

Developing TOEFL-Based Reading Materials to Enhance Undergraduate Students' Performance in TOEFL Reading

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ABSTRACT: This study aimed to develop TOEFL-based reading materials to enhance undergraduate students' performance in the TOEFL Reading section. Using Plomp's (1997) educational design model, the research proceeded through three phases: preliminary research, prototyping, and assessment. The final product was a 34-page handbook covering six key question types – main idea, supporting details, vocabulary, exception, inference, and reference – supplemented by test-taking strategies, practice exercises, and answer keys. Expert evaluations of content, language, and presentation rated the materials "good" to "very good" (average scores: 4.2, 4.3, and 4.4 respectively). Practicality assessments with undergraduate students indicated that the handbook is clear, accessible, and suitable for self-study. However, some explanations and terminology require further simplification, and the materials would benefit from greater content attractiveness and enhanced vocabulary-building activities. Overall, the handbook is pedagogically sound, practically applicable, and suitable as supplementary TOEFL preparation material. Future refinements may involve multimedia integration, richer explanations, and broader validation across diverse learner populations.

KEYWORDS: TOEFL Reading; reading materials; handbook; undergraduate students.

I. INTRODUCTION

The *Test of English as a Foreign Language* (TOEFL) is among the most widely recognized standardized assessments used to measure English proficiency for academic and professional purposes. For non-native speakers, it is a necessary qualification for admission to universities, applications for scholarships and jobs in domestic and foreign settings. In Indonesia, TOEFL certification has gained increased prominence not only as a requirement for postgraduate study but also as a prerequisite for graduation and professional advancement. At the University of Mataram, for example, English Education students must achieve a minimum TOEFL score of 500 to graduate, while other programmes require a score of at least 400, as stipulated in the *Academic Guidelines of the Faculty of Teacher Training and Education* (2020). This institutional policy underscores the national recognition of English proficiency as a key indicator of academic readiness and global competitiveness. However, many students struggle to achieve these benchmarks, often retaking the test multiple times due to persistent difficulties in the Reading section.

The TOEFL comprises four main sections – Listening, Structure (Grammar), Reading, and Writing. Among these, the Reading section is often perceived as the most demanding because it measures not only linguistic competence but also higher-order comprehension and reasoning skills. This section typically features 600 – 700-word passages drawn from academic sources, followed by 30 – 40 multiple-choice questions on main ideas, supporting details, vocabulary in context, inference, and rhetorical organisation. Test-takers must answer these questions within a limited time frame of 54 – 72 minutes. Consequently, success in TOEFL Reading depends heavily on effective time management and the ability to employ strategic reading techniques such as skimming, scanning, predicting, and inferring meaning (Fitria, 2024; Isma Gustin, 2023; Samad et al., 2017; Zalha et al., 2020)

Research has shown that Indonesian EFL learners face recurring challenges in this section, including limited vocabulary, difficulties identifying main ideas, weak inferencing skills, and poor time management (Adib Nazri et al., 2020; Dahlan, 2021). These issues stem from both internal and external factors. Internally, many students lack reading strategies and sufficient exposure to academic texts; externally, they often rely on textbooks that provide inadequate preparation for TOEFL-specific question types (Girsang et al., 2019; Pramesti, 2023; Fitria, 2022; Isma Gustin, 2023). As a result, students may possess general reading comprehension skills but remain unprepared for the cognitive and strategic demands of TOEFL Reading.

Given these challenges, there is a strong pedagogical need to design and develop TOEFL-oriented learning materials that explicitly address the structure and demands of the test. Such materials should include clear explanations of question types, guided

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practice, vocabulary development, and strategic test-taking support. According to Grabe (2009) and Sharpe (2004), focused exposure to diverse reading question types enhances both comprehension and test performance, while structured strategy instruction supports learners' ability to transfer reading skills across contexts. In addition, materials that integrate vocabulary-building and contextualised practice can help students overcome lexical and inferential difficulties that often impede comprehension (Aeni, 2024; Nursalim et al., 2025).

