

CHAPTER III

RESEARCH METHODOLOGY

The data collection process was carried out to obtain information that could support the purpose of developing the *Speak Easy* Handbook as a learning medium for internship students and early career employees who wanted to learn public speaking skills that are used directly in the world of work. In this study, two data collection methods were used, observation and interviews. Both methods were carried out to obtain data from the research targets to design the *Speak Easy* Handbook for internship students and early career employees. In addition, this study used the Research and Development (R&D) method because the focus of the research was on the process of developing a product in the form of the *Speak Easy* Handbook.

3.1 Research and Development (R&D)

According to Sugiyono (2015), Research and Development (R&D) is a research method used to produce specific products and test their effectiveness. Based on the above definition, it can be explained that the R&D method is a research method used to produce certain products and to refine a product in accordance with the references and criteria of the product being made to produce new products through various stages and validation or testing. Researchers first conduct research to collect the necessary data, then develop a product and test and evaluate the product that has been created. A similar opinion is expressed by Borg and Gall (1983), who state that development research is a process used to develop and validate products.

In addition, Research and Development (R&D) is also defined as the process of creating and accrediting educational products. The Research and Development (R&D) method has a cycle that includes reviewing research relevant to the product being developed, creating products based on that research, testing

products in the field, i.e., in the environment where the product will be used, and revising product deficiencies during testing. This cycle is continued in more rigorous research and development projects until field test data shows that the product has met its stated objectives. (Umar, et al., 2023).

3.2 Borg & Gall R&D (Research and Development) Development Model

This study utilizes only eight of the ten stages in the Research and Development (R&D) methodology proposed by Borg and Gall (1983). The model was adapted to suit the scope and objectives of this study while maintaining the essential stages of product development. Two stages, namely Primary Field Testing and Operational Product Revision, were omitted because their functions overlap with other stages that were retained in this research. The activities of Primary Field Testing, which involve collecting users' initial feedback on the developed product, were incorporated into the Operational Field Testing stage, where the handbook was evaluated by the target users on a larger scale. Likewise, the function of Operational Product Revision was integrated into the Main Product Revision and Final Product Revision stages, both of which involved revising the handbook based on expert validation and users' feedback. Therefore, eliminating these two stages did not affect the overall product development process, as their objectives were still achieved through the remaining stages while making the research process more efficient and feasible within the available time and resources.

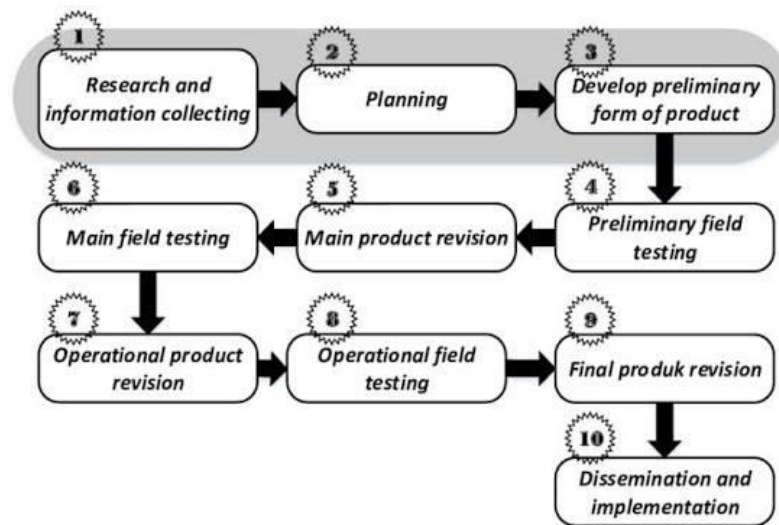


Figure 3.2 1 The 10 step Borg and Gall RnD method

Specifically, Primary Field Testing is similar to Operational Field Testing (stage eight), while Operational Product Revision aligns with Primary Product Revision (stage five). Furthermore, this simplification of stages is based on Borg & Gall's opinion in Emzir (2013) that "it is possible to limit research to a small scale, including limiting the research steps." This is due to the researcher's time and financial constraints.

