

Unveiling Students of Midwifery Needs towards HOTS-based English for Specific Purpose Reading Materials

Muthia Zahranisa Koller¹, Soni Mirizon^{2*}, Eryansyah³

Universitas Sriwijaya, Universitas Sriwijaya, Universitas Sriwijaya

muthiazhrns@gmail.com, *smirizon@unsri.ac.id, eryansyah@unsri.ac.id

Abstract:

Higher-order thinking skills (HOTS) are crucial in today's fast-paced world of healthcare education. Healthcare professionals frequently encounter complex, unpredictable situations. HOTS enables them to assess patient conditions, make informed decisions, and solve problems effectively. These skills need to be taught to students of healthcare education. One of the ways is through the provision of HOTS-based learning materials in teaching English for specific purposes. The primary goal of this study was to investigate the students' need for English in relation to their future careers as paramedics. This study explores the needs of DIII Midwifery Study Program students at the Health Polytechnic, Ministry of Health in Palembang. Using a mixed-method approach incorporating both quantitative and qualitative, the research data were gathered using surveys for collecting quantitative data and semi-structured interviews for collecting qualitative data. The data was examined utilizing the Target Situation Analysis, Deficiency Analysis, Present Situation Analysis, and Strategy Analysis criteria for requirements analysis put forward by Hutchinson and Waters (1987). The study revealed that students of the Midwifery Program had a high interest in learning English, especially HOTS-based English reading materials. Additionally, the lecturer of English was also in need of a specific source of English material related to midwifery to support students learning English for specific purposes, as such material was not available in her teaching context.

Keywords: English for Specific Purpose, HOTS reading materials, Midwifery Students

1. INTRODUCTION

Healthcare systems grow more complex, imposing additional requirements on medical professionals, including midwives. The changing environment of patient care needs a change toward more nuanced decision-making, particularly in vital sectors like midwifery, where clinical judgment is essential. Mechtel et al. (2024) highlighted midwifery education programs that lead to midwife registration require students to demonstrate academic, clinical, and professional competence. In addition, Chapman & Calhoun (2006) mentioned that students must move beyond rote memorization and basic comprehension in the constantly changing environment of

healthcare education. Therefore, developing higher-order thinking skills (HOTS) has emerged as a top priority.

Singh et al., (2017) emphasized that HOTS represents students' thinking ability. In addition, Widana, (2020) stated that HOTS-based reading materials are deliberately created to engage students in critical thinking and problem-solving exercises that go beyond rote memorization. These tools require students to examine and synthesize information, assess evidence, and apply their knowledge in real-world situations, which aligns with the educational idea that critical thinking is essential for future success (Anderson & Krathwohl, 2001). Recent research further reinforces the critical role of higher-order thinking in midwifery education. Carter et al., (2017) noted that the incorporation of HOTS into English reading materials has significant implications for midwifery education, as critical thinking is essential for providing safe and effective care. Similarly, Adnani et al., (2023) asserted that midwifery students may improve their critical thinking skills by analyzing and evaluating materials that require them to do so. Additionally, Brundiers et al., (2010) argued these resources foster problem-solving abilities by forcing students to apply their knowledge to real-world circumstances, developing their ability to recognize and overcome difficult challenges.

Moreover, Adnani et al., (2022) mentioned midwifery education is inextricably linked to the development of critical thinking skills, which are essential for delivering high-quality care to pregnant women and their babies. Numerous studies have demonstrated the efficacy of innovative teaching methods, such as simulation-based learning, problem-based learning, and case-based learning, in enhancing students' critical thinking abilities and improving their clinical decision-making processes. The first study was done by Imansyah et al., (2022) which developed HOTS-based descriptive reading materials for tenth graders in the Indonesian context. The second study by Ma'rufa, (2023) Developed English language textbook for midwifery students at the Institute of Health Science in Sampang, Indonesia. The third previous study by Sujana et al., (2019) entitled negotiating conflicts of needs in designing teaching English for midwifery students. The fourth previous study was done by Mazdayasna and Tahririan (2008) Developed a profile of the ESP needs of Iranian students: The case of students of nursing and midwifery. Those studies proved to be an essential step in bridging the gap between the lack of English reading materials and students' demands, as they identified a glaring gap in the resources that were then accessible online or web-based through sway by Microsoft Office. While existing research emphasizes the importance of HOTS in midwifery education, there is a substantial shortage of HOTS-based English reading resources intended exclusively for midwifery students. Imansyah et al. (2022), Ma'rufa (2023), and Sujana et al. (2019) found a lack of materials that integrate HOTS with field-specific English, which is vital for developing critical thinking and problem-solving abilities. This study seeks to close this gap by investigating midwifery students' requirements for HOTS-based English reading materials and their possible influence on students' professional competency.

