the selection of terms and their definitions was based on the needs of beginner guides, with the researchers positioning themselves as users of the glossary to ensure a high-quality product (Sadia et al., 2022) so that the words in each glossary and vocabulary list are selected based on the frequency of their appearance in the narrative text. In addition, this handbook includes a vocabulary list. Vocabulary is essential for achieving learning objectives. In compiling the vocabulary list, the researcher employed a simple and efficient approach by collaborating with stakeholders as validators, in line with the theory (Finlayson et al., 2024) and by applying the theories of (Astuti & Aziez, 2021) and (Bergström et al., 2023) namely, developing vocabulary based on corpus studies, which involve analyzing collections of written and spoken words frequently used in guided tours at the Sonobudoyo Museum, through direct fieldwork.

The next step was the translation process. In developing the bilingual content of the handbook, the researcher first translated the Indonesian content into English using DeepL Translator as an initial translation tool. The translated content was then carefully reviewed, edited, and refined by the researcher to ensure that the language was appropriate for the museum context and understandable for beginner guides. In developing the bilingual content, the researcher also applied several translation techniques proposed by Molina and Albir (2002), as cited in Amelia et al. (2023), including adaptation, descriptive translation, literal translation, modulation, and reduction. These techniques were selected according to the characteristics of the source text and the intended meaning of the museum narratives. Their application aimed to ensure that historical information, cultural concepts, and guiding expressions could be communicated naturally and accurately in both Indonesian and English while remaining understandable for beginner guides. As the final stage, the translated content was proofread by the research supervisor, Naila Rohmah, S.Pd., M.Li., to verify its linguistic accuracy, clarity, and

appropriateness before being incorporated into the final version of the handbook.

Table 4.3 Translation Methods for Developing PETA Thomas Karsten

Translation Technique	Application in the Handbook
Adaptation	Used for culture-specific terms that require equivalent meanings in English.
Descriptive	Used to explain cultural objects or concepts that have no direct English equivalent.
Literal	Used for simple and straightforward informational content.
Modulation	Used when a change in perspective was needed to improve clarity in English.
Reduction	Used to shorten lengthy explanations while retaining the essential meaning.

4.1.3.2. Illustration and Product Design

The product illustration and design process was developed with the assistance of a third party, a graphic designer. The researcher served as content provider and design director, while the graphic designer executed the visuals and layout to enhance user readability.

The researcher determined the overall design concept by prioritizing a simple and clear layout that supported user readability, using a bullet point format and adding illustrations consistent with the content of the handbook. The graphic designer helped interpret the design direction and layout according to the researcher's instructions, resulting in the final product design. The researcher provided guidance on the selection of the color palette, font types, references, elements, book size, and layout, which were then implemented by the graphic designer.

In selecting the color palette, the author opted for a dominant use of green and red, in keeping with the colors of the Sonobudoyo Museum.



Figure 4.4 Color palette handbook

Montserrat

Cormorant Garamond

Cormorant Garamond

Figure 4.5 Font type in the handbook

Next, the fonts chosen are Montserrat and Cormorant Garamond to ensure a clear and clean layout. The researchers also incorporated design elements by including a portion of the museum's architectural ornamentation in the design, specifically the Candrasengkala Memet carving "*Butha Ngrasa Hestining Lata*," which represents the year the Sonobudoyo Museum was founded according to the Javanese calendar: 1865.



Figure 4.6 Ornamental carvings of museum buildings
(Resource: Santosa, 2017, p. 06)

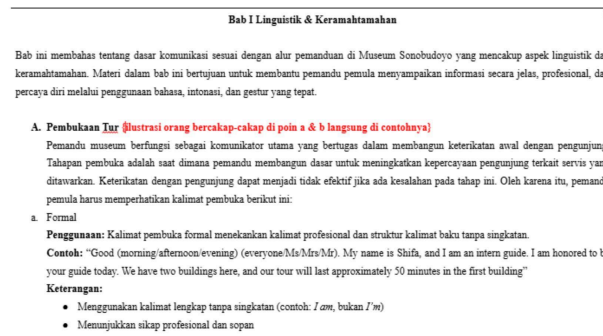


Figure 4.7 Thesis handbook contents and design directions

When creating the sections of the handbook, the researcher provided guidance by specifying which sections should be included in the handbook, which the author then outlined in the handbook draft. This was followed by the graphic designers' implementation of the design elements using Clip Studio Paint (CPS) and Adobe Illustrator. CPS was used to create the canvas as a starting point for drawing the elements, while Adobe Illustrator was used for sketching and coloring them.