Therefore, the R&D stages in this study proceed systematically from stages one to five, followed immediately by stages eight, nine, and ten. The eight stages are as follows:

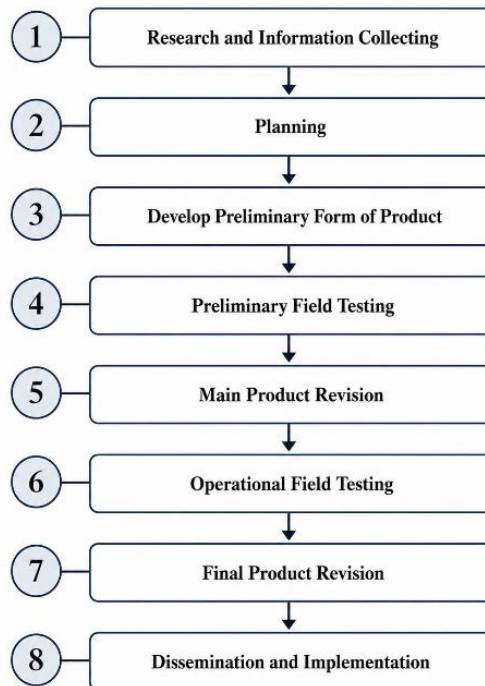


Figure 3.2 2 Borg & Gall R&D Model

1. Research and Information Collecting

This stage aims to identify the needs and problems faced by internship students and early career employee in conducting public speaking in the workplace. Data was collected through interviews, distribute the questionnaires, and literature studies related to the experiences of internship students and early career employees in conducting public speaking when entering the workforce. This was done to obtain in depth data on the obstacles and experiences they encountered in public speaking. This analysis was used to interpret the input from the interviews, which then became the basis for develop the Handbook.

a. Initial Interview

In the initial interview, the sampling technique used in this study is stratified sampling, which is a technique that divides the population into several groups based on specific characteristics. According to John W. Creswell (2014), stratified sampling is a

sampling procedure in which the population is divided into several subgroups or strata with similar characteristics, and samples are then selected from each group to ensure representation. Additionally, Uma Sekaran and Roger Bougie (2016) state that this technique ensures that every important subgroup within the population is adequately represented in the study.

In this study, respondents were divided into two groups: interns, and early career employees. From these two groups, two and three respondents/informants were selected three respondents from the student interns and two respondents from the early career employees bringing the total sample size to five respondents. This technique was used during the interviews to ensure that the perspectives of each group regarding public speaking experiences in the workplace were adequately represented.

The data obtained from the research was analyzed using qualitative descriptive techniques. This analysis was used to interpret the input from the interviews, which then became the basis for develop the handbook

b. Distribution of the need analysis questionnaire

Through the distribution of the needs analysis questionnaire, the researcher aimed to identify the type of handbook needed by respondents based on their needs and preferences for learning public speaking in the workplace. This questionnaire was distributed to the same five respondents as in the initial interview phase, consisting of interns and early career employees with diverse professional backgrounds.

Through this questionnaire, the researcher attempted to obtain more specific information regarding the concept and design of the handbook that respondents expected. The aspects covered in the questionnaire included preferences regarding book design, the

concept of material presentation, the language used, the proportion of book content, the format of material presentation, as well as additional features that could support the public speaking learning process.

2. Planning

Based on the data obtained, this stage includes planning the content, format, and design of the handbook. This involves determining the material to be included in the handbook, such as chapter of the handbook, proportion of Material, handbook concept and design, languages in handbook, and presentation of the Material.

3. Develop Preliminary of Form Product

At this stage, a preliminary draft of the guide was designed. The content of the guide included an overview of public speaking as a communication media, the functions of public speaking for internship students and early career employees, additional techniques and strategies for public speaking in English, and the problems encountered by internship students and early career employees when public speaking in the workplace, along with their solutions.

