

Developing Local-Content Agricultural Reading Materials for Freshmen

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ABSTRACT: This study developed and evaluated agricultural local-content-based instructional reading materials alongside a Group Reading Assessment (GRA) instrument for English as a Foreign Language (EFL) freshmen at STIPER Belitang, an agricultural college in South Sumatra, Indonesia. Employing Akker's (1999) developmental research framework and Tessmer's (1993) formative evaluation model, this investigation addressed a critical yet underexplored gap—the systematic absence of contextualized English reading resources integrating authentic local agricultural content for Indonesian university freshmen. The materials were validated by expert reviewers and tested through one-to-one, small group, and field trial phases. Results confirmed high validity ($M = 3.10$), high practicality ($M = 3.12$ and 3.08 , respectively), and significant criterion-related validity ($r = 0.711$ for reading materials; $r = 0.812$ for the GRA). The field test further revealed that 71.4% of students surpassed the minimum mastery criterion, affirming the products' potential effectiveness. This study contributes a replicable, context-sensitive framework for ESP material development that bridges language learning with students' immediate agricultural environment, thereby enhancing both learner engagement and reading comprehension outcomes.

Keywords: *developmental research, ESP reading materials, local-content integration, agricultural context, EFL freshmen.*

PENGEMBANGAN BAHAN BACAAN PERTANIAN BERBASIS KEARIFAN LOKAL UNTUK MAHASISWA BARU

ABSTRAK: Penelitian ini mengembangkan dan mengevaluasi bahan ajar membaca berbasis muatan lokal pertanian beserta instrumen Group Reading Assessment (GRA) untuk mahasiswa baru program bahasa Inggris sebagai bahasa asing (EFL) di STIPER Belitang, sebuah perguruan tinggi pertanian di Sumatera Selatan, Indonesia. Dengan menggunakan kerangka penelitian pengembangan Akker (1999) dan model evaluasi formatif Tessmer (1993), penelitian ini menjawab kesenjangan kritis yang belum banyak dieksplorasi—ketiadaan sumber belajar membaca bahasa Inggris yang secara sistematis mengintegrasikan konten lokal pertanian autentik untuk mahasiswa baru perguruan tinggi di Indonesia. Produk yang dikembangkan divalidasi oleh peninjau ahli dan diuji melalui tahapan perorangan, kelompok kecil, dan uji lapangan. Temuan mengonfirmasi validitas tinggi ($M = 3,10$), praktikalitas tinggi ($M = 3,12$ dan $3,08$), dan validitas terkait kriteria yang signifikan ($r = 0,711$ untuk bahan bacaan; $r = 0,812$ untuk GRA). Uji lapangan menunjukkan bahwa 71,4% mahasiswa melampaui kriteria ketuntasan minimal, mengafirmasi efektivitas potensial produk. Penelitian ini memberikan kontribusi kerangka pengembangan bahan ajar ESP yang dapat direplikasi dan sensitif terhadap konteks, yang menjembatani pembelajaran bahasa dengan lingkungan pertanian mahasiswa secara langsung.

Kata kunci: *penelitian pengembangan, bahan ajar membaca ESP, integrasi muatan lokal, konteks pertanian, mahasiswa baru EF*

INTRODUCTION

English reading proficiency constitutes one of the most foundational academic competencies for university students in Indonesia, as it underpins access to scholarly resources and determines overall academic performance. Reading, broadly understood as a cognitive process of constructing meaning from printed text (Cooper, Warncke, & Shipman, 1988), is further complicated in foreign language contexts by the role of prior knowledge or "schema," which mediates how readers process and interpret new information (Cochran, 1993). For Indonesian learners, this cognitive complexity is compounded by systemic challenges: limited exposure to English outside the classroom, high-density learning environments often comprising 40 to 50 students per class (Sahiruddin, 2013), and instructional materials that frequently fail to resonate with students' disciplinary backgrounds or lived experiences.