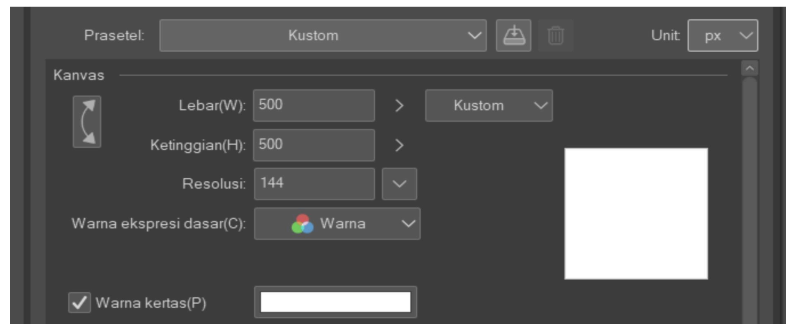


Figure 4.8 Design process in CPC

At this stage, the handbook canvas was prepared by determining the dimensions and page specifications of the product. The layout framework was adjusted to the selected B6 handbook size to ensure consistency throughout the design process.

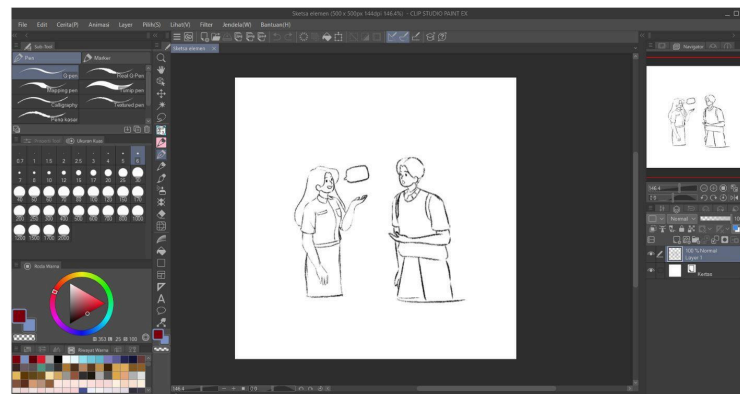


Figure 4.9 Design process in Adobe Illustrator

At this stage, visual elements, icons, and supporting illustrations used throughout the handbook were created and refined to support the presentation of the learning materials.

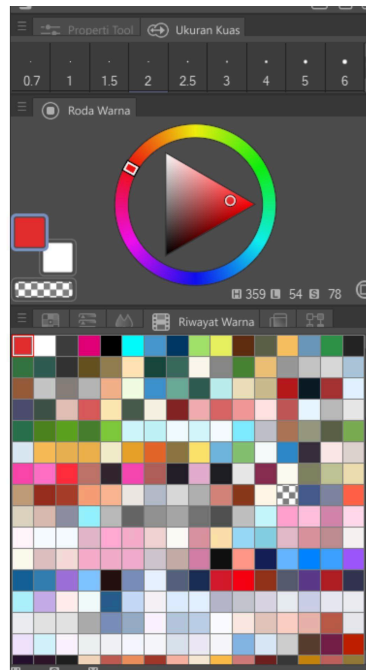


Figure 4.10 Color selection process

During this stage, color coordination and visual identity were determined, including the application of final colors to the illustrations. The selected color scheme was intended to create a visually appealing and consistent appearance throughout the handbook.