In the Indonesian higher-education context – where TOEFL performance significantly influences academic progression and employability – the availability of accessible, localised, and well-structured TOEFL Reading materials is essential. Therefore, this study aims to develop and evaluate TOEFL-based reading instructional materials that systematically introduce question types, provide explicit strategy training, and facilitate autonomous learning. The primary goal is to improve undergraduate students' reading comprehension, strategic awareness, and overall TOEFL Reading performance.

II. RESEARCH METHOD

This study followed (Plomp, 1997) Research and Development model, progressing through three key phases: Preliminary Research, Prototyping, and Assessment. It was conducted in the undergraduate English study program at University of Mataram, involving expert evaluators and ten fourth-semester students.

Preliminary Research employed interviews and observations to identify students' TOEFL Reading challenges and learning needs. Based on these insights, a 34-page TOEFL Reading handbook was developed, featuring six main sections covering key TOEFL Reading question types: main idea, supporting details, vocabulary, exception, inference, and reference. Each section included clear learning objectives, explanations of question types, sample questions with detailed answer keys, and varied practice exercises. Supplementary materials, such as test-taking strategies for multiple-choice questions, were also integrated to support learners' comprehension and time management skills.

In the Assessment phase, experts assessed the handbook's content, language, and presentation using a Likert scale rating system, categorizing scores as very good (4.2 and above), good (3.4 to 4.2), sufficient (2.6 to 3.4), poor (1.8 to 2.6), and very poor (below 1.8). For practicality, the student participants completed questionnaires with eight statements rated on a 5-point scale ranging from Strongly Agree (5) to Strongly Disagree (1), addressing clarity, appropriateness, and ease of use of the handbook.

The data obtained from expert evaluations and student questionnaires were analyzed quantitatively by calculating mean scores for each aspect assessed. The average ratings were then compared against the predetermined criteria to determine the overall quality category of the handbook. To ensure reliability, consistency of expert ratings was examined, and student responses were reviewed for patterns in agreement and variation. Descriptive statistics (means, percentages, and frequency distributions) were used to summarize the results, highlighting the strengths of the material and identifying any aspects requiring improvement. These analyses provided comprehensive evidence of both the validity and practicality of the TOEFL Reading handbook as instructional material.

III. RESULTS AND DISCUSSION

Results

The results of the initial analysis in general can be summarized that it is important to develop reading teaching materials that are suitable for students' needs, which can help them in achieving the predetermined TOEFL scores and can be additional instructional materials in addition to the textbooks that have been used.

In the prototyping stage, the central task involved designing the instructional content, culminating in a handbook comprising 34 pages. The handbook is named Handbook TOEFL Reading Section for English Students and it consists of six main parts involving main idea, supporting details, vocabulary, exception, inference and reference questions and each part has learning aims, main idea questions, sample questions, finding answers to questions and practice finding answers to questions. The handbook also has a cover page, preface, table of contents and a list of references. In addition, multiple-choice test strategies, TOEFL reading practice and answer keys are also provided within the handbook

The developed handbook was then assessed or evaluated in terms of its content, language dan presentation aspects. This assessment involved experts for subject matter, language and media and the assessment from the students for its practicality. The following are the assessment results of the developed instructional materials covering content, language, presentation and its practicality.

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Table 1. Content Components

No.	Criteria	Score
1	The material presented aligns with learning objectives	5
2	The material is arranged clearly	4
3	The material integration is appropriate	4
4	The examples provided are appropriate	5
5	The material presented is easy to study	4
6	The material is interesting to students	3
Total Score		25
Score Percentage		83.33
Average Score		4.2
Category		Good

Table 2. Language Components

No.	Criteria	Score
1	Clarity of language in the material	5
2	Conformity with English language rules	5
3	Language in explanations is easy to understand	3
4	The difficulty level of language in exercises is adequate	4
Total Score		17
Score Percentage		85.00
Average Score		4.3
Category		Very Good

Table 3. Presentation Components

No.	Criteria	Score
1	Presentation systematics	4
2	Sequence of presentation	5
3	Foreword	4
4	Examples of questions	5
5	Question presentation	4
6	Answer keys	5
7	References	4
Total Score		31
Score Percentage		88.57
Average Score		4.4
Category		Very Good

The content assessment consists of six criteria and it was conducted by the subject matter expert. The assessment results as shown in Table 1 indicate that the content component in the teaching materials falls into the "good" category with an average score of 4.2.