However, despite recognizing HOTS as critical in midwifery education, there needs to be more HOTS-based reading and instructional materials tailored explicitly for midwifery students. By investigating how HOTS-based materials, particularly in English reading resources, might be more effectively included in midwifery education to improve the critical thinking and problem-solving abilities necessary for delivering high-quality care to mothers and their infants, this project aims to close this gap. The overarching research problem is how can integrating HOTS-based English for Specific Purposes reading materials address the specific needs of midwifery students by providing a thorough and engaging approach to developing reading comprehension skills.

2. LITERATURE REVIEW

2.1 English for Specific Purposes (ESP)

Susanta & Pradnyana (2019) found that midwifery students face a unique challenge in mastering English vocabulary that is directly relevant to their field of study. Since midwifery students are considered English for Specific Purposes (ESP) learners, as they study English to fulfill a specific need enhancing their linguistic proficiency in academic, professional, and workplace contexts (Wisudayanti, 2020). Moreover, Clemett and Raleigh (2021) found midwifery students suffer from this absence since they are often expected to apply their knowledge quickly and effectively in real-world clinical settings where critical thinking is crucial (Clemett & Raleigh, 2021). Because of this focused concentration, their language learning is directly related to their intended careers as healthcare professionals. While ESP frameworks have made progress in meeting this demand, there is still a significant lack of interactive, HOTS-based resources that promote critical thinking and decision-making abilities in the medical setting (Maawali, 2021). The ESP framework directs the development of customized language programs that align with the communication requirements of midwifery practice, such as interacting with patients, comprehending medical literature, and working with other medical professionals (Teo et al., 2022). In addition, it makes learning more efficient and relevant while giving students the tools they need to succeed in the workplace. Consequently, a needs analysis is imperative in designing materials tailored to their unique requirements (Padmadewi et al., 2022). Furthermore, Midwifery students require English handbooks relevant to their subject matter, as limited vocabulary competence can impede their comprehension of reading materials (Arisoy & Aybek, 2021). They should also contain tasks encouraging vocabulary acquisition and understanding, allowing pupils to improve their language skills steadily. To bridge this gap, interactive materials that align with the teaching and learning process are essential (Budiman, 2017). Furthermore, HOTS-based English reading materials have the potential to provide the necessary scaffolding, fostering critical thinking skills and enhancing the overall learning experience for midwifery students (Zain et al., 2022).

2.2 Higher Order Thinking Skills (HOTS)-based English Materials

Many available English resources focus on general language acquisition rather than the specific professional contexts in which midwifery students will operate. To address this gap and create relevant and impactful materials, it is essential to develop creative, HOTS-based English reading content tailored to their needs. While midwifery students must acquire a vast array of knowledge encompassing anatomy, physiology, pharmacology, psychology, and communication skills, mere memorization is insufficient (Jacob, 2015). To provide optimal care, they must apply their knowledge in critical thinking and problem-solving situations, underscoring the significance of HOTS-based English reading materials. Moreover, Bogren et al., (2021) pointed out that midwifery students face a wide range of English learning resource shortages. One of the most critical aspects of this gap is a lack of context-specific resources geared to the special needs of midwifery students, who require both medical knowledge and language abilities (Mumtaz et al., 2015). These resources, which stress Higher-Order Thinking Skills (HOTS), are critical because they help students move beyond rote learning, resulting in a more profound understanding of complicated medical concepts and situations (Varutharaju & Ratnavadivel, 2014). Therefore, Students who engage with such materials are more prepared for real-life clinical settings in which they must quickly think on their feet and make educated judgments.

3. RESEARCH METHODOLOGY

This study employed a mixed-methods approach, combining qualitative and quantitative procedures to investigate the research issues thoroughly (Creswell, 1999). The quantitative technique was used to carefully evaluate survey data, resulting in a comprehensive overview of participant trends and patterns. This numerical data provided information about the prevalence of particular behaviors, attitudes, and outcomes in the student population. In contrast, the qualitative element of the study sought to extract deeper insights through in-depth interviews, resulting in a fuller, more nuanced knowledge of the participants' experiences and viewpoints.

This combined strategy guaranteed that the findings were both reliable and contextually relevant. The study was conducted at the Health Polytechnic, Ministry of Health in Palembang, involving 93 DIII Midwifery Study Program students and a lecturer of English. This location was chosen because it is relevant to the study aims and has a diverse student body engaged in midwifery education. The combination of qualitative and quantitative data improved the findings' reliability and validity while allowing for a more extensive examination. By recording both statistical patterns and human accounts, the study was able to give a comprehensive assessment of midwifery students' educational experiences and results. The mixed-method approach enabled data triangulation, strengthening the overall results and providing practical implications for educational practices and policy creation within the health polytechnic.