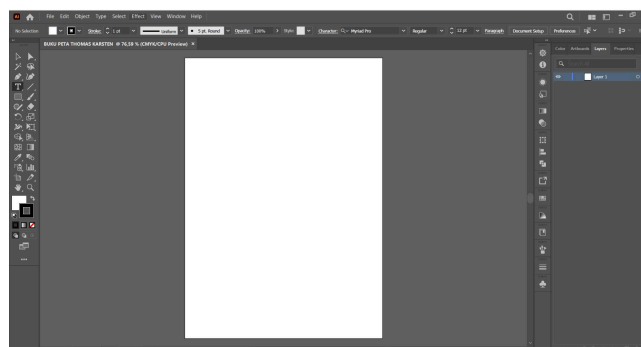


Figure 4.11 Initial layout preparation process

This stage involved arranging page layouts, text placement, headings, page numbering, and other content elements. After the illustrations were finalized, they were integrated into the layout and adjusted to ensure readability and visual balance.



Figure 4.12 Handbook content layout preparation process

The next step is to create the handbook layout by incorporating the content script that the researcher has created into the layout design. The next step is to review and finalize the product by importing the design into Canva to facilitate communication and revisions between the researcher and the graphic designer. During this process, the researcher made several revisions to the product regarding layout and copywriting until the result aligned with the handbook's development plan. Once all designs have been finalized and are in line with the researcher's handbook development plan, the designs are exported as print-ready PDFs for book production, with the final product being a bound volume.

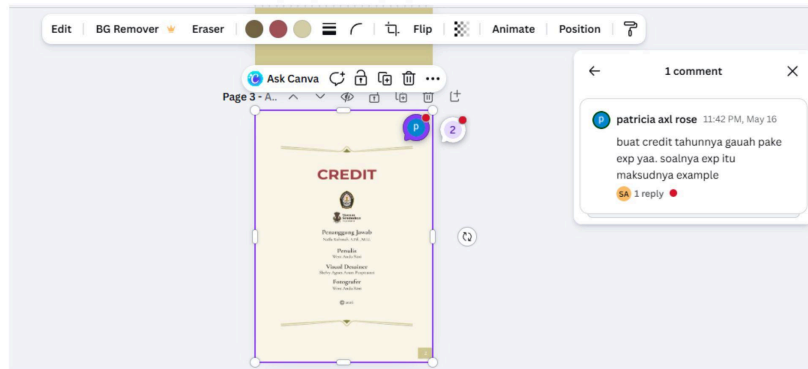


Figure 4.13 Review and revision process in Canva

4.1.4. Preliminary Field Testing

At this stage, the researcher conducted expert validation with the supervising lecturer and stakeholders serving as experts to assess the handbook's initial suitability before testing it with users. The aspects evaluated at this stage included the suitability of the content, layout, and design of the handbook using a validation form with three rating categories: suitable, suitable for use with revisions in accordance with regulations, and unsuitable.

The first validation was conducted by the supervising lecturer, Naila Rohmah, S.Pd., M.Li., as the first expert on May 20, 2026, by evaluating all aspects of the handbook. Based on the validation results, the handbook was deemed suitable for use with revisions in accordance with regulations. In this stage, the academic advisor provided suggestions regarding the addition of an additional University of Diponegoro logo on the handbook cover, refinement of English terminology in several sections of the guide text, the addition of a title to the floor plan of the Thomas Karsten Building, and the inclusion of an author profile.



Figure 4.14 Preliminary field testing by stakeholder as expert

Subsequently, the second validation was conducted by a stakeholder at Sonobudoyo Museum, Iccha Pratita Saraswati Saroha, S.S., on May 23, 2026. Based on the validation results, the handbook was also deemed suitable for use with revisions in accordance with the regulations. In this stage, the stakeholder provided suggestions regarding the selection of appropriate photos in the “One-Minute Script” section for Room VI to ensure objects are displayed more clearly.