The language assessment consists of four criteria and it was carried out by a language expert. The results presented in Table 2 show that the language component received a category of "very good" with an average score of 4.3.

The presentation assessment consists of seven criteria and it was conducted by the subject matter expert. Results shown in Table 3 indicate that the presentation component is categorized as "very good" with an average score of 4.4.

The practicality assessment (Table 4) comprises eight statements, each of which is scored on a five-point scale, ranging from strongly agree (very practical) to strongly disagree (not practical). For this assessment, ten students at the fourth semester were given the handout and asked to give their responses to the eight statements in the questionnaire.

Table 4. Practicality Assessment

No.	Statement	Scale				
		5	4	3	2	1
1.	Examples of TOEFL reading question types in the Handbook are provided clearly and are easy to understand.	5	5			
2.	The practice questions provided in the Handbook are sufficient and varied to improve reading skills.	3	7			
3.	The explanations for example and practice questions are presented in detail and are easy to understand.	6	2	2		
4.	Strategies or techniques for solving TOEFL reading questions are explained practically.	5	4	1		
5.	The Handbook is easy to use for self-study without additional explanation from an instructor.	2	8			
6.	The language and terms used in the Handbook are easy to understand.	5	3	2		
7.	The format and appearance of the Handbook are attractive and facilitate finding materials and exercises.	4	6			
8.	Overall, I feel this Handbook is very practical and suitable to be used as TOEFL Reading study material.	4	6			

Based on the practicality assessment result presented in Table 4, it can be further explained:

1. **Clarity of Sample Question Types**
Five respondents rated 5 (strongly agree/very practical) and five rated 4 (agree/practical). This shows most participants believe the sample questions in the handbook are very clear and easy to understand.
2. **Variety and Quantity of Practice Questions**
For sufficient and varied practice questions, 3 respondents gave a score of 5 and 7 respondents gave a 4, indicating the exercises are considered adequate and diverse to help improve TOEFL reading skills.
3. **Detailed and Understandable Question Discussions**
Received a score of 5 from 6 respondents, 4 from 2 respondents, and 3 from 2 respondents. Although the majority found the explanations detailed and clear, some feel that explanations could still be improved to be more easily understood by all users.
4. **Explanation of Strategies or Techniques**
The strategy and technique section received scores of 5 from 5 respondents, 4 from 4 respondents, and 3 from 1 respondent. This indicates the strategies provided are practical and assist users in effectively solving questions.
5. **Ease of Use for Self-Study**
Most respondents (8) scored 4 and 2 scored 5 for ease of using the handbook independently without additional guidance, indicating it is very suitable for self-study.
6. **Language and Terminology Used**
The language and terms are generally easy to understand, with 5 respondents giving a 5, 3 giving a 4, and 2 giving a 3. While some users find some terms somewhat difficult, overall, the language used is considered adequate and understandable.
7. **Format and Appearance**
Received 4 from 6 respondents and 5 from 4 respondents, showing the design and layout are quite attractive and facilitate finding materials and exercises.
8. **Overall Practicality**
The last statement on overall practicality received 4 from 6 respondents and 5 from 4 respondents, indicating positive perception regarding the handbook's effectiveness and ease of use as TOEFL Reading study material.

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Discussion

The results of this study affirm that the TOEFL-Based Reading Handbook is both pedagogically sound and practically useful for improving students' test preparedness. The handbook achieved positive evaluations across all aspects – content, language, and presentation – with overall ratings ranging from “good” to “very good.” These findings support Reiser & Dempsey's (2018) assertion that instructional effectiveness relies on the alignment between learning objectives, instructional strategies, and content organisation.