4. Preliminary Field Testing

At this stage, the validity of the product is evaluated by experts, particularly those from academic circles. The expert validator is a Academic Advisor of the reesearcher, Mrs. Girindra Putri Ardana Reswari S.Pd., M.Sc, Ph.D. This validation process plays a crucial role in ensuring the accuracy and completeness of the handbook's content. Through this evaluation, experts provide useful feedback and suggestions for improving both the content and the structure of the material. Additionally, the validation stage includes any necessary revisions to enhance the overall quality of the handbook.

The expert validation sheet is divided into two aspects:

a. Product Material Validation

To evaluate the quality and suitability of the handbook that had been developed, a product validation sheet was used as a research instrument. The product validation instrument used in this study is presented in the table below.

Table 1 Product Material Validation

| No. | Indicators | Score | | | | |
|-----|---|-------|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| 1. | The material is in accordance with the learning objectives. | | | | | |
| 2. | The material content of various phrases, role-play & exercises (conversations) that can be used for practice. | | | | | |
| 3. | The course content is sufficiently in-depth and relevant to the professional world. | | | | | |
| 4. | Sentences are structured effectively and communicatively. | | | | | |
| 5. | The material covers the correct use of public speaking terminology in the workplace. | | | | | |
| 6. | The material is relevant to user needs dan content of contextual example. | | | | | |

-
7. The language used is easy to understand and communicative.
-
8. The material reflects real conditions in the field.
-
9. The concepts presented in the material are appropriate.
-
10. The material is in accordance with relevant theories or references.
-

b. Product Media Presentation Validation

To evaluate the quality of the handbook's presentation, a product presentation validation sheet was used as a research instrument. The product presentation validation instrument used in this study is presented in the table below.

Table 2 Product Media Presentation Validation

| No. | Indicators | Skor | | | | |
|-----|---|------|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| 1. | The media design is attractive and professional | | | | | |
| 2. | The media's structure and learning objectives are clear | | | | | |
| 3. | The media's format is consistent and the layout is neat | | | | | |

-
4. The media has attractive colors,
and easy to read fonts

 - 5 The media suits the
characteristics of the users

 - 6 The media has attractive cover
and supporting illustrations

 - 7 The presentation of the material
is not confusing

 8. The instructions for use are clear

 9. The media is easy to use

 - 10 The Media is practical and
relevant to the early stages of the
professional world
-

5. Main Product Revision

After the product design is evaluated through discussions with an academic advisor or expert, various design weaknesses can be identified. These weaknesses are then addressed through a design refinement process. The researcher, as the product developer, is responsible for making improvements so that the final design optimally represents the goals and objectives of the product.

At this stage, the author carries out a revision process based on the suggestions and input from the academic advisor. Furthermore, the author presents a comparison of the design before and after the revision. The design revisions are discussed in detail and divided into several subsections. Some aspects discussed include errors in color usage and various improvements to the overall product design.

6. Operational Field Testing

This product has been tested on a larger scale with 20 participants, consisting of 10 interns and 10 employees who are just starting their careers. This larger-scale trial was conducted to ensure consistent results and to evaluate the product's ease of use among target users with diverse backgrounds. Some of them were in the same field as the five participants in the initial interview, while others were in different fields. At this stage, participants used the product in a public speaking learning process related to the workplace. In addition, researchers collected responses and feedback from participants regarding the clarity of the material, ease of use, and the product's usefulness in helping improve their public speaking skills.

This stage aimed to evaluate the product's effectiveness over a longer period of use and to assess whether it optimally met user needs. The results of this stage were then used as a basis for final revisions and refinements to the developed product.

The following are the questions used in the Operational Field Testing form to gather respondents' feedback on the product being developed.

a. Identity of the Respondent

This section describes the identity of the respondents who participated in the operational field testing. The respondents consisted of internship students and early-career employees who met the predetermined research criteria. Their demographic information, including respondent category and gender, is presented in the following table.