4.1.5. Main Product Revision

At this stage, the researcher revised the product based on suggestions and feedback from the expert validators. The revisions were made to improve the quality, language accuracy, content presentation, and overall appearance of the handbook before proceeding to the main field testing stage. The revisions included the addition of the Diponegoro University logo on the cover, refinement of English word choices in several sections of the guiding scripts, the addition of a title to the floor plan of the Thomas Karsten Building, the inclusion of the author’s profile, and the correction of credit writing. In addition, the photo of the *Permainan Adu Kemiri* in the “*Naskah Satu Menit dan Fakta Unik*” section was replaced with a clearer image to improve visual

representation. Several improvements were also made to the handbook's printing specifications. The cover material was changed from 150 gsm paper to 260 gsm paper to enhance durability and presentation quality. Furthermore, the interior pages were upgraded from 80 gsm HVS paper to 100 gsm art paper to produce clearer images, sharper text, and better overall print quality.



Figure 4.15 Before and after product revision with additional logo

Revision involving the addition of the university logo to the handbook cover.

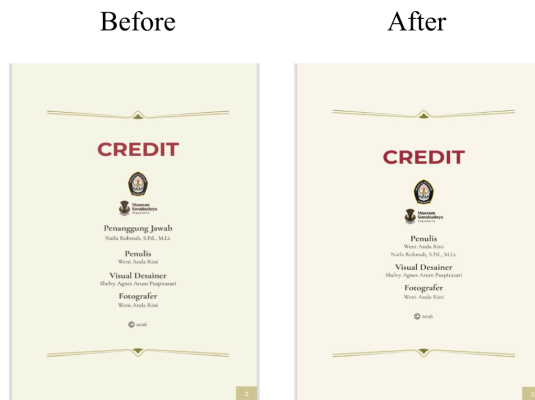


Figure 4.16 Before and after product revision with modifying the credit structure

This revision involved modifying the credit structure by changing the role designation from “Person in Charge (PIC)” to “Second Writer”.



Figure 4.17 Before and after product revision with changing the credit structure

Revision of the Adu Kemiri photograph through the replacement of the original image with a clearer photograph, as the previous image lacked visual distinction between the object and the wooden background.

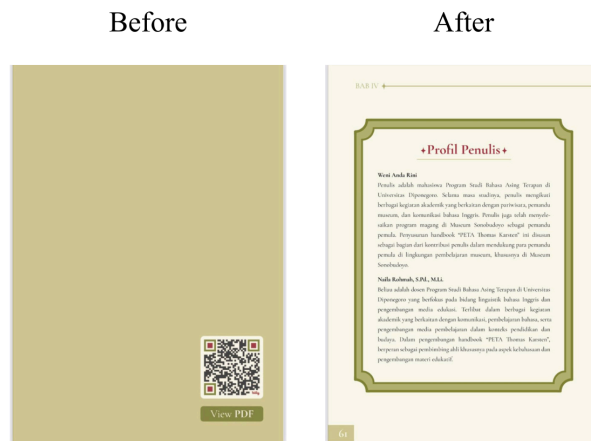


Figure 4.18 Before and after product revision with additional writer profile

Revision involving the addition of an author profile section to provide information about the handbook developer.

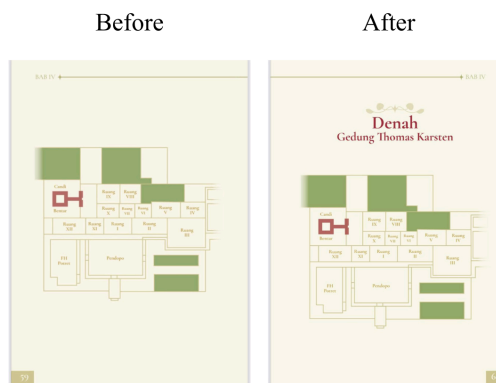


Figure 4.19 Before and after product revision with additional floor plan information

Revision of the Thomas Karsten Building floor plan through the addition of explanatory labels to provide clearer information.



Figure 4.20 Before and after product revision with changing the language accuracy

Revision regarding language accuracy through the correction of grammatical structures, including tense usage and word choice.