Empirical evidence consistently underscores the severity of reading underachievement among Indonesian students. International assessment data indicate that a substantial proportion of Indonesian fifteen-year-olds perform below the global benchmark for reading literacy (Latief, 2009). At the tertiary level, this deficit persists: students at agricultural colleges such as STIPER Belitang routinely score below satisfactory thresholds on reading assessments, a phenomenon partly attributable to the mismatch between available instructional materials and learners' actual proficiency levels. A preliminary analysis conducted for this study revealed that the existing textbook—sourced from a general agricultural ESP series from Universitas Andalas—presented texts with readability levels ranging from 9.5 to 11.6 on the Flesch-Kincaid scale, substantially exceeding the students' measured reading proficiency of approximately Level 7 on Stark's Informal Reading Inventory (Stark, 1982).

A further challenge concerns the cultural dimension of instructional material selection and its implications for learner motivation. Widdowson (1990, as cited in Berardo, 2006) contends that reading materials should be authentic, enabling learners to perceive the language as practically applicable beyond the academic environment. When materials draw on familiar cultural contexts, students are more likely to engage substantively with the content, thereby improving comprehension outcomes (Tomlinson, 2011). Moreover, the integration of local cultural content into English Language Teaching is recognized not merely as a pedagogical strategy but as a mechanism for preserving regional identities in an era of globalization (Alwasilah, 2006; McKay, 2003). Existing resources at STIPER Belitang, however, contained no material drawing on Belitang's agricultural heritage—a significant oversight given that the institution is situated in Ogan Komering Ulu Timur, South Sumatra, a region widely recognized for its rice cultivation.

Within the English for Specific Purposes (ESP) framework, Chen (2011) argues that tertiary English instruction must be strategically aligned with students' academic disciplines. Such alignment not only renders the language contextually meaningful but also facilitates the acquisition of technical vocabulary that students require to access disciplinary literature. Despite broad consensus on these principles in the ESP literature (Dudley-Evans & St. John, 1998; Hutchinson & Waters, 1987), their systematic application to material development for Indonesian agricultural college freshmen remains largely unrealized.

Previous studies have not systematically developed ESP reading materials that integrate local agricultural content for Indonesian university freshmen. This study addresses that gap by developing and evaluating agricultural local-content-based

instructional reading materials, together with a corresponding Group Reading Assessment (GRA), for freshmen at STIPER Belitang. By anchoring reading texts in the agricultural landscape of Belitang—a sub-district of Ogan Komering Ulu Timur recognized as the "granary of South Sumatra"—this study aims to simultaneously enhance reading comprehension, strengthen learner motivation, and provide a replicable model for context-sensitive ESP material development in Indonesian agricultural higher education.

METHODOLOGY

1. Research Design and Method

This study employed a developmental research design aimed at producing, validating, and evaluating two instructional products: agricultural local-content-based reading materials and a Group Reading Assessment (GRA). Consistent with Akker's (1999) conceptualization, developmental research focuses on crafting functional educational products through a rigorous iterative sequence of analysis, design, evaluation, and revision. This framework was selected because it explicitly positions product quality—assessed across validity, practicality, and effectiveness dimensions—as the primary research outcome, making it the most methodologically appropriate approach for instructional design investigations (Nieveen, 2007). To operationalize the evaluation phase, the study adopted Tessmer's (1993) formative evaluation model, which provides a sequential structure for gathering and integrating feedback from multiple stakeholder groups—experts, individual learners, and class-sized samples—at progressively larger scales of implementation.