Data collection involved questionnaires administered to the students and English lecturer participants. These questionnaires, consisting of 25 items, were carefully tailored to meet the study's objectives, focusing on students' needs, perspectives on the current situation (including limitations and materials), and aspirations, according to the guidelines proposed by Hutchinson, and Waters (1987) for conducting student needs analysis. The questionnaire items were organized into categories: Target Situation Analysis (T.S.A.), Deficiency Analysis (needs and wants), and Present Situation Analysis (P.S.A.) and Strategy Analysis (S.A). Additionally, semi-structured interviews were conducted with the English lecturer. These interviews mainly focused on English teaching for DIII midwifery students, the availability of English reading materials, and the potential integration of HOTS-based reading material. This comprehensive data collection approach aimed to gain a holistic understanding of students' preferences of integrating HOTS-based reading for midwifery students. Using quantitative and qualitative methods provided a well-rounded perspective on the subject.

4. RESULTS

The results were derived by analyzing students' needs concerning HOTS-based English reading materials through Target Situation Analysis, Deficiency Analysis, Present Situation Analysis, Strategy Analysis and lecturer' perceived needs.

4.1. Target Situation Analysis

The target situation analysis provided valuable insights into students' perceptions of their English language needs within their Midwifery study program context.

Table 1. Students' View on Target Situation Analysis

| No | Statements | Students' view | Percentage |
|----|---|---|------------|
| 1. | English courses are important in my opinion because | help communicates with others | 53,76% |
| 2. | The English course should be able to make me | master vocabulary related to my Midwifery study program | 40,86% |
| 3. | When I work later, I will likely use English more often for | read texts in English to deepen my skills in the field of Midwifery | 58,06% |
| 4. | To be able to support my work in the future, my English skills should be at the | Advanced: able to understand various forms of text and understand the implied meaning contained in a text | 44,09% |

Table 1 showed Over half of the students (53.76%) recognized the importance of English courses for effective communication, emphasizing the key role of English in facilitating interaction and collaboration in the healthcare sector. Many students (40.86%) stressed the need to learn vocabulary specific to their Midwifery studies, indicating a preference for specialized language skills that directly support their academic and professional goals. Additionally, most students (58.06%) expected to use English primarily for reading texts to enhance their expertise in Midwifery. It underscores the importance of English proficiency in accessing and understanding academic and professional materials, which is essential for their ongoing development and knowledge acquisition. Lastly, nearly half of the students (44.09%) believed that to support their future careers effectively, they need to reach an advanced level of English proficiency. It includes understanding different types of texts and interpreting implied meanings, which are crucial for comprehending complex information and making informed decisions in their field. Overall, the students' perspectives highlighted the need for tailored English language instruction that addresses general communication skills and specific professional requirements in Midwifery.

4.2 Deficiency Analysis

The research on students' reading preferences and requirements suggests that they tended to prefer materials that are directly related to their future midwifery jobs.

4.2.1 Wants and Needs

Table 2 Results of Wants and Needs Analysis

| No | Statements | Students' view | Percentage |
|----|--|---|------------|
| 5. | In learning <i>to read</i> , the topic I want is | Midwifery Health | 46,24% |
| 6. | In learning <i>to read</i> , the input I want is | Text describing the context related to my field of Midwifery work later | 46,24% |
| 7. | Incorporating course topics related to my field of work in midwifery into English reading texts is | Important | 52,69% |
| 8. | Incorporating course topics related to higher-order thinking Skills (HOTS) and Information Transfer into English reading texts is | Important | 65,59% |
| 9. | In my opinion, studying reading texts related to higher-order thinking Skills (HOTS) and Information Transfer in English lessons can help me | Improving English skills, especially <i>reading skills</i> . | 35,87% |

| | | | |
|-----|---|---------------|--------|
| 10. | The aspects of Higher Order Thinking Skills (HOTS) and Information Transfer that need to be included in English reading texts are | Understanding | 52,69% |
|-----|---|---------------|--------|

Based on Table 2, a noteworthy 46.24% of students indicated they would want to read about midwifery health-related issues, emphasizing the significance of matching professional interests with educational material. The requirement for relevant and practical information in their studies was further highlighted by the fact that 46.24% of students preferred reading books that described scenarios connected to their future employment as midwives. Additionally, more than half of the students (52.69%) thought it is critical to include issues connected to midwifery in English reading books, demonstrating how essential it is to them that their coursework directly reflects their career goals. It shows that curriculum designers should consider incorporating field-specific content to improve the relevance and engagement of the learning material. Higher-order thinking Skills (HOTS) and Information Transfer are highly valued by students in their reading materials and topics unique to their careers. These abilities are vital for academic and professional growth, as demonstrated by the noteworthy 65.59% of students rated them as significant. While the proportion may be smaller, 35.87% of students agreed that reading books about information transfer and HOTS can help them become more proficient in English, especially reading. Despite the recognized benefits, this research implies that more attention should be paid to these abilities, and curricular integration may be necessary. The last finding was that 52.69% of students said comprehension was crucial to HOTS and information transfer. This understanding-focused approach highlights the necessity for educational resources that not only convey knowledge but also encourage greater understanding and critical thinking. By placing an emphasis on comprehension while reading texts, teachers may better prepare students for the abilities required to analyze, evaluate, and apply knowledge in their future employment.

4.2.2 Lacks

The survey’s findings draw attention to particular challenges that midwifery students had while reading and understanding course materials.