4.1.6. Main Field Testing

In this phase, testing was conducted with beginner guides as the target users. The survey was distributed via Google Forms using a pre-designed questionnaire structure that aligned with the overall evaluation criteria outlined in the handbook. At this stage, 27 respondents

of beginner guides at Sonobudoyo Museum were obtained with the average percentages were obtained in this phase:

Table 4.4 Accumulated Feedback Questionnaire Assessment Scores in Percentage

No.	Statement	Range	Result
Content Assessment Aspects			
1.	The handbook material is aligned with the needs of beginner guides.	92.59%	Strongly Agree
2.	The explanation of guiding materials in the handbook is easily understood.	93.33%	Strongly Agree
3.	Basic communication and hospitality materials in the handbook are utilized to facilitate interaction with foreign tourists.	91.85%	Strongly Agree
4.	The guiding narratives in the “ <i>Naskah Satu Menit & Fakta Unik (One-Minute Script & Fun Fact)</i> ” are designed to assist in explaining museum collections in English.	94.07%	Strongly Agree
5.	The “ <i>Frasa Pembantu (Helpful Phrases)</i> ” section is provided to assist when technical issues occur during English guiding.	91.85%	Strongly Agree
6.	The “ <i>Daftar Glosarium & Kosakata (Glossary and Vocabulary List)</i> ” is included to enhance the understanding of terms within museum and cultural contexts.	94.81%	Strongly Agree

No.	Statement	Range	Result
7.	The English language used in the handbook is structured to be easily understood by beginner guides.	91.11%	Strongly Agree
8.	Readiness for guiding in English is enhanced through the use of the handbook.	91.11%	Strongly Agree
9.	Confidence in learning to guide in English is boosted by the handbook.	91.85%	Strongly Agree
Design Assessment Aspects			
10.	The layout of the handbook is clearly arranged and easily read.	92.59%	Strongly Agree
11.	The design and visuals of the handbook are structured to aid in understanding the material content.	91.85%	Strongly Agree

The results of the content assessment indicate that the handbook successfully addressed the learning needs of beginner guides. Most respondents strongly agreed that the handbook materials were relevant to their needs and that the explanations were easy to understand. The findings also show that the communication and hospitality materials helped respondents prepare for interactions with foreign tourists. Furthermore, respondents strongly agreed that the bilingual guiding narratives in the *“Naskah Satu Menit dan Fakta Unik”* supported their understanding of museum collections and assisted them in explaining the collections in English. The *“Frasa Pembantu”* section was also positively received, as respondents considered it useful for handling technical situations during guiding activities. Similarly, the *“Daftar Glosarium dan Kosakata”* was perceived as beneficial in improving understanding of museum-related and cultural terminology. Respondents further indicated that the English

language used throughout the handbook was easy to understand and appropriate for beginner-level guides. Overall, the handbook was considered effective in improving respondents' readiness and confidence to conduct guiding activities in English.

In addition, the design assessment results also received highly positive responses from the respondents. Most participants strongly agreed that the handbook layout was well-organized and easy to read. In addition, the visual elements and overall design were perceived as helpful in supporting the understanding of the learning materials. These findings suggest that the handbook's visual presentation successfully complemented the content and contributed to a more accessible learning experience for beginner guides.

Based on the results of the questionnaire from the feedback collection phase of the main field testing, most assessment components received scores categorized as "Strongly Agree". These findings indicate that beginner guides felt that the handbook was very helpful in teaching them guiding techniques and complex museum content, overcoming technical challenges, enriching their vocabulary and knowledge of museum terminology, and boosting their confidence when guiding in English.

4.1.7. Final Product Revision

This phase involved reviewing all feedback provided by respondents during the Main Field Testing phase. Based on user feedback, the PETA handbook by Thomas Karsten received positive responses and was deemed suitable for the educational needs of the Sonobudoyo Museum. The researcher did not identify any significant revisions that would require changes to the handbook's content, design, or structure. Some respondents provided recommendations for future product development, such as increasing the number of entries in the glossary and vocabulary lists, as well as adjusting font size and color. Therefore, these

recommendations were noted as suggestions and input for product development in future research.