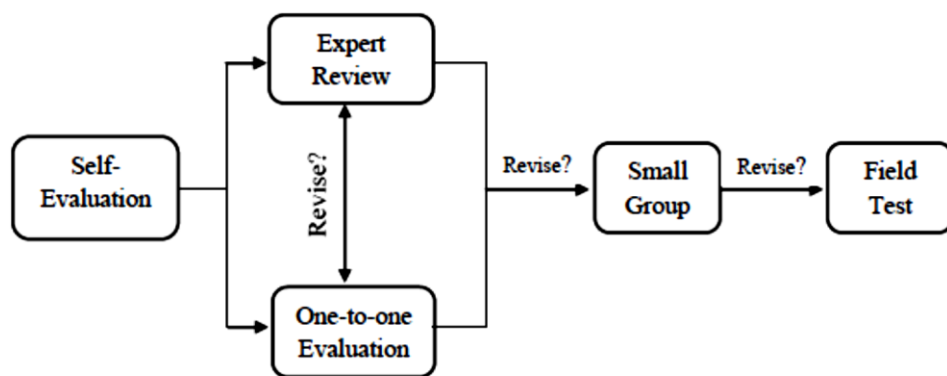


Figure 1. General Sequence of Formative Evaluation (Tessmer, 1993)

2. Research Procedures

The developmental process unfolded across three principal phases. In the *analysis phase*, the researcher conducted a comprehensive situational assessment encompassing (1) an instructional analysis of the existing syllabus and textbook, (2) an environmental analysis of classroom and institutional conditions, (3) a learner needs analysis using interview and questionnaire data, and (4) a reading level assessment using Stark's Informal Reading Inventory. In the *design phase*, ten reading passages were constructed—five for instructional use and five for assessment—spanning difficulty levels 5 through 9 to bracket the students' identified optimal reading level (Level 7). The *evaluation and revision phase* proceeded iteratively through five stages: self-evaluation,

expert review, one-to-one evaluation, small-group evaluation, and field test, with targeted revisions implemented between stages. This iterative cycle ensured that product quality was continuously refined based on empirical feedback. The procedural flow can be represented as: Analysis → Design → Evaluation → Revision → (back to Evaluation if needed), reflecting the recursive logic that distinguishes developmental research from linear experimental designs.