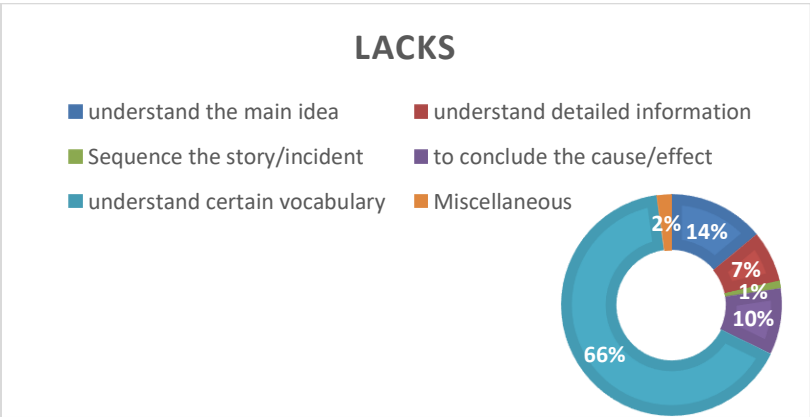


Figure 1 Students’ Lacks of Reading and Understanding Course Materials

The pie chart above displayed 14% of students who said they needed help understanding the main concepts in books. This problem could make it harder to integrate new knowledge with what is previously known and lead to a fragmented understanding of fundamental concepts. Following the

task and comprehending the details will be more challenging for students who require assistance understanding the basic theme. Understanding complex material is another difficulty that 7% of students had. Because midwifery requires precise and complex knowledge that must be precisely remembered and preserved, this problem is significant. It may be challenging for students who need more detailed comprehension to complete assignments that need a deep awareness of certain protocols, processes, and patient care specifics. Just 1% of students struggled with event or incident sequencing. This ability is crucial for creating patient histories, comprehending how labor progresses, and recording clinical procedures in midwifery. Failure to sequence events accurately might result in inaccuracies in patient care and misreading clinical settings. Another significant challenge that 10% of students faced is the question of cause-and-effect relationships. This ability is essential for interpreting different therapies' results and making diagnoses. Making educated clinical judgments and comprehending the underlying mechanics of medical disorders may prove difficult for students who need help recognizing cause-and-effect linkages. Moreover, 66% of students said comprehending specific vocabularies was the most common challenge. In the medical domain, midwifery is no exception, as specialist vocabulary is essential. Students who only partially grasp medical terminology may be severely hampered in reading and comprehending textbooks, research articles, and clinical recommendations. This lack of language knowledge might negatively impact academic and clinical performance, which can also hinder learning. Meanwhile, 2% of students reported other issues that do not fit into the previously described categories. These might involve a variety of problems, including reading comprehension, focus, speed, and even the anxiety that comes with reading complex material. Even if they are less frequent, these challenges can nonetheless greatly influence a student's performance in the classroom and clinical settings.

4.3 Present Situation Analysis (PSA)

A Present Situation Analysis (PSA) assesses students' present English competence better to understand their strengths, limitations, and requirements. This research is critical for establishing tailored educational techniques to improve language abilities, especially for people in specialized industries like midwifery.

4.3.1 Students' English Proficiency

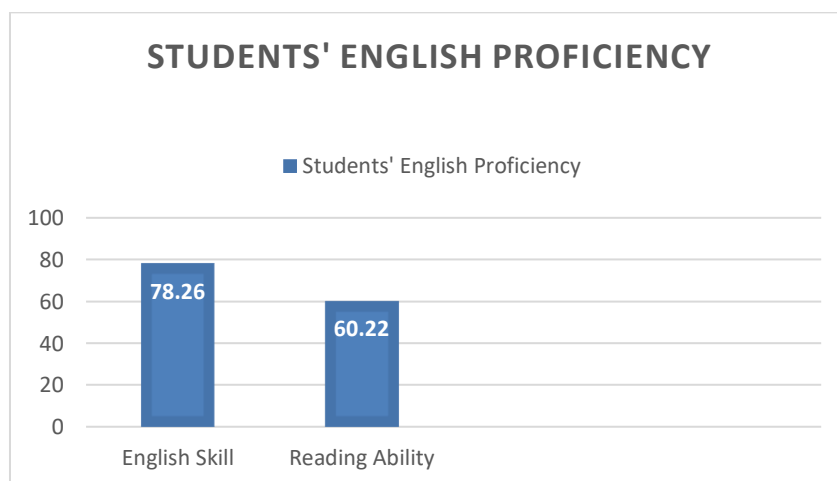


Figure 2 Results of Students' English Proficiency Test

Based on the chart, the majority of students (78,26%) stated their English proficiency levels were at the beginner level, where they could only understand sentences and simple statements that often appear in daily life. Additionally, 60,22% of students said their reading ability in comprehending English text recently is just sufficient.

