



**“The Impact of Scientific Texts on Reading Motivation Among Freshman English
Learners”**

Daiana Murzakanova

A thesis submitted to the Faculty of Education and Humanities
in partial fulfillment of the requirements for the degree of

MASTER OF ARTS

in Teaching English as a Foreign Language

SDU University

Department of Language Teacher Education

June, 2025

Thesis Advisor:

PhD., assoc. prof. Gulnara Kassymova

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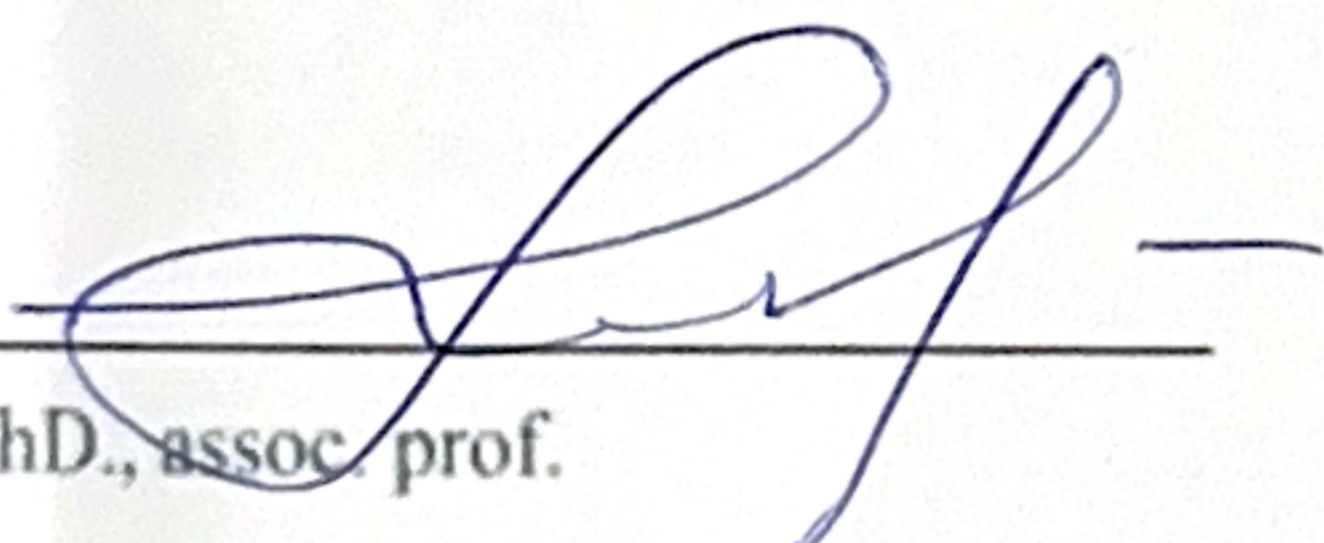
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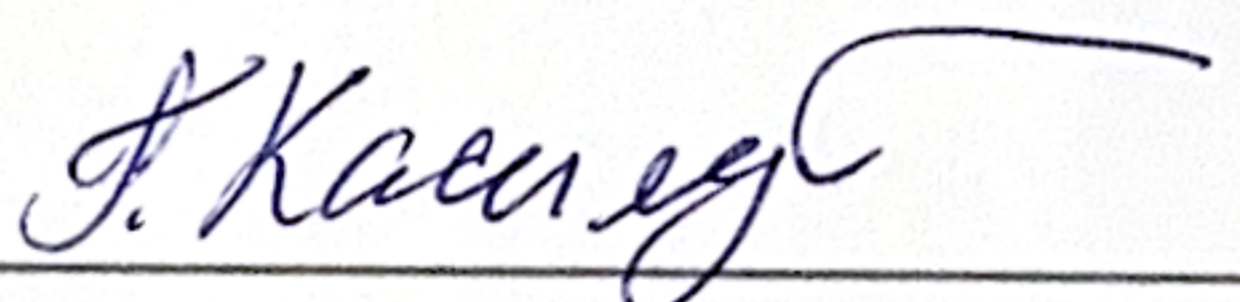
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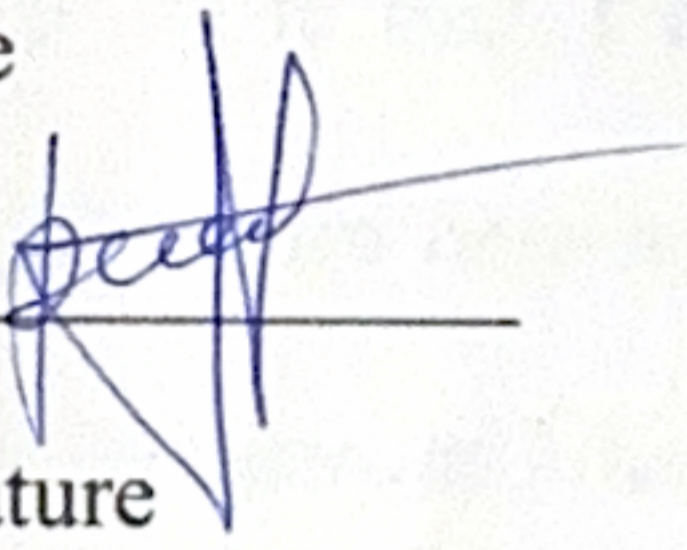
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I believe that the outcomes of this study will be beneficial for both learners and educators in the field of Teaching English as a Foreign Language (TEFL).