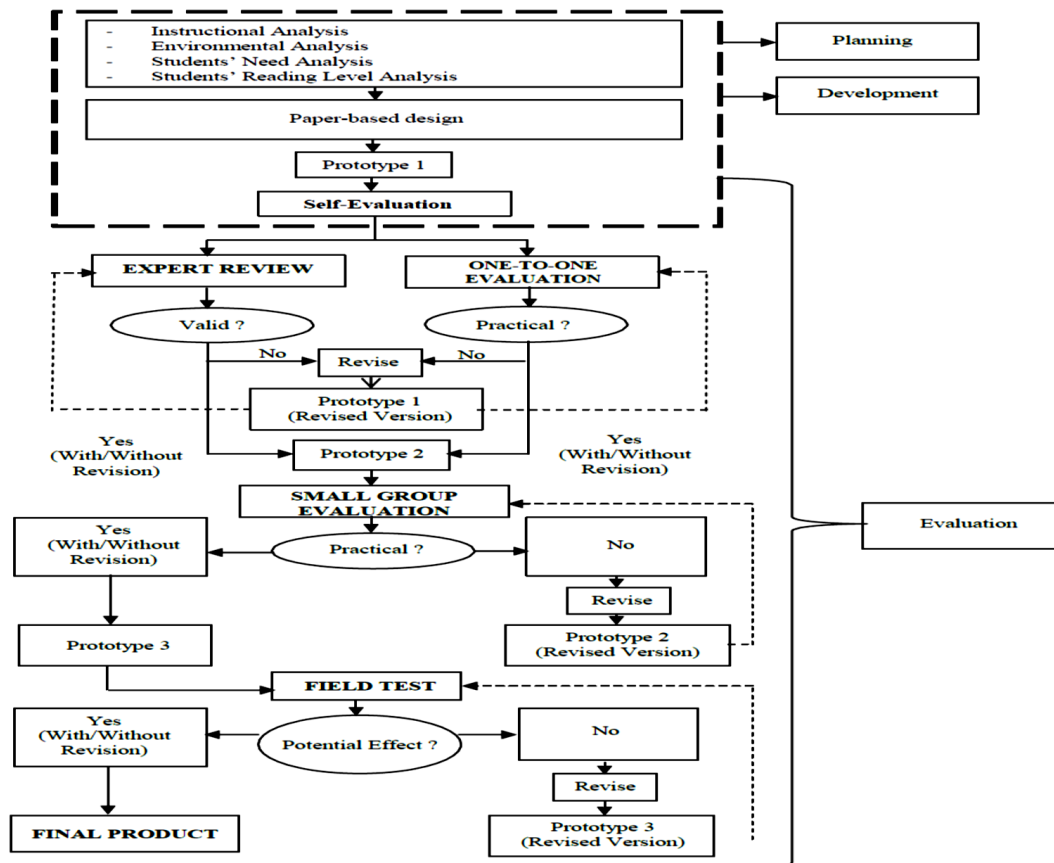


Figure 2. The Procedure of the Study

3. Research Participants

The study engaged three distinct participant groups, each corresponding to a specific evaluation stage. An expert review was conducted by two qualified specialists: an English lecturer from Sriwijaya University responsible for content validity assessment and a second English lecturer with established expertise in instructional design who evaluated construct validity. Subsequent evaluation stages involved freshmen from STIPER Belitang, selected through purposive sampling to represent three English proficiency levels—high, medium, and low—as determined by prior academic records. The one-to-one evaluation engaged three students (one per proficiency level), the small group evaluation involved nine students (three per level), and the field test was administered to 35 second-semester students in an authentic classroom setting. Participants were mutually exclusive across stages to prevent response contamination.

4. Instrumentation

Four primary instruments were employed in this study. (1) *Expert validation questionnaires* utilized a four-point Likert-type rating scale (1 = Strongly Disagree to 4 = Strongly Agree) with open-ended commentary sections, tailored separately for content and construct validity. (2) *Student practicality questionnaires* consisted of 30 structured items assessing learners' perceptions of the materials' usability and relevance. (3) *Stark's Informal Reading Inventory (IRI)* (Stark, 1982) served as the standardized criterion measure for assessing reading levels and establishing criterion-related validity, selected for its diagnostic precision in categorizing reading performance into independent, instructional, and frustrational levels—a distinction essential for calibrating material difficulty in EFL contexts. (4) The *Group Reading Assessment (GRA)*, a 50-item multiple-choice instrument developed by the researchers, evaluated comprehension competencies including main idea identification, supporting detail recognition, cause-effect reasoning, inferential thinking, sequence comprehension, referential understanding, and vocabulary knowledge. The readability of all instructional texts was assessed using the Flesch-Kincaid readability formula (Kincaid et al., 1975), chosen for its broad applicability in quantifying text difficulty and its practical accessibility via the online tool at <http://readability-score.com>.

5. Data Collection Techniques

Data collection proceeded systematically across each evaluation phase. During the analysis phase, learner needs data were gathered through unstructured interviews with the English lecturer, document analysis of existing syllabi and test score records, and administration of the Stark IRI to the full class cohort. During evaluation phases, quantitative data were collected via expert questionnaires and student practicality questionnaires. In the field test phase, reading comprehension performance was assessed using both the GRA and the Stark IRI to enable criterion-related validity computation.

6. Data Analysis

Validity and practicality data were analyzed by computing mean scores from expert and student questionnaires, respectively, and interpreting results against the categorization criteria adapted from Kubiszyn and Borich (1993), as presented in Table 1. Item-level validity for the GRA was assessed using SPSS version 17 through point-biserial correlation, and item difficulty and discrimination indices were computed to ensure assessment quality. Criterion-related validity was established through Pearson Product-Moment Correlation. The proportion of students achieving the minimum mastery criterion ($KKM = 70$) was computed and categorized using the Sriwijaya University (2012) classification scheme presented in Table 2.