4.3.2 Students' View on Existing Reading Materials Learned and Provided

Table 3 Results of Students' View on Existing Reading Material Learned and Provided

| No. | Statements | Students' view | Percentage |
|-----|--|----------------|------------|
| 14. | In my opinion, the difficulty level of English reading texts in the English course book used at the Palembang Ministry of Health Polytechnic is | Difficult | 48,39% |
| 15. | In my opinion, the topic in the English reading text in the English course book used at the Palembang Ministry of Health Polytechnic is | Interesting | 82,80% |
| 16. | Types of reading texts that are often found or studied in English courses be | Narrative | 48,39% |
| 17. | In the teaching and learning process, the frequency of my English lecturers providing reading materials or texts along with questions related to the topic of Midwifery is | Sometimes | 40,86% |
| 18. | In the teaching and learning process, the frequency with which my English lecturer provides reading materials or texts along with questions related to Higher Level Thinking Skills (HOTS) and Information Transfer is | Sometimes | 39,78% |

Table 3 how Midwifery students of Health Polytechnic, Ministry of Health Palembang had offered insightful criticism on the current reading materials in their English studies. Almost half of the students (48.39%) found the English reading materials challenging, showing problems with vocabulary, sentence structure, or idea complexity. Despite this difficulty, the vast majority of the students (82.80%) found the themes fascinating, implying that the information is engaging and relevant to their interests. Narrative texts are the most common, with 48.39% of students reporting their use. In addition, the emphasis on narratives in these texts may restrict exposure to other essential text genres, notwithstanding their potential for engagement. Regarding subject-specific content, 40.86% of students reported that their lecturer of English occasionally assigned readings about midwifery; this suggests a need for more regular incorporation of pertinent subjects. Furthermore, 39.78% of students noted that their lecturer of English occasionally offered resources emphasizing knowledge transmission and higher-level thinking abilities, indicating a possible area for growth. Although students found the themes interesting overall, their learning experience might be improved by raising the difficulty level, changing the sorts of texts, and including more midwifery-related information and higher-level thinking problems.

4.3.3 Students' Knowledge about Higher Order Thinking Skills and Information Transfer

A survey of students at the Palembang Ministry of Health Polytechnic provides a comprehensive view of their knowledge and understanding of higher-order thinking Skills (HOTS) and Information Transfer. The results reveal varied levels of awareness and sources of learning, indicating both strengths and areas for improvement in their educational experience.

Table 4 Results of Students' Knowledge about Higher Order Thinking Skills and Information Transfer

| No. | Statements | Students' View | Percentage |
|-----|--|--|------------|
| 19. | My knowledge and understanding of Higher Order Thinking Skills (HOTS) and Information Transfer is | Enough | 59,785% |
| 20. | The various Higher Level Thinking Skills (HOTS) and Information Transfer that I know and understand are in the form of | Knowledge | 38,04% |
| 21. | I know and understand Higher Level Thinking Skills (HOTS) and Information Transfer through | Online Media | 36,56% |
| 22. | I know the Higher Order Thinking Skills (HOTS) and Information Transfer that are in | My study program and related study programs | 41,94% |
| 23. | My level of knowledge and understanding of Higher Order Thinking Skills (HOTS) and Information Transfer that I know is | Others | 59,14% |
| 24. | The things I can do to develop Higher Thinking Skills (HOTS) and Information Transfer are | Increased my knowledge and understanding of Higher Order Thinking Skills (HOTS) and Information Transfer | 55,91% |

Based on Table 4, (59.785%) of students were comfortable with their present knowledge about Information Transfer and HOTS, suggesting they understood these advanced cognitive skills sufficiently. Nevertheless, a noteworthy acknowledgment (59.14%) of vague lacunae in comprehension indicates domains where learners could pursue further explanation or enhancement. In addition, most students emphasized the importance of digital resources and academic curricula in forming their comprehension by citing online media 36.56% and their study programs 41.94% as their primary sources of information. Although many students (55.91%) acknowledged the academic parts of HOTS, they also stressed the significance of expanding practical knowledge through further educational opportunities. The results highlighted the advantages and shortcomings of improving the incorporation and utilization of HOTS and Information Transfer competencies in their education, especially in equipping students for career obstacles in disciplines such as midwifery.