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“The Impact of Scientific Texts on Reading Motivation Among Freshman English Learners”

Abstract

This thesis is conducted to investigate how scientific texts affect the reading motivation of freshmen university students who are learning English. During many academic English courses, students are required to read scientific texts from coursebooks. These texts are assigned to students to help them improve their academic vocabulary and reading skills in general. However, it is still not clear whether those scientific texts help students feel more motivated to read in English or in contrast make reading more difficult and less enjoyable to them. The goal of this research is to understand whether scientific texts have a positive or negative influence on students' reading motivation. The study uses a qualitative approach. Data were collected through surveys collected from students and classroom observation forms filled in by teachers. The student surveys included questions about their experiences, opinions, and feelings while reading scientific texts in English. At the same time, teachers observed students in class during reading activities and shared their views based on what they noticed about students' engagement and participation while reading those scientific texts. Some students said that scientific texts helped them learn useful vocabulary and better understand academic topics. These students felt more confident and were interested in reading in English. On the other hand, some students found the texts difficult because of the complex vocabulary and unfamiliar content they noticed while reading. As a result, they felt frustrated or less motivated to read in English. Teachers also noticed that some students became quiet or less active during these reading tasks. Because of scientific texts being often included in required coursebooks, it is important to understand how they affect students' learning and their general motivation to read in English. This research suggests that choosing the right texts, preparing students before reading, and supporting them during the reading tasks can help make reading more enjoyable and effective to students. These findings can be useful not only for English learners but also for teachers who want to support students in their English language learning.

**“Бірінші курс ағылшын тілін шетел тілі ретінде үйренушілердің мотивациясына
ғылыми мәтіндердің әсері”**

Аңдатпа

Бұл зерттеу жұмысы ғылыми мәтіндердің ағылшын тілін шет тілі ретінде оқып жатқан бірінші курс студенттерінің оқу мотивациясына қалай әсер етіп жатқанын зерттеуге арналды. Көптеген университетте оқытылатын академиялық ағылшын сабақтарында студенттерге оқулықтағы ғылыми мәтіндерді оқу міндетті болып саналады. Оқулықтағы мәтіндердің бұл түрі студенттердің академиялық сөздік қорын және оқу дағдыларын дамытуға бағытталған. Дегенмен, бұл мәтіндердің оқу мотивациясына оң немесе теріс әсер ететіні әлі де толық анық емес. Сол себептен осы зерттеу жұмысының мақсаты ғылыми мәтіндердің студенттердің оқуға деген мотивациясына қалай әсер ететінін анықтауға арналды. Зерттеу сапалық әдіске негізделген. Деректер студенттер толтырған сауалнама және мұғалімдер толтырған сыныпты бақылау формалары арқылы жиналды. Сауалнамалардағы жауаптар студенттердің ғылыми мәтіндерді ағылшын тілінде оқыған кездегі тәжірибесі, ойы және сезімдері туралы ақпарат берді. Сонымен қатар, мұғалімдер оқушылардың мәтінді оқу кезіндегі белсенділігін, қатысуын бақылап жазып отырды. Кейбір студенттер ғылыми мәтіндерден пайдалы сөздер үйреніп, академиялық тақырыптарды жақсы түсінетінін айтты. Олар бұл мәтіндер арқылы өздерін сенімді сезініп, оқуға деген қызығушылығы артқанын білдірді. Алайда басқа студенттер мәтіннің сөздік қоры мен мазмұны күрделі болғандықтан оны түсіну қиынға соққанын және оқуға ынтасы төмендегенін жеткізді. Мұғалімдер де кейбір студенттердің мұндай тапсырмалар кезінде белсенділігінің азайғанын байқады. Ғылыми мәтіндер оқулықтарға жиі енгізілетіндіктен, олардың студенттердің оқуына қалай әсер ететінін түсіну өте маңызды. Бұл зерттеу жұмысы арқылы жиналған ақпарат оқулықтарды дұрыс таңдау және оқуға дейін дайындық жүргізу үшін керек. Сол себептен бұл зерттеудің нәтижелері тек қана үйренушілерге ғана емес ағылшын тілін оқытуда мұғалімдер үшін де пайдалы бола алады.