Table 1. Validity and Practicality Categorization

Average Score	Category
3.26 – 4.00	Very high
2.51 – 3.25	High
1.76 – 2.50	Low
1.00 – 1.75	Very low

Source: Modified from Kubiszyn & Borich, 1993

$$\text{Mastery (\%)} = \frac{\text{The number of students obtaining score } \geq 70}{\text{The total number of students}} \times 100$$

Table 2. Potential Effect Categorization

Mastery Percentage	Category
86 – 100	Very high
71 – 85	High
56 – 70	Average
41 – 55	Low
0 – 40	Very low

Source: Universitas Sriwijaya, 2012

FINDINGS AND DISCUSSION

Findings

1. Instructional Analysis

In the initial phase of development, the existing syllabus and textbook used at STIPER Belitang were systematically analyzed. The English course syllabus allocated four instructional meetings to agricultural reading materials, all drawn from the text "Special English Agriculture" (Universitas Andalas). The Flesch-Kincaid readability levels of these texts were as follows: "Dry Land Farming" (Level 9.5), "Pollution is Spoiling the Air You Breathe" (Level 11.0), "Soil as a Medium for Plant Growth" (Level 10.4), and "Rice Plant Growth" (Level 11.6). Critically, the students' reading proficiency was assessed at Level 7 using Stark's IRI, revealing a substantial readability gap between available materials and learner capacity. Additionally, no existing material addressed agricultural local content specific to Belitang.

2. Environmental Analysis

An observation-based environmental analysis of STIPER Belitang identified the following key institutional conditions relevant to the instructional design: (1) STIPER Belitang is the only college of agriculture in OKU Timur; (2) LCD projectors were available in each classroom; (3) the majority of first-year students were freshmen with no prior exposure to university-level English for academic purposes; (4) OKU Timur is a predominantly agricultural district; and (5) no locally grounded English reading materials were available to the English lecturer. These conditions collectively supported the feasibility and necessity of developing agricultural local-content-based reading materials for implementation at this institution.

3. Students' Needs Analysis

A comprehensive needs analysis was conducted to assess students' reading achievement, comprehension barriers, perceptions of existing materials, and expectations for the new resources. Academic records indicated unsatisfactory mid-semester and final-semester reading scores. Unstructured interviews with the lecturer revealed four key concerns: (1) the majority of freshmen demonstrated poor reading skills; (2) word pronunciation constituted the primary comprehension obstacle; (3) students exhibited higher learning motivation when materials connected to familiar daily or local activities;

and (4) no reading resources integrating local agricultural content from Belitang were available. A 12-item questionnaire administered to freshmen confirmed these findings: students' reading proficiency was generally low, vocabulary limitations and pronunciation difficulties were the primary barriers, independent reading outside the classroom was rare, and a strong majority expressed preference for English materials incorporating local agricultural themes. These results confirm that the development of contextualized instructional reading materials was both necessary and pedagogically warranted.

4. Students' Reading Level Analysis

The Stark Informal Reading Inventory (Stark, 1982) was administered to determine the optimal instructional reading level for the target students. The instrument utilized passages spanning Levels 4 through 8, each categorized into three stages: frustrational, instructional, and independent. Distributional results indicated that at Level 4, 42.8% of students reached the independent stage, while at Levels 5, 6, and 8, the majority were classified at the frustrational stage (48.7%, 54.2%, and 68.5%, respectively). At Level 7, 62.8% of students operated at the instructional stage, representing the highest proportion of learners functioning within the pedagogically productive zone. Accordingly, Level 7 was established as the students' optimal instructional reading level, providing the calibration benchmark for subsequent material development.