4. 4 Strategy Analysis

4.4.1 Types of activities in learning English reading

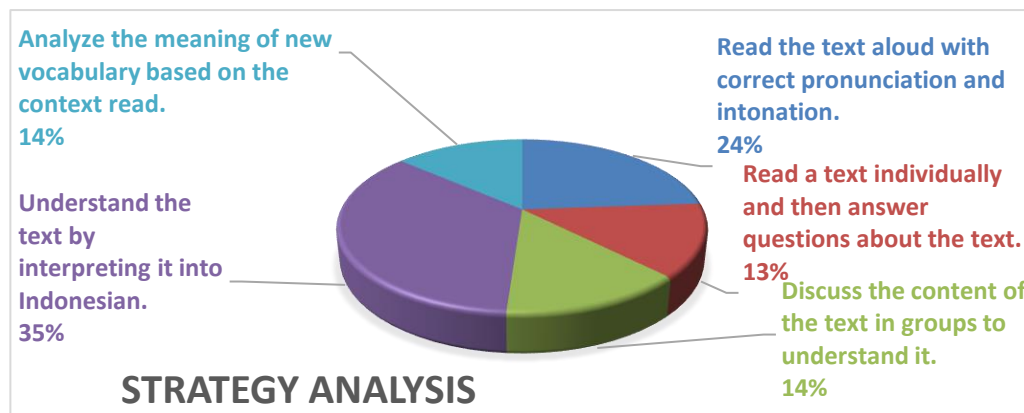


Figure 3. Results of Strategy Analysis

Students had a wide range of choices for activities that helped them understand and engage with the material when learning English. The most popular exercise was comprehending the material by translating it into Indonesian (31%), which helped them bridge the gap between English and their home tongue. Reading the material aloud with proper pronunciation and intonation was also popular (21%), which improved fluency and listening abilities. Analyzing new vocabulary based on context (12%), discussing the topic in groups (12%), and reading separately, followed by answering questions (12%), were all equally preferable, each promoting a distinct element of language learning. A small number of students (4%) preferred diverse activities, such as creative or multimedia approaches, emphasizing the significance of using various teaching techniques to accommodate different learning styles.

4.5 Lecturer' Perceived Needs

The interviews with the English lecturer of the Midwifery study program revealed insights into the perception of Midwifery students' needs for Hots-driven English Reading Materials. the lecturer emphasized the significance of HOTS-based reading materials for students, noting the limited materials provided in her book. She said:

"The material has related, yet some materials require further information. Since some elements need to be combined, it isn't feasible. The only topic discussed throughout the conversation was that".

From the interview data, it could be seen that the English reading materials for midwifery students need further information about English reading materials that are related to their major, which can be integrated into the teaching and learning process. Besides, students limited in vocabulary also influenced their critical thinking. Therefore, it is really recommended that HOTS-based English reading materials be developed.

Moreover, she added, *"The more they read, the more vocabulary they acquire".*

5. DISCUSSION

The needs analysis of midwifery students in this study underscored the urgent need to incorporate higher-order thinking skills (HOTS) into their language learning. According to a thorough evaluation using target situation analysis (TSA), deficiency analysis (DA), present situation analysis (PSA), and strategy analysis (SA), there was a significant gap between students' current abilities and the linguistic and cognitive demands of professional practice despite strong motivation to improve their English proficiency. The wants and needs study revealed a strong preference for context-based learning materials that addressed midwives' particular communication and understanding issues in clinical settings. The results of the deficiency analysis also showed that students sometimes struggled to understand complex texts, cause-and-effect relationships, and specialized language needed to assess medical information and draw well-informed decisions. Moreover, the lecturer corroborated these results, citing a shortage of HOTS-based resources relevant to professional demands.

The findings of the study aligned with the critical principles of needs analysis theory. The students' expressed preferences for midwifery-specific vocabulary and practical scenarios

highlighted their need for language instruction relevant to their professional context. It is aligned with the findings of Lyster & Ballinger (2011), who emphasized the importance of context-based language teaching. Students' difficulties with specialized vocabulary and complex concepts indicated a need for scaffolding and explicit instruction to support their learning. It is related to the work of Flick (2000), who emphasized the role of scaffolding in cognitive development. Finally, their interest in HOTS-based materials demonstrated a need for instruction that promoted critical thinking and problem-solving skills that is in line with Bloom's taxonomy. Adesoji (2018), found that Bloom's cognitive levels should not be generalized, and it is preferable to divide the six levels into low, medium, and high cognitive processes. The needs analysis of Midwifery students highlighted the students' mature understanding of the importance of English for effective communication, particularly in professional healthcare settings. However, by examining the lack of HOTS-based English materials that precisely match the cognitive demands of midwifery, our study fills a more specific need. Moreover, English proficiency is seen as necessary for effective communication by the majority of students. Attard et al. (2015) mentioned effective communication between the healthcare provider and the patient is essential for providing high-quality treatment and ensuring patient safety and satisfaction during interactions with healthcare providers. It is related to the findings where 53.76% of them stated English proficiency can help them communicate with others, especially in healthcare settings where contact with patients, colleagues, and other professionals is crucial. Furthermore, 40.86% of students emphasized the importance of mastering midwifery-specific vocabulary, illustrating the necessity for language learning that aligns directly with their academic and professional goals. The emphasis on specific vocabulary indicated that students know proficiency in English is not just a generic talent but is essential for success in the workplace, particularly when interacting with clinical paperwork and medical literature. In line with this, Hull (2016), stated language competence is vital, particularly in the medical field. Medical language is a universal concept in healthcare, serving as the shared language of all health and allied health professions.