**“Влияние научных текстов на мотивацию к чтению студентов-первокурсников,
изучающих английский язык как иностранный”**

Аннотация

Данная работа исследует как чтение научных текстов влияет на мотивацию студентов первого курса, изучающих английский язык как иностранный. Во многих курсах академического английского студенты должны читать научные тексты из учебников. Эти тексты направлены на развитие академического словарного запаса и навыков чтения в целом. Однако до сих пор не ясно, помогают ли они повысить мотивацию студентов к чтению или, наоборот, делают процесс сложнее и менее интересным. Цель этого исследования – определить оказывают ли научные тексты положительное или отрицательное влияние на мотивацию к чтению. Исследование основано на качественном подходе. Данные были собраны с помощью опросов среди студентов и форм наблюдений, которые заполняли преподаватели. Опросы студентов включали вопросы об их опыте, мнениях и чувствах, связанных с чтением научных текстов на английском языке. Преподаватели, в свою очередь, наблюдали за студентами во время уроков чтения и описывали их активность и вовлечённость. Многие студенты отметили, что научные тексты помогли им выучить полезную лексику и лучше понять академические темы. Они чувствовали себя увереннее и проявляли больший интерес к чтению на английском. Однако другие студенты считали такие тексты слишком сложными из-за незнакомых слов и тематики, что вызывало у них трудности и снижало мотивацию. Преподаватели также замечали, что часть студентов становилась менее активной во время таких заданий. Так как научные тексты часто включены в обязательные учебные материалы, важно понимать, как они влияют на обучение. Исследование показывает, что правильный выбор текста, предварительная подготовка студентов и поддержка во время чтения могут сделать процесс более эффективным и интересным. Эти выводы могут быть полезны не только для изучающих английский язык, но и для преподавателей.

CHAPTER 1

1. Introduction

1.1 Background of the Study

To start with, reading is one of the most important skills for students who are learning English, especially for those who are aiming to become English teachers. Reading helps them improve their vocabulary, grammar, and thinking skills. It also gives them access to knowledge, ideas, and also different ways of writing in academic style. In their first year of university, English majors often take courses that focus on academic reading. During these courses, students are required to read different types of texts, including scientific texts. These texts usually come from fields like education, the environment, technology, or psychology and are often included in coursebooks to help students get used to reading academic English (Grabe, 2009). Scientific texts are used in reading courses because they can help students learn academic vocabulary and understand complex ideas. However, not all students find these texts easy to read or interesting. Some students may struggle with the difficult vocabulary or unfamiliar topics while reading scientific texts. This can make them feel discouraged or bored and unmotivated to read in English. As a result, their motivation to read in English may decrease. Since these students are preparing to become English teachers, it is important to understand how these texts affect their motivation and confidence.

1.2 Importance of Reading Motivation

Reading motivation means how interested and willing students are to read. It includes how much people enjoy reading, how confident they feel when they are reading. (Guthrie et al., 2004) Motivation plays a big role in learning a language. Based on my observation as a teacher,

students are motivated, they are more likely to try hard, use reading strategies, and keep going even when the text is difficult. However, when students' motivation is low, they may avoid reading at all (Gambrell et al., 1996). For future English teachers, building strong motivation to read in English is not only important for their own studies, but also for their future teaching practices. Scientific texts can help prepare students for academic life, but they are often harder to understand compared to other types of texts. These texts are written in a formal and academic style. For example, they may include technical terms, data, or ideas that freshmen have not seen before. Unlike stories or opinion articles, scientific texts may not have characters, emotions, or personal viewpoints, which makes them less interesting to read for some learners (Brantmeier, 2005). First-year students, especially those who do not have a deep knowledge in science, might feel that these texts are too difficult or not connected to their goals as future English teachers. Although scientific texts are being widely used in reading classes, not many studies have looked at how they affect students' motivation. There is very little research about students' views regarding scientific texts in regular reading courses, especially among English majors. This is a problem and a large research gap because reading motivation is important not only for students but also for teachers. If future teachers are not motivated to read, they may not become confident readers or be able to help their own students later. This study explores how scientific texts used in first-year reading courses influence the motivation to read of university students majoring in English. It focuses on students who are preparing to become teachers and aims to understand whether reading scientific texts makes them more motivated or less to read in English. It also looks at what factors affect their motivation such as whether they find the topics interesting, how difficult the texts are, and how much support they get from teachers in the classroom.

1.3 Significance of the Study

This research is important for several reasons. First, the first year of university is a time when students build new study habits, learn academic skills, and form their attitudes toward reading and language learning in general. If students have a negative experience with reading early on during their first years at university, it might affect how they feel about English during their following years of study. Second, since these students are future teachers, their own reading experiences may shape the way they will teach reading in their own classrooms. Third, in many universities, teachers use standard required coursebooks and may not be able to change the texts they are assigning to students to read. So, knowing how students react to different types of texts can help teachers give better support and adapt their lessons according to their students' needs. To explore this topic, this study uses a qualitative approach. Data were collected through student surveys and teacher observation forms. The surveys asked students to reflect on how they felt when reading scientific texts and about their motivation to continue reading in English. At the same time, teachers filled out observation forms based on what they saw during class such as student participation, focus, and reactions to the texts while they were reading scientific texts. Based on my investigation on research on this topic, there is a gap in qualitative understanding of how scientific texts influence reading motivation among freshmen English language learners, particularly whether it is positive or negative. This present study aims to address this gap and provide evidence of this impact, which is crucial for the development of effective language education strategies for teachers. The study collects data by considering both students and teachers perspectives and that can make the findings or results of this research quite reliable.

1.4 The research questions of this study are:

1. What are the perceptions of freshman English learners regarding the impact of science-based texts on their reading motivation?
2. In what ways do science-based texts influence the reading motivation of freshman English learners?
3. What strategies do freshman English learners employ to overcome challenges and obstacles when reading science-based texts?

As I have mentioned before, at present, there are a few studies that are conducted to explore this topic. Therefore, the current study examined this topic from both teachers and students with instruments believed to be reliable. By addressing these questions, the study not only contributes to the theoretical understanding of the impact of scientific texts on reading motivation of 1-year students but also provides practical knowledge that can be used while finding effective teaching strategies for teachers. So, by revealing how scientific texts influence reading motivation of students, this study aims to motivate educators to create teaching strategies that develop students' linguistic skills and foster a passion for learning among first-year English learners. Finally, also this study aims to remind language teachers the importance of learning students' perceptions about reading to teach this skill more effectively.

CHAPTER 2

2. Literature Review

2.1 Introduction to Reading Motivation

Reading motivation can be considered as an important factor in successful second language learning. (Grabe, 1991). That is why, based on our context, for English majors preparing to become language teachers, motivation to read academic texts is essential. Scholars argue that motivation is not only about the amount of reading a learner does but also about how learners engage with the text. It is important to mention that in the context of both foreign language learning and education, motivation is particularly important because it influences students' willingness to read challenging texts and persist through difficulties to fully understand reading material.

The next aspect to consider is components of reading motivation. Reading motivation consists of both intrinsic and extrinsic components. First, intrinsic motivation is about reading for personal interest and pleasure, while extrinsic motivation is about reading for external rewards or academic achievement learners are aiming to achieve after reading. Based on facts, intrinsically motivated students are more likely to develop deeper comprehension skills and sustain long-term reading motivation compared to extrinsically motivated students. Based on my own teaching experience, for first-year university students, particularly those in English departments, the balance between these types of motivation can shift based on classroom context and text difficulty itself.

2.2 Reading Motivation in English as a Foreign Language (EFL) Contexts

In EFL classrooms learners are being around the English and are quite motivated to read, but motivation levels are most likely to change outside the classroom. It is because learners who

are highly motivated to read in English tend to demonstrate better comprehension, improved vocabulary acquisition, and greater willingness to engage with English texts in class compared to when they are outside the classroom. However, motivation in a language learning context is not something fixed and stable and it can be changed or shaped by some factors. (Guthrie et al., 2004). These factors include the types of texts assigned to learners to read and in general their personal goals about language. Based on my observation, as a teacher, when students are being assigned with the texts that are either too difficult or not aligned with their interests, their motivation decreases significantly. Therefore, selecting reading materials that match students' interests and language proficiency levels is essential for teachers.

In addition to that, EFL learners are also affected by the extent to which they feel autonomy and have the opportunity to choose the topics they want to read about in class. That is why, providing students with some opportunities to choose what they read, or at least the topics, can increase their motivation to read in English. (Guthrie et al., 2004). Similarly, when texts can be perceived as culturally familiar to learners or based on their interests, engagement is often higher. That is why, teachers must ensure to create positive environments in class in which reading is seen not just as a requirement, but as an engaging activity for students.

2.3 Scientific Texts in Academic English Courses

Nowadays, scientific texts are required to be read in many academic English courses at university. The scientific texts are being included due to the need to prepare students for academic life, where reading such texts is unavoidable and required. That is why, especially for students majoring in English who are preparing to become teachers, reading scientific texts can be extremely useful for their future career success.

However, despite their benefits, scientific texts can also pose several difficulties for learners. Firstly, students often experience anxiety when reading texts with unfamiliar terminology or abstract concepts. When it comes to reading, students often do better with stories or descriptive texts than with scientific ones. That's probably because scientific texts tend to be full of academic words, and written in a way that makes it difficult to read for learners. There are situations when scientific texts do not grab the reader the same way a story might, which can make it harder to understand.

Moreover, first-year students may lack background knowledge in scientific material, making it harder to understand core ideas written in texts. Due to this lack of familiarity, reading can become more difficult for learners, especially when multiple scientific texts are assigned by teachers across courses.

In recent years, the integration of scientific texts into English courses has become a central topic of interest among educators. As English becomes the dominant language of scientific materials that are necessary for students to learn, proficiency in reading and understanding scientific texts is becoming crucially important for students. (Hyland, 2006). This is especially crucial for students majoring in English, who are expected to read many academic materials and analyze various research materials during their university years.

It is obvious that scientific texts include complex vocabulary, formal writing structure making the reading process difficult for EFL learners. According to Gillett, Hammond, and Martala (2009), scientific texts often include complex writing structures which may require advanced reading skills. Moreover, the language used in scientific texts is not as simple as used in everyday communication. (Nation, 2009). That is why, sometimes even students with

intermediate level may struggle to understand scientific texts without proper instruction from teachers' side.

Despite those previously mentioned challenges, scientific texts play a vital role in the language learning process. Research by Hyland (2009) emphasizes the importance of including scientific texts into the curriculum during the first years of university studies. It is because including scientific texts into required courses can help students build both linguistic competence and critical thinking skills. (Flowerdew & Peacock, 2001).

Research about this topic suggests that integration alone is not enough to make students succeed in the language learning process. In addition to that, students need structured support and instruction in order to benefit and take best from such materials. To support learners, teachers can use scaffolding with activities that can be done with students such as pre-teaching vocabulary, asking some guiding questions to help them understand material better.

In addition to that, teaching vocabulary is important while assigning students the reading tasks. According to Nation (2013), students need to know at least 95%–98% of the words in a text to understand the reading material. However, scientific texts often contain complex terms that are unfamiliar to many students, making the reading process more difficult to them. To address this issue, instructors can make students use academic word lists and may even permit students to use digital glossaries during class activities. (Coxhead, 2000).

The challenges the students face while reading scientific texts are not only linguistic, but they also can be motivational. For example, many students reported that they felt anxious and frustrated when they were assigned to read scientific texts, and mentioned how their motivation to read in English decreased after reading this type of texts (Brantmeier, 2005). However, when

they understand the purpose of the text and see its relevance to their personal goals their motivation levels increased. According to Eccles and Wigfield (2002) , students are more likely to engage in a task when they believe they can succeed and when they perceive the task as important. Therefore, as I have mentioned above, teachers should clearly explain why it is important to read this type of text for their future career success. Moreover, another important aspect of having motivation is autonomy. Ryan and Deci (2000) stated that intrinsic motivation is enhanced when students feel a sense of control while learning a language. In Academic English courses required to take at university, this can be encouraged by giving opportunities for students to choose at least topics of scientific texts, design their own reading projects, or set personal learning goals about reading in general. Research by Gambrell (2011) supports the idea that giving students the opportunity to choose increases motivation and engagement in reading tasks. For example, students studying education may be more interested in reading articles about classroom behavior or learning theory. That is why, selecting reading assignments to align with student interests promotes both motivation and deeper learning of students.

Based on arguments mentioned above, it is obvious that the role of the instructor is central in facilitating students' motivation to read scientific texts. Teachers must not only select appropriate materials but also provide clear instructions, guide discussions among students in class, and teach strategies the students can use during reading . Afflerbach, Pearson, and Paris (2008) stated the importance of using strategies for students that can be described as metacognitive such as summarizing, questioning, and clarifying while reading. By using these strategies during reading activities, teachers help students develop a reading skill that can make students read difficult texts independently in the future. In addition to that, teachers should have

reflection sessions, in which they can ask students various questions to evaluate their reading process and identify their strengths and weaknesses.

In addition to that, research suggests that many teachers feel not knowledgeable enough to teach such materials, especially if they lack knowledge about science related texts Cammarata and Tedick, 2012. For this reason, I think professional development for instructors should include training on how to teach scientific texts, maybe integrating some teaching strategies effectively. According to Cammarata and Tedick (2012), language teachers need both content knowledge and should use various teaching approaches in order to effectively integrate scientific texts into their teaching.

Furthermore, scientific texts are used in English courses, evaluation methods can be very important. For example, summative assessments like quizzes or summaries may not help students fully capture the reading material. Instead, formative assessments such as reading journals and group discussions may allow students to express their understanding and receive feedback from teachers. According to Andrade and Cizek (2010), such assessments may provide more opportunities for students to develop their learning.

In general, the integration of scientific texts in academic English courses provides valuable opportunities for students for their language development and even critical thinking. However, these benefits are not spontaneous. It is because scientific texts must be carefully selected by teachers and only then should be integrated into the curriculum in order to be fully effective. That is why, teachers play a central role in guiding students through the complexities of scientific texts and in helping them develop the confidence and competence to engage with scientific materials.

2.4 Reading challenges of English learners

Grabe (1991) argued that vocabulary knowledge is vital to better understand academic texts in a foreign language, as lack of vocabulary can lead to some reading difficulties. Akbari (2017) highlighted that students over-rely on dictionaries and previous knowledge of old words without checking for accuracy. According to Akbari (2017) due to previously mentioned reasons, there is a need for students to have good translation skills while reading academic texts in English. Gunning (1998) identified six factors contributing to poor reading such as academic vocabulary, overall vocabulary, reliance on background knowledge, and the absence or not using the reading strategies such as scanning and skimming. There are also some factors that are worth mentioning such as cultural background, teachers support and classroom environment. So, finding out these factors among freshmen and then implementing effective reading strategies using the findings can enhance students' academic reading skills in the future. An irreplaceable and key aspect of having a high level of reading motivation lies in the area of language proficiency.

2.5 Factors influencing reading motivation of students

To proceed further, motivation when it comes to reading is often considered as having joy and to be interested in reading. According to Cambria (2010), this definition is quite correct, but it is important to know that motivation can mean different things, and it is not just about having fun while reading. Motivation includes a person's values, beliefs, and how they act when it comes to reading. So, this study also considers these previously mentioned factors while investigating this topic.

According to Ningrum & Matondang (2017), skill and motivation are interconnected among each other. It means while some students may have interest in reading, may lack dedication and can fail to recognize the importance of hard work in reading. It is vital to recognise that different students may face various challenges in their reading. That is why it is crucial for educators to find teaching strategies that address both reading skills development and motivational aspects as well.

Additionally, Abdelrahim (2012) found out factors influencing student motivation. For example, factors such as classroom climate play a crucial role in the development of reading motivation, while lack of interest, unmet needs may contribute to lack of motivation in learning English. That is why, knowing these diverse factors that influence motivation is critical for educators to properly identify and address them. So, as this study aims to find out these factors among freshmen it can be greatly beneficial for educators. There is a big importance of matching reading materials to students' interests, experiences, and cultural backgrounds to make them more interested in reading.

To support the previously mentioned arguments, Turner and Paris (1995) highlighted the important role of teachers who scaffold, provide constructive feedback, and provide their students with choice opportunities and autonomy in reading tasks, making them motivated to read in English. In addition to that, the significant role of the classroom environment was mentioned in shaping student motivation, arguing that a supportive and positive environment with positive teacher-student relationships in it, and collaborative peer interactions can influence student motivation.

The interaction between cultural background and reading motivation is an important area that needs to be investigated. Kim (2001) highlighted the significant influence of cultural factors

that can shape ESL students' motivation to use reading materials. Moreover, the cultural relevance of reading materials becomes paramount as it promotes increased engagement with reading materials among students. As I have mentioned before, one of the most significant barriers to reading motivation is text difficulty. Texts become difficult due to vocabulary load, sentence complexity, and content familiarity. When texts are perceived as too difficult, learners may become frustrated, lose confidence to read, and avoid reading altogether. This is particularly problematic for English majors in their first year, as they may not yet possess the linguistic and background knowledge needed to fully engage with scientific texts. Students' perceptions of text difficulty directly influence their willingness to read. If a text is seen as too hard, motivation drops, regardless of the potential benefits of the material. Conversely, when students feel that a text is within their ability range, they are more likely to approach it with interest and persistence. This highlights the importance of careful scaffolding when introducing difficult texts. Pre-reading activities, vocabulary previews, and opportunities to discuss content before reading can help students feel more prepared and confident. Teachers must also be aware that perceived difficulty is subjective. Two students with similar reading levels may respond very differently to the same text depending on their mindset, past experiences, and expectations.

2.6 Relevance of Texts to Learners' Goals

Another important factor in reading motivation is the relevance of the text. To explain this, relevance is about how well the content of the text connects to students' personal interests, academic goals, or future careers. For English majors, especially those who plan to become English teachers, reading materials that relate to teaching, education, or language learning are more likely to be considered as relevant to them. When students can see the value of what they are reading, they are more likely to stay engaged and motivated to read in English. For example,

a scientific text about language acquisition theory might initially seem unrelated and not interesting to first-year students, but if teachers explain the importance of this topic earlier, it becomes more meaningful to them. It is because the more students can see the importance of what they read, the more likely they are to invest effort to understand the reading material.

If students see themselves as future educators, texts that are about teaching itself can increase motivation. On the other hand, if scientific texts seem disconnected from teaching, students may feel that the reading material is unnecessary. It is obvious that, when learners read texts in a second or foreign language, their motivation to read often depends on how relevant they find the content that they are reading. For example, if the reading materials connect to their personal, academic, or professional goals, they are more likely to stay engaged, persist through challenges they may face while reading.

According to the Eccles & Wigfield (2002), students are more motivated when they believe they see the task as valuable and important for them. For example, if an English major student believes that reading scientific texts will help them become a better teacher, they will be more motivated to engage with those texts, even if they are difficult. Eccles and Wigfield (2002) argue that when tasks are seen as irrelevant or unrelated to them, motivation drops for this reason.

Similarly, Deci & Ryan (2000) suggested that learners feel more motivated when their needs for autonomy are met. One way to meet the need for autonomy is to let students choose the topics they are going to read. For language learners, reading a text that matches their goals can make the reading process in general more interesting activity. According to Deci and Ryan, motivation suffers when learners cannot see how the material is useful for them.

There are studies that also support the importance of relevance. For instance, in a study by Guthrie et al. (2004), students were more motivated to read when they found the reading materials interesting and important. When reading content was directly related to students' goals, they were motivated to read. Similarly, Wang and Guthrie (2004) found that relevance and being interested in reading topics were reasons to stay engaged in reading among Chinese students learning English.

In addition to that, Kikuchi and Sakai (2009) observed that one major reason for demotivation among Japanese university students was the use of texts that seemed unrelated to their goals. According to the survey results, students reported feeling bored and disconnected when reading materials did not match their goals. On the other hand, when teachers used reading materials related to students' future professions or interests, students felt more engaged and motivated to read in English. This finding supports the idea that text selection should not be random but should be carefully organized by teachers.

According to Grabe and Stoller (2011), reading scientific texts can be very difficult for students because of their complexity. However, if students believe the texts are essential for their future careers or for passing key exams, they are more likely to be motivated. Grabe (2009) argues that academic reading tasks must be followed by clear explanations from teachers about why it is necessary to read to support learner motivation.

The current study, which explores how scientific texts affect the reading motivation of freshman English learners, also connects closely to this topic. Scientific texts are often difficult and abstract, making it hard for students to understand their importance unless teachers explain it clearly. When learners cannot see how reading scientific texts is important for them to read, they

become disinterested in reading them. To support the previously mentioned idea, Bernaus and Gardner (2008), showed that students' motivation levels to read increased when instruction was connected to their future goals.

Despite these ideas, there are still research gaps about this topic. First, many studies on reading motivation do not examine how relevance is defined by students. For example, what is seen as relevant for a student studying education may not be the same for one studying engineering. Second, few studies have explored how teachers decide which texts to use and whether they consider students' goals in their planning. Third, there is a lack of research in Central Asia countries, where educational goals and motivations may be shaped by different social and institutional factors. As Mokhtari and Sheorey (2002) noted, reading habits and attitudes vary widely across countries, which can influence how learners respond to reading tasks.

In addition to that, there is still another underexplored area about how relevance affects comprehension of the texts. While we know that relevance boosts motivation, there is less research on whether it also helps students understand texts better. One possibility is that when learners are interested about the topic, they are more likely to use reading strategies. This was suggested by Afflerbach, Pearson, and Paris (2008), who found that motivation affects not just how much students read but also how they understand information.

Moreover, digital tools also can be used to increase relevance. It is because online platforms may allow teachers to find texts based on student interests, and some platforms even recommend texts based on students' personalities. According to Huang (2015), technology can help learners see how English reading is useful in their daily lives and careers. For example, a

future teacher might read a blog post about teaching tips or watch a video about language development.

Finally, giving feedback and organizing reflection sessions as teachers can improve the relevance of reading tasks. According to Schunk and Pajares (2002), when students receive feedback that shows how their reading relates to their goals, they are more likely to stay motivated to read. In addition to that, reflective tasks such as journaling about what they learned can also increase the sense of relevance. Those strategies are especially valuable because they help future teachers think about how to bring the same strategies into their own classrooms and make the reading activity more interesting for their own students.

2.7 Teacher Support and Classroom Environment

The classroom environment has a major impact on reading motivation of students. (Candry & Chamber, 2012) Teachers who are supportive create a positive environment where students feel comfortable taking risks and exploring difficult materials. It is obvious that this is especially important when students are asked to read challenging texts like scientific ones.

According to Candry & Chamber (2012), teachers can support learners and motivate the students by preparing them for what they will read. For example, this might involve discussing the topic before giving the reading material, asking students what they already know about its topic, or reviewing key vocabulary before starting to read scientific texts. During reading, guided questions can help students focus on key ideas. After reading, discussion, reflection, or application tasks can help consolidate the material and give students a sense of accomplishment after reading.

Based on my observation as a teacher, students can also benefit from collaborative reading strategies. For example, when reading is done in pairs or small groups, students can help

each other understand the text and build confidence through social interaction. Peer discussions not only improve comprehension but also reduce anxiety and increase willingness to engage with the text. In addition to that, teachers must also be sensitive to students' emotional responses. Reading motivation is not just cognitive, it is also emotional. Encouragement, constructive feedback, and positive reinforcement can build students' self-efficacy and help them develop a more positive relationship with reading in foreign language.

As I have mentioned before, teacher support and the classroom environment are very important for helping students stay motivated and succeed in their studies. This is especially true for students learning English as a foreign language. First-year students at university often find academic tasks difficult, especially when they are asked to read scientific texts in English. These texts can be hard to understand because they include complex ideas, technical words, and formal grammar. A supportive teacher and a positive classroom environment can help students overcome these challenges. In fact, many studies show that when students feel supported by their teacher and safe in their classroom, they are more willing to continue reading even when the task is difficult (Eccles & Roeser, 2011).

To proceed further, a helpful way to understand teacher support is through the idea of scaffolding. In the case of reading scientific texts, a teacher might prepare students by teaching important words before reading or giving background information about the text. Hammond and Gibbons (2005) explain that scaffolding works best when the task is still challenging but the language is made easier so that the student can succeed. This approach helps students feel that the task is easy enough and possible to complete.

In addition to that, with academic help, emotional support from teachers is also very important. According to Deci & Ryan (2000), students learn better when they feel confident, connected to others, and feel support from teachers' side. It is obvious that teachers who care about their students, listen to their worries, and offer choices in tasks help students feel more motivated. Reeve (2006) explained that when teachers explain why a task is important and give students opportunities to share their opinions, students are more active in class and try harder to understand the text even if it is very difficult. This kind of emotional support helps students stay interested in reading even when it is hard.

Freshman students often feel pressure when reading complex texts. Undoubtedly, in this case, support from the teacher becomes very important for students. For example, when teachers give positive feedback, students believe they are making progress and feel more confident to read (Assor et al., 2002). For example, Hattie and Timperley (2007) found that students who receive positive feedback do better than those who only hear what they did wrong.

The classroom environment also affects how students feel about reading. A classroom that is friendly makes it easier for students to focus and stay motivated to read in English. Undoubtedly, students perform better when there is a positive atmosphere in the classroom. In reading classes, this can mean having group reading time, class discussions based on what they are reading at their current time. When students feel comfortable asking questions, they are more likely to understand difficult material. For example, students also feel less nervous when they are allowed to talk to classmates about the text (Guthrie & Wigfield, 2004).

The relationship between the student and the teacher is also very important. Pianta et al. (2008) explain that when teachers are kind and supportive, students behave better and work

harder in class. In university EFL classes, many students feel nervous about making mistakes in English. Teachers who are patient and understanding can help students feel less afraid to engage with difficult texts. Skinner and Belmont (1993) found that when students think their teacher cares about them, they are more willing to stay active in class and not give up when things get hard. This kind of support also includes showing interest in students' goals and their future plans.

Dweck (2006) says that students who believe they can learn, even if it is hard, are more motivated. That is why, teachers should praise their students' effort, accept their mistakes as part of learning, and focus on how students can improve.

Cummins (2001) explains that when teachers connect some activities to their students' personal lives, students feel respected. This helps them stay interested and see the text as relevant. For example, if a scientific text is about education, a teacher might ask students to think about their own school experiences before reading. These small changes help students understand the material and enjoy the process.

Teacher training also affects the classroom environment. Keller (2010) writes that training teachers in areas like using technology, giving useful feedback, and adapting lessons for different students makes the classroom more effective. In courses that include scientific reading, teachers should be trained to deal with the special challenges these texts bring. This includes knowing how to explain hard vocabulary, guide students through difficult ideas, and connect texts to real-life situations.

As it was mentioned earlier, technology can also improve the classroom environment. For example, tools like online dictionaries, shared documents, and reading apps help students work together. Warschauer and Kern (2000) say that technology helps students learn from each other.

For example, a teacher can ask students to highlight parts of the text and add comments, creating a shared reading activity. This makes reading more active and helps students learn from their classmates.

It is also important to understand how students see their teacher's support. Sometimes teachers think they are being helpful, but students may not feel that way. Wentzel (2002) explains that students must believe that the support is helpful. Teachers should listen to student feedback and make changes when needed. When students feel heard, they trust the teacher more and are more open to learning.

Reading scientific texts can feel difficult, especially for new university students. But when students are in a classroom where they feel safe, supported, and part of a team, they are more likely to read with interest. They also start to see reading as something they can succeed in. This change is very important for long-term learning. Students begin to believe that they *can* read hard texts, which helps them continue learning in other areas as well.

Overall, the teacher and the classroom environment have a big importance on students' reading motivation. A good teacher does more than just teach the material, they create an environment where students feel safe and motivated to read. It is because support from teachers' side helps students face difficult texts with confidence. The research clearly shows that strong teacher support and a good classroom environment are key to helping all students succeed in reading and language learning in general.

2.8 Extensive Reading vs. Intensive Reading Approaches

There is an ongoing debate about whether extensive or intensive reading better supports language development and motivation. (Grabe & Stoller, 2011). Extensive reading is about reading more pages of easy, enjoyable texts, while intensive reading focuses on careful analysis of shorter but more complex texts. When it comes to scientific texts, they typically fall under the category of intensive reading due to their difficulty.

While intensive reading is useful for developing academic reading skills, it can also feel tiring especially when students are expected to analyze difficult texts without support from teachers' side. According to Grabe & Stoller (2011), for first-year students, starting with extensive reading materials may help build confidence, fluency, and a positive attitude toward reading. As students become more comfortable, they can have a gradual transition to more intensive reading tasks. That is why, blending both approaches may offer the best solution in order to make students have mastery in reading. For example, teachers can assign extensive reading for pleasure or general understanding, while using selected scientific texts for more focused analysis of reading material. Undoubtedly, this balance can help keep motivation high while still meeting academic objectives. Additionally, when students are allowed to choose some of their reading materials or topics, it can further enhance their sense of motivation to read in English.

Despite that the students may be equally motivated to read, the type of motivation that drives them to read may be different. According to Candry & Chamber (2012), students with intrinsic motivation demonstrate more desire and effort while reading in a foreign language. High intrinsic motivation can be as a result of big interest in the reading material, high reading

performance and high achievement in reading tasks. On the other hand, extrinsic motivation can be the result of desire to obtain praise, rewards and more about external recognition.

Extrinsic motivation, on the other hand, involves engaging in an activity to obtain external rewards or avoid punishments. In the context of reading, extrinsically motivated learners may read to fulfill academic requirements, earn rewards, or meet external expectations (Ryan & Deci, 2000