Table 3 Identity of the respondent

| No. | Questions |
|-----|-----------|
| 1. | Name |
| 2. | Age Range |

-
- < 18 years old
 - 18-23 years old
 - 23-28 years old
 - >28 years old
-

3. Current status

- Internship Students
 - Early Career Employees
-

4. Gender

- Male
 - Female
-

b. Main Question

This section presents the results of the main questionnaire administered during the operational field testing. The questionnaire was designed to evaluate the feasibility of the *Speak Easy Handbook* as a learning medium based on the respondents' perceptions. It consisted of 17 statements covering various aspects, including the handbook's content, language, design, practicality, and relevance to workplace communication. The respondents rated each statement using a five-point Likert scale, and the results are presented in the following table.

Table 4 Main question

| No. | Questions |
|-----|--|
| 1. | <p>This handbook has clear and easy-to-understand language</p> <p>1 = Strongly Disagree</p> <p>2 = Disagree</p> <p>3 = Fairly Agree</p> |

4 = Agree

5 = Strongly Agree

2. This handbook covers the material in sufficient depth.

1 = Strongly Disagree

2 = Disagree

3 = Fairly Agree

4 = Agree

5 = Strongly Agree

3. This handbook uses appropriate public speaking terms

1 = Strongly Disagree

2 = Disagree

3 = Fairly Agree

4 = Agree

5 = Strongly Agree

4. The language style of the handbook is communicative

1 = Strongly Disagree

2 = Disagree

3 = Fairly Agree

4 = Agree

5 = Strongly Agree

5. The handbook is aligned with the learning objectives

1 = Strongly Disagree

2 = Disagree

3 = Fairly Agree

4 = Agree

5 = Strongly Agree

6. This handbook is relevant to the professional world.

1 = Strongly Disagree

2 = Disagree

3 = Fairly Agree

4 = Agree

5 = Strongly Agree

7. This handbook presents contextual examples

1 = Strongly Disagree

2 = Disagree

3 = Fairly Agree

4 = Agree

5 = Strongly Agree

8. This handbook provides exercises and practice that are relevant to the professional world.

1 = Strongly Disagree

2 = Disagree

3 = Fairly Agree

4 = Agree

5 = Strongly Agree

9. This handbook has a clear structure

1 = Strongly Disagree

2 = Disagree

3 = Fairly Agree

4 = Agree

5 = Strongly Agree

10. This handbook is engaging

1 = Strongly Disagree

2 = Disagree

3 = Fairly Agree

4 = Agree

5 = Strongly Agree

11. This handbook has a neat layout.

1 = Strongly Disagree

2 = Disagree

3 = Fairly Agree

4 = Agree

5 = Strongly Agree

12. This handbook uses attractive colors.

1 = Strongly Disagree

2 = Disagree

3 = Fairly Agree

4 = Agree

5 = Strongly Agree

13. This handbook has an attractive cover design

1 = Strongly Disagree

2 = Disagree

3 = Fairly Agree

4 = Agree

5 = Strongly Agree

14. This handbook uses illustrations that support the content

1 = Strongly Disagree

2 = Disagree

3 = Fairly Agree

4 = Agree

5 = Strongly Agree

15. This handbook is easy to use independently.

1 = Strongly Disagree

2 = Disagree

3 = Fairly Agree

4 = Agree

5 = Strongly Agree

16. This handbook is easy to apply in practice.

1 = Strongly Disagree

2 = Disagree

3 = Fairly Agree

4 = Agree

5 = Strongly Agree

17. This handbook meets the workplace needs of early-career employees

1 = Strongly Disagree

2 = Disagree

3 = Fairly Agree

4 = Agree

5 = Strongly Agree

To analyze the data, the researchers used a quantitative method based on the scores respondents assigned to the product. These scores were then analyzed using the Likert scale theory to assess the level of acceptance and effectiveness of the product based on respondents' responses. The Likert scale is a measurement method used to assess the perceptions, attitudes, or opinions of individuals or groups regarding a social phenomenon (Bahrin, Alifah, & Mulyono, 2018; Saputra & Nugroho, 2017). The scale categories used in this study consist of Strongly Disagree, Disagree, Fairly Agree, Agree, and Strongly Agree. Respondents expressed their opinions by marking the degree of agreement or disagreement with statements that had been systematically designed, ranging from very positive to very negative attitudes toward an object (Zikmund & Griffin, 2016).