In terms of content, the average score of 4.2 indicates that the handbook's materials align effectively with the intended learning goals. Each unit focuses on a specific TOEFL Reading question type – main idea, supporting details, vocabulary, exception, inference, and reference – providing learners with systematic exposure to authentic test tasks. However, the relatively lower score in student interest (3.0) highlights the need for more engaging presentation techniques. Mayer (2017) emphasises that visually appealing and interactive materials enhance learner motivation and comprehension through dual-channel processing. Future revisions could incorporate visual highlights, real-world reading contexts, or digital resources to enhance engagement and accessibility.

The language aspect, rated 4.3 (“very good”), suggests that the handbook effectively employs clear, level-appropriate English. Brown (2000) notes that linguistic clarity minimises cognitive load and facilitates comprehension, especially for learners with intermediate proficiency levels. Nevertheless, some respondents reported difficulty with specific terms, suggesting the need for additional scaffolding such as glossary lists, vocabulary boxes, or translated annotations to support comprehension.

The presentation aspect, which achieved the highest score (4.4), reflects the handbook's logical organisation and systematic layout – from explanations to guided practice and answer keys. This finding is consistent with Gagné et al. (2004) model of instructional sequencing, which advocates for progressive scaffolding to build learner competence. The inclusion of prefaces, examples, exercises and references enhances usability and coherence, allowing students to navigate the materials independently and confidently.

The practicality assessment further confirmed the handbook's effectiveness as a self-study tool. Most respondents agreed that the explanations, examples and strategies were clear and applicable. This finding supports Tomlinson's (2018) concept of “learnability,” which stresses that well-designed materials should enable learners to engage autonomously in the learning process. The handbook's layout, clarity and self-access format make it particularly suitable for independent TOEFL preparation, reducing reliance on teacher guidance.

Nevertheless, several areas warrant further enhancement. Some participants expressed that explanations could be simplified and supported by additional examples, while others suggested including more varied vocabulary-building exercises. Incorporating activities such as synonym recognition, paraphrasing practice, and contextual guessing could strengthen learners' ability to handle inference and vocabulary-in-context questions – two of the most challenging components of TOEFL Reading (Grabe, 2009; Nursalim et al., 2025). Moreover, integrating digital or multimedia components – such as QR-linked videos, online quizzes, or gamified tasks – could foster engagement and support multimodal learning (Harmer, 2007; Mayer, 2017; Puspitasari et al., 2025)

Overall, these findings indicate that while the TOEFL-Based Reading Materials are both practical and pedagogically sound, there remains room for targeted improvements to maximize their instructional effectiveness. Specifically, enhancing content attractiveness and vocabulary acquisition through varied, contextualized exercises and more interactive media could boost learner motivation, reduce cognitive load, and improve reading comprehension and test performance. Additionally, expanding explanatory sections and simplifying complex terms would increase accessibility and usability for learners.

IV. CONCLUSIONS

Using (Plomp, 1997) model, this study developed a TOEFL-based reading handbook to enhance university students' performance in the TOEFL Reading section. Expert evaluation rated the materials “good” to “very good” in content, language, and presentation, while student feedback confirmed their practicality and suitability for self-study. Key strengths include the clarity of question types, variety of practice exercises, and practical test-taking strategies. However, some learners noted that certain explanations could be made clearer and that selected terms may require simplification. Enhancing content attractiveness and integrating contextualized vocabulary activities would further increase engagement and comprehension. Overall, the handbook is pedagogically sound and applicable as supplementary TOEFL preparation material.

For future development, adding interactive vocabulary tasks, richer explanations, and multimedia features is recommended to optimize learning outcomes. Lecturers may employ the handbook as either a self-access resource or classroom support material. Moreover, future research could investigate its long-term effectiveness, compare it with other instructional design models, and explore digital adaptations to enhance accessibility and learner engagement.

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