4.1.8. Disseminating and Implementing

During the Disseminating and Implementing phase, the researcher officially handed over the final version of the PETA Thomas Karsten handbook to the stakeholders of the Sonobudoyo Museum on Thursday, June 6, 2026. The handbook was provided in both printed and digital (e-book) formats to facilitate access and use. As part of the dissemination process, the handover was formalized through the signing of a *Berita Acara Serah Terima (BAST)* as official documentation of product acceptance by the Sonobudoyo Museum. In addition, the researcher initiated the Intellectual Property Rights (HAKI) registration process to protect the originality and ownership of the handbook as the final product of this research. The handbook is intended for beginner guides as a learning resource for museum guiding, particularly in preparing for English-language guided tours in the Thomas Karsten Building.



Figure 4.15 Product handover to the stakeholder

Additionally, this handbook can serve as supplementary material for self-directed learning in guiding practice, particularly in enhancing understanding of guiding techniques, knowledge of the museum's collections, and communication skills in English. Through this process, the handbook is expected to become a reference resource to support the learning needs of beginner guides at the Sonobudoyo Museum.

4.2. Discussion

The findings of this study indicate that the development of the PETA Thomas Karsten handbook was closely aligned with the needs identified during the needs analysis stage. Observations, interviews, and questionnaires revealed that beginner guides required practical learning materials to help them understand museum collections, learn guiding techniques, and prepare for English-language guiding activities. These findings became the basis for determining the handbook structure and content. As a result, the handbook was designed to include four main sections: basic communication and hospitality techniques, bilingual guiding narratives, helpful phrases, and a glossary and vocabulary list. This development process reflects the principles of engagement and relevance proposed by Reynolds (1993) and Sesriyani (2021), as cited in Shoffa et al. (2024), since the product was developed based on the actual needs of beginner guides and stakeholders at the Sonobudoyo Museum.

To address these needs, the handbook was developed using the concepts of one-way communication and value-oriented storytelling. One-way communication was applied by presenting concise and ready-to-use materials that allow beginner guides to focus on understanding guiding content before engaging in more complex interactions with visitors. This approach supports the scaffolding concept proposed by Ertugruloglu et al. (2023), which aims to reduce cognitive burden during the learning process. Meanwhile, value-oriented storytelling

was implemented through simplified historical narratives, fun facts, and the presentation of key cultural values within museum collections. Rather than presenting lengthy historical descriptions, the handbook emphasizes the most significant information required by beginner guides. This concept was implemented through one-minute scripts that highlight essential historical information, fun facts that enrich storytelling, and helpful phrases that support practical communication during guided tours. The positive responses obtained during the main field testing indicate that respondents found the handbook helpful in understanding museum content, preparing for guiding activities, and increasing their confidence in learning English for guiding purposes.

The findings of this study support those of Hajar, Atmowardoyo, and Taufik (2024), who demonstrated that bilingual learning materials can facilitate communication learning in tourism contexts. Similarly, the “PETA Thomas Karsten” handbook was developed as a bilingual learning resource to assist beginner guides in learning museum narratives and communication techniques in English. The findings also align with Riana and Indrianty (2024), who emphasized the importance of hospitality knowledge and English communication skills for museum educators. In addition, the findings complement the study by Anjani (2024), which showed that tour guide knowledge, skills, and attitude significantly influence visitor satisfaction at the Sonobudoyo Museum.

While their study identified the importance of guide competence, the present study contributes by providing a practical learning resource designed to support the development of those competencies among beginner guides. This study contributes both practically and academically. Practically, the handbook provides a structured learning resource that can be used by beginner guides at the Sonobudoyo Museum to study museum content, guiding techniques, and English communication. The handbook also offers updated narratives that are aligned with the current museum layout and guiding context. Academically, this study extends previous

research by integrating bilingual learning materials, guiding techniques, cultural interpretation scripts, helpful phrases, glossary support, one-way communication, and value-oriented storytelling into a single handbook specifically designed for beginner museum guides. Therefore, the PETA Thomas Karsten handbook serves not only as a source of information but also as a practical learning resource that supports the preparation of beginner guides at the Sonobudoyo Museum.