According to Pairunan and Saehana (2021), the results of the analysis using the ADDIE model indicate that the statements used are

positive in nature. Therefore, the scores for each response option were determined as presented in the following table.

Table 5 Score of the statement

| No. | Category | Score |
|-----|-------------------|-------|
| 1. | Strongly Disagree | 1 |
| 2. | Disagree | 2 |
| 3. | Fairly Agree | 3 |
| 4. | Agree | 4 |
| 5. | Srongly Agree | 5 |

The score that has been obtained from the scale above is then calculated using the following formula.

$$X = \mathbf{Mx/n}$$

M = Average Score

Mx = Total Scores

n = Total Respondents

According to Pairunan & Saehana (2021), the average scores from the questionnaire were then converted into qualitative categories as shown in the table.

Table 6 Interval of the Statements

| No. | Intervals | Category |
|-----|-------------|-------------------|
| 1. | 1.00 – 1.80 | Strongly Disagree |
| 2. | 1.81 – 2.60 | Disagree |
| 3. | 2.61 – 3.40 | Fairly Agree |
| 4. | 3.41 – 4.20 | Agree |
| 5 | 4.21 – 5.00 | Strongly Agree |

If the calculation results show a value of 4.21 or higher, then the majority of responses are categorized as “Strongly Agree.” Thus, this guidebook is deemed appropriate and suitable for use as a learning resource for new radio broadcasters. Although there are several items that scored below 4.21, the overall average is above 4.21, so the guidebook remains in the “Strongly Agree” category based on the dominant data trend. Therefore, the differences in scores on some items do not affect the overall suitability of the handbook.

7. Final Product Revision

Following field trials, final revisions to the handbook were made based on user feedback, suggestions, and evaluation results. Through this final revision phase, the guidebook is expected to become a more appropriate and effective learning resource for student interns and employees just starting out in their careers, improving their public speaking skills in a professional setting.

8. Dissemination & Implementation

The final stage of product dissemination to users or the wider community. By involving product distribution, training for users, making documentation or guidelines, and evaluating the implementation to ensure the success of the product in the field. Implementation to ensure the success of the product in the field.

3.3 Research Timeline

The research and product development process required approximately four months to complete. A detailed timeline of the research activities is presented in the following table.

Table 7 Research Timeline

| No. | Activities | March | April | May | June |
|-----|-------------------------------------|-------|-------|-----|------|
| 1. | Chapter I (Background of the Study) | ✓ | | | |

| | | | |
|-----|------------------------------------|---|---|
| 2. | Chapter III (Methodology) | ✓ | |
| 3. | Chapter I (Background Revision) | ✓ | |
| 4. | Chapter III (Background Revision) | ✓ | |
| 5. | Chapter II (Literature Review) | ✓ | |
| 6. | Product Development | | ✓ |
| 7. | Product Review I | | ✓ |
| 8. | Product Review II | | ✓ |
| 9. | Product Review III | | ✓ |
| 10. | Expert Validation | | ✓ |
| 11. | Chapter IV | | ✓ |
| 12. | Chapter IV (Data Results Revision) | | ✓ |
| 13. | Chapters I–V | | ✓ |
| 14. | Chapters I–V (Revision) | | ✓ |

3.5 Budget and Costing

The following table provides a detailed summary of the expenditures associated with the research and product development activities.

Table 8 Budgeting Plan

| No. | Item Description | Quantity | Unit cost (IDR) | Total cost (IDR) |
|-----|--|----------|--------------------|---------------------|
| 1. | Printing Research Instruments (draft of handbook contents) | 2 | 20,000 | 40,000 |
| 2. | Make copies of Documents During Counseling | 4 | 20,000 | 80,000 |
| 3. | Printing document + Soft Cover | 4 | 40,000 | 160,000 |

| | | | | |
|--------------|-----------------------|------------|--------|----------------|
| 3. | Premium App (Canva) | 3 (months) | 10,000 | 30,000 |
| 4. | Printing the Handbook | 5 | 54,000 | 270,000 |
| Total | | | | 580,000 |