The presence of HOTS-based English reading materials for midwifery students are crucial to addressing the deficiency in appropriate English resources tailored to their needs. As Suharno et al., (2022) found in their study on the effectiveness of mobile-based instructional approaches, integrating higher-order thinking skills (HOTS) can significantly enhance students' learning outcomes. Providing midwifery students with HOTS-based English reading materials can empower them to develop critical thinking, problem-solving, and communication skills essential for their future professional roles. By addressing the specific language needs of midwifery students and encouraging the development of HOTS, we may help future healthcare workers flourish in their jobs and contribute to better patient care.

6. CONCLUSION

The study discovered that students of midwifery greatly require HOTS-based English Reading Materials to increase their reading abilities. Quantitative results highlighted the students' difficulties with specialized vocabulary. Despite 66% of students identifying these difficulties, only 48.39% reported that existing materials are too challenging. This discrepancy points to a significant gap in resources that align with their linguistic and professional requirements. The students reported a wish to learn more about English reading resources relating to their midwifery field, as well as how

to think critically when reading. They also believed that HOTS-based English Reading Materials would be an interesting and challenging approach to English for Specific Purposes. The study findings highlight the importance of establishing HOTS-based English Reading Materials resources for teaching midwifery students.

7. REFERENCES

- Adesoji, F. A. (2018). Bloom taxonomy of educational objectives and the modification of cognitive levels. *Advances in Social Sciences Research Journal*, 5(5).
<https://doi.org/10.14738/assrj.55.4233>
- Adnani, Q. E. S., Gilkison, A., & McAra-Couper, J. (2022). The interplay of structural and external factors for strengthening midwifery education in Indonesia. *Sexual and Reproductive Healthcare*, 33. <https://doi.org/10.1016/j.srhc.2022.100734>
- Adnani, Q. E. S., Gilkison, A., & McAra-Couper, J. (2023). A historical narrative of the development of midwifery education in Indonesia. *Women and Birth*, 36(1).
<https://doi.org/10.1016/j.wombi.2022.06.007>
- Anderson, L. W., & Krathwohl, D. R. (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives: complete edition*. Longman.
<http://eduq.info/xmlui/handle/11515/18824>
- Arisoy, B., & Aybek, B. (2021). The effects of subject-based critical thinking education in mathematics on students' critical thinking skills and virtues*. *Eurasian Journal of Educational Research*, 2021(92). <https://doi.org/10.14689/ejer.2021.92.6>
- Attard, M., Mcarthur, A., Riitano, D., Aromataris, E., Bollen, C., & Pearson, A. (2015). Improving communication between health-care professionals and patients with limited English proficiency in the general practice setting. *Australian Journal of Primary Health*, 21(1). <https://doi.org/10.1071/PY13095>
- Bogren, M., Kaboru, B. B., & Berg, M. (2021). Barriers to delivering quality midwifery education programmes in the Democratic Republic of Congo – An interview study with educators and clinical preceptors. *Women and Birth*, 34(1).
<https://doi.org/10.1016/j.wombi.2020.06.004>
- Brundiers, K., Wiek, A., & Redman, C. L. (2010). Real-world learning opportunities in sustainability: from classroom into the real world. *International Journal of Sustainability in Higher Education*, 11(4). <https://doi.org/10.1108/14676371011077540>
- Budiman, A. (2017). Behaviorism and Foreign Language Teaching Methodology. *ENGLISH FRANCA : Academic Journal of English Language and Education*, 1(2).
<https://doi.org/10.29240/ef.v1i2.171>
- Carter, A. G., Creedy, D. K., & Sidebotham, M. (2017). Critical thinking evaluation in reflective writing: development and testing of Carter Assessment of critical thinking in midwifery (Reflection). *Midwifery*, 54. <https://doi.org/10.1016/j.midw.2017.08.003>
- Chapman, D. M., & Calhoun, J. G. (2006). Validation of learning style measures: Implications for medical education practice. *Medical Education*, 40(6). <https://doi.org/10.1111/j.1365-2929.2006.02476.x>
- Clemett, V. J., & Raleigh, M. (2021). The validity and reliability of clinical judgement and decision-making skills assessment in nursing: A systematic literature review. In *Nurse Education Today* (Vol. 102). <https://doi.org/10.1016/j.nedt.2021.104885>
- Creswell, J.W. (1999). Mixed-Method Research: Introduction and Application. *Handbook of Educational Policy*.