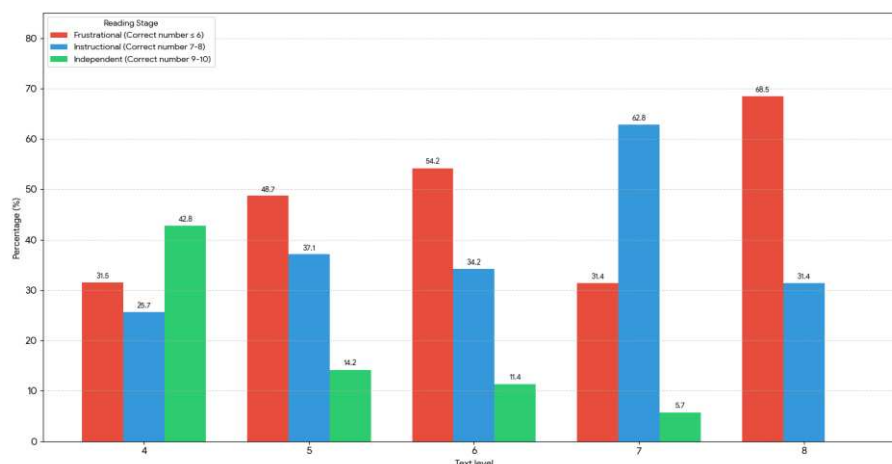


Figure 3. The Distribution of Students' Reading Levels

5. Design Phase Results

Drawing on the analysis findings, the design phase commenced with the formulation of learning objectives. Content for the reading passages was gathered from multiple authoritative local sources, including the Department of Agriculture in OKU Timur, local farmers, and the OKU Timur Statistics Department (BPS). Ten original passages were composed by the researchers: five for instructional reading materials (covering descriptive, procedure, and explanatory text types) and five for the GRA. To ensure appropriate coverage across proficiency levels, one text was calibrated precisely to Level 7, while the remaining four spanned two levels above (Levels 8 and 9) and two below (Levels 5 and 6). Each instructional text was accompanied by exercises in multiple-choice, short-answer, and true-or-false formats. The GRA comprised 50 multiple-choice items targeting seven comprehension competencies: main idea, supporting details, cause-

and-effect relationships, inferences, sequencing, referencing, and vocabulary. Text readability was verified using the Flesch-Kincaid online tool (<http://readability-score.com>).

6. Evaluation Results

6.1 Self-Evaluation

The initial self-evaluation phase involved a systematic review of the developed materials by the researchers. This process identified several technical errors relating to spelling accuracy and grammatical correctness within the texts. Representative examples and their corrections are presented in Table 3.

Table 3. Result of Self-Evaluation

No.	Mistakes	Revision	Type
1	"What do you <i>thik</i> the man does?"	"What do you <i>think</i> the man does?"	Misspelling
2	"What does the underlined <i>words</i> mean?"	"What do the underlined <i>words</i> mean?"	Grammatical error

6.2 Expert Review

The expert review stage assessed the validity of the developed products through two evaluative lenses: content (linguistic accuracy) and construct (instructional design). Two specialists independently assessed the materials using structured rating scale questionnaires supplemented with qualitative commentary. The content validity evaluator, an English lecturer from Sriwijaya University, identified specific revisions required, as detailed in Table 4.

Table 4. Expert's Comments on Content Aspect

No.	Aspect	Expert's Comments	Writers' Response
1	Appropriateness of content with student characteristics	The third statement must be reworded to reflect measurable learner outcomes.	Statement revised: "...can <i>increase</i> students' interest and motivation to read"
2	Exercise and evaluation aspects	Clarify whether questions assess vocabulary or referential comprehension.	Items 2, 4, 12, 27, and 36 were confirmed as referential comprehension questions
3	Linguistic aspects of the contents	Revise instructional language for clarity and pedagogical appropriateness	"Make a paragraph..." → " <i>Write a paragraph...</i> "; "Read and comprehend..." → " <i>Read the following text carefully!</i> "

The construct validity evaluator, an English lecturer recognized for expertise in instructional design, determined that the materials and assessment tool were valid and required no further revision at this stage. Overall validity scores, calculated as mean ratings from both validation sheets (content and construct), are reported in Table 5.

Table 5. Validity Level of the Products

No.	Aspect	Average Score	Interpretation
1	Content (Linguistic Accuracy)	3.20	High validity
2	Construct (Instructional Design)	3.00	High validity
	Overall Average Score	3.10	High validity

6.3 One-to-One Evaluation

Three students representing distinct English proficiency levels (high, medium, and low) used and assessed the developed reading materials during the one-to-one evaluation. Based on analysis of the 30-item practicality questionnaire, the mean score of 3.12 indicated a high level of practicality, confirming that the materials were accessible and appropriate for individual learner use before broader implementation.

6.4 Small Group Evaluation

Nine second-semester students from STIPER Belitang—three representatives from each proficiency level, all distinct from one-to-one participants—participated in the small group evaluation. Their 30-item questionnaire responses yielded a mean practicality score of 3.08, again indicating high practicality. These results corroborate the one-to-one findings and suggest that the materials function effectively within a small-scale classroom setting.

6.5 Field Test

The field test was conducted with 35 second-semester students in an authentic classroom setting, all of whom had not participated in prior evaluation stages. Before field administration, item-level validity of the GRA was assessed using SPSS version 17. Nine items (10, 19, 23, 26, 34, 38, 43, 46, and 49) did not meet the validity criterion and were revised. Item difficulty analysis classified 10 items as easy, 31 as average, and 9 as difficult. Discrimination index analysis indicated that the majority of items demonstrated satisfactory discriminatory power. Following this refinement, criterion-related validity was computed using Pearson Product-Moment Correlation: the GRA correlated significantly with Stark's IRI ($r = 0.812$), and the reading materials correlated significantly with the GRA ($r = 0.711$), both exceeding Wallen and Fraenkel's (1991) recommended threshold of $r = 0.70$. Furthermore, 71.4% of students achieved the minimum mastery criterion score of 70, placing the products' potential effectiveness in the "high" category according to the Sriwijaya University (2012) classification.

Discussion

1. Interpretation of Findings in Relation to the Research Gap

The results of this study collectively affirm that the developed agricultural local-content-based reading materials and GRA constitute valid, practical, and potentially effective instructional products for EFL freshmen in an agricultural higher education context. These outcomes are particularly significant given the study's point of departure: no systematically developed ESP reading resources integrating local agricultural content existed for students at STIPER Belitang before this investigation. The high validity scores ($M = 3.10$) indicate that both products are well-grounded in current disciplinary knowledge and exhibit coherent internal structure, consistent with Akker's (1999) quality

criteria for educational products. The high practicality ratings across the one-to-one ($M = 3.12$) and small group ($M = 3.08$) evaluations indicate that students found the materials accessible and relevant to their learning needs—a critical outcome given that decontextualized materials have been repeatedly associated with diminished motivation and comprehension difficulties among EFL learners (Sahiruddin, 2013; Tomlinson, 2011).

The criterion-related validity of the GRA ($r = 0.812$) is particularly noteworthy, as it not only surpassed Wallen and Fraenkel's (1991) recommended reliability threshold but also demonstrated that a locally developed assessment instrument can exhibit psychometric properties comparable to a standardized measure. This finding has important implications for institutional assessment practice, suggesting that context-specific instruments need not sacrifice technical quality in pursuit of content relevance.

2. Comparison with Previous Studies

The outcomes of this study resonate with a body of research affirming the value of authentic, locally grounded materials in EFL reading instruction. Berardo's (2006) systematic review established that authentic materials substantially improve reading engagement, a finding echoed here by the 71.4% mastery achievement rate in the field test. Similarly, the importance of local content integration—as advocated by Alwasilah (2006) and McKay (2003) within English as an International Language framework—is empirically supported by students expressed preference for locally grounded reading topics in the needs analysis phase. This study extends these theoretical positions by demonstrating that local-content integration can be rigorously operationalized within a validated formative evaluation cycle rather than merely advocated as a normative principle.

In the domain of ESP material development, these findings align with the broader argument that effective ESP resources must be calibrated to learners' disciplinary context, proficiency level, and authentic communicative needs (Chen, 2011; Dudley-Evans & St. John, 1998). The readability mismatch documented between existing textbooks (Levels 9.5–11.6) and learner proficiency (Level 7) underscores the risks of adopting generic materials without systematic needs analysis—a process that this study demonstrates can be systematically conducted even in resource-limited institutional settings.

Regarding assessment development, the item analysis and criterion-related validity procedures employed in this study are consistent with accepted practice in language testing research (Hughes, 2003). The identification and revision of nine initially non-valid GRA items reflects the iterative refinement that distinguishes rigorous from perfunctory assessment development—a quality dimension often underreported in developmental studies but central to the credibility of potential impact claims.

3. Implications for Practice

This study carries substantive implications for ESP curriculum design and material development in Indonesian agricultural higher education. First, English lecturers in analogous institutional contexts are encouraged to conduct systematic reading level assessments and readability analyses before material adoption or adaptation, as the documented mismatch between existing materials and learner proficiency represents a widespread yet addressable barrier. Second, the GRA developed in this study provides institutions with a validated, locally normed assessment alternative, enabling more contextually appropriate evaluation of students' agricultural English comprehension. Third, the developmental research process documented here—encompassing needs

analysis, design, expert validation, and iterative student trials—offers a replicable methodological template for material developers operating in specialized disciplinary contexts across Indonesian higher education.

4. Limitations and Future Directions

Several limitations of this study merit acknowledgment. The research was conducted within a single institutional context, which constrains the generalizability of findings to comparable agricultural college settings. The field test sample ($n = 35$), while appropriate for a developmental study's potential impact evaluation, is insufficient to establish definitive effectiveness claims at a population level. Additionally, reliance on self-reported practicality data introduces potential social desirability bias in student questionnaire responses.

Future research should extend this line of inquiry by developing local-content-based ESP materials for secondary school learners in the Belitang region, thereby establishing a developmental progression of agricultural English literacy from secondary to tertiary levels. Longitudinal studies examining the sustained impact of these materials on reading proficiency and academic achievement would substantially strengthen the evidence base. Researchers are also encouraged to explore the integration of digital platforms and multimodal content into locally developed ESP resources, in alignment with contemporary directions in technology-enhanced language learning (Warschauer & Healey, 1998; Tomlinson, 2011).

CONCLUSIONS

This developmental study produced and evaluated agricultural local-content-based instructional reading materials and a Group Reading Assessment (GRA) for EFL freshmen at STIPER Belitang, Indonesia. Three principal conclusions can be drawn from the findings. First, both products attained high validity ($M = 3.10$) following expert review of linguistic content and instructional design dimensions, confirming their alignment with current theoretical and disciplinary knowledge. Second, the materials demonstrated high practicality ($M = 3.12$ in one-to-one evaluation; $M = 3.08$ in small group evaluation), indicating that students found them accessible and appropriate for classroom use. Third, the field test yielded significant criterion-related validity ($r = 0.812$ for the GRA; $r = 0.711$ for the reading materials) and a mastery achievement rate of 71.4%, affirming the products' strong potential effectiveness for the target learner population. Collectively, these outcomes demonstrate that locally grounded, readability-calibrated ESP materials can be developed within a rigorous formative evaluation framework—a contribution of practical significance for ESP material development in Indonesian agricultural education.

Based on the research findings, several recommendations are proposed for educators, students, institutional administrators, and the broader research community. First, English lecturers in similar contexts are encouraged to systematically assess students' reading proficiency and material readability before adoption or adaptation, and to integrate local cultural content as a strategy for enhancing learner engagement and contextual relevance. Second, students should prioritize sustained independent reading to expand vocabulary knowledge and develop fluency, both of which are foundational to reading comprehension gains. Third, institutions such as STIPER Belitang should invest in instructional facility improvements and support the professional development of English lecturers in ESP material design and adaptation. Finally, given that this study

focused exclusively on agricultural freshmen at a single institution, future researchers are encouraged to develop and investigate local-content-based ESP materials for junior and senior high school populations within the Belitang region, and to examine whether findings replicate across comparable agricultural college settings in South Sumatra.

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