- Flick, L. B. (2000). Cognitive scaffolding that fosters scientific inquiry in middle level science. *Journal of Science Teacher Education*, 11(2). <https://doi.org/10.1023/A:1009464707968>
- Huang, Q., & Yu, Q. J. (2023). Towards a communication-focused ESP course for nursing students in building partnership with patients: a needs analysis. *English for Specific Purposes*, 70. <https://doi.org/10.1016/j.esp.2022.11.006>
- Hull, M. (2016). Medical language proficiency: A discussion of interprofessional language competencies and potential for patient risk. In *International Journal of Nursing Studies* (Vol. 54). <https://doi.org/10.1016/j.ijnurstu.2015.02.015>
- Hutchinson, T., & Waters, A. (1987). *English for specific purposes: A learning- centred approach*. Cambridge University Press.
- Imansyah, I., Mirizon, S., & Petrus, I. (2022). Developing HOTS-based descriptive reading materials in Indosian context for tenth graders. *English Review: Journal of English Education*, 10(2). <https://doi.org/10.25134/erjee.v10i2.6301>
- Jacob, A. (2015). A comprehensive textbook of midwifery and gynecological nursing. In *A Comprehensive Textbook of Midwifery and Gynecological Nursing*. <https://doi.org/10.5005/jp/books/12492>
- Lyster, R., & Ballinger, S. (2011). Content-based language teaching: Convergent concerns across divergent contexts. *Language Teaching Research*, 15(3). <https://doi.org/10.1177/1362168811401150>
- Ma'rufa, I. M. U. (2023). Developing English language textbook for midwifery students at institute of health science in sampang, Indonesia. *Surakarta English and Literature Journal*, 6(1), 124–139.
- Maawali, A. (2021). *The learning and assessment of higher-order thinking skills (HOTS) in the Omani english language curriculum*. <https://doi.org/10.26190/unsworks/22758>
- Mazdayasna, G., & Tahririan, M. H. (2008). Developing a profile of the ESP needs of Iranian students: The case of students of nursing and midwifery. *Journal of English for Academic Purposes*, 7(4), 277–289. <https://doi.org/10.1016/j.jeap.2008.10.008>
- Mechtel, M., Kitt-Lewis, E., Reaves, C., Sinacori, B., O'Brien, T., Logan, P., Rimbey, P., Streiff, K., & Phillips, K. (2024). Durable learning strategies in nursing education: state-of-the-evidence review. In *Journal of Nursing Education* (Vol. 63, Issue 1). <https://doi.org/10.3928/01484834-20231112-05>
- Mumtaz, Z., Levay, A., Bhatti, A., & Salway, S. (2015). Good on paper: the gap between programme theory and real-world context in Pakistan's community midwife programme. *BJOG: An International Journal of Obstetrics and Gynaecology*, 122(2). <https://doi.org/10.1111/1471-0528.13112>
- Padmadewi, N. N., Artini, L. P., Ratminingsih, N. M., Utami, I. G. A. L. P., & Marsakawati, N. P. E. (2022). Needs Analysis of Literacy Assessment Using Blended Learning for Beginner EFL Learners. *Journal of Language Teaching and Research*, 13(2). <https://doi.org/10.17507/jltr.1302.27>
- Singh, R. K. A., Singh, C. K., Mostafa, N. A., & Singh, T. S. M. (2017). A review of research on the use of higher order thinking skills to teach writing. *International Journal of English Linguistics*, 8(1). <https://doi.org/10.5539/ijel.v8n1p86>
- Suharno, S., Irmawan, S., Saputro, H., Agung, P. N., & Jumintono, J. (2022). Improving students' higher order thinking skills in learning health systems using mobile-based instructional approach. *Health Education and Health Promotion*, 10(1).
- Sujana, I. M., Hanafi, N., Wilian, S., Syahrial, E., & Fitriana, E. (2019). Negotiating conflicts of

- needs in designing teaching english for midwifery students. *International Journal of Language Education*, 3(2), 20–26. <https://doi.org/10.26858/ijole.v3i2.10657>
- Susanta, I. P. A. E., & Pradnyana, I. G. G. S. (2019). The Use of English Language Functions for Midwifery Education. *Proceedings of the Global Conference on Teaching, Assessment, and Learning in Education (GC-TALE 2019)*, 26–36. <http://www.asian-efl-journal.com>
- Teo, T., Khazaie, S., & Derakhshan, A. (2022). Exploring teacher immediacy-(non)dependency in the tutored augmented reality game-assisted flipped classrooms of English for medical purposes comprehension among the Asian students. *Computers and Education*, 179. <https://doi.org/10.1016/j.compedu.2021.104406>
- Varutharaju, E., & Ratnavadivel, N. (2014). Enhancing higher order thinking skills through clinical simulation. *Malaysian Journal of Learning and Instruction*, 11(1). <https://doi.org/10.32890/mjli.11.2014.7666>
- Wayan Widana, I. (2020). The Effect of Digital Literacy on the Ability of Teachers to Develop HOTS-based Assessment. *Journal of Physics: Conference Series*, 1503(1). <https://doi.org/10.1088/1742-6596/1503/1/012045>
- Wisudayanti, K. H. O. (2020). An ESP Learning Materials for Students of Midwifery. *EDUVELOP*, 4(1). <https://doi.org/10.31605/eduvelop.v4i1.795>
- Zain, F. M., Sailin, S. N., & Mahmor, N. A. (2022). Promoting Higher Order Thinking Skills among Pre-Service Teachers through Group-Based Flipped Learning. *International Journal of Instruction*, 15(3). <https://doi.org/10.29333/iji.2022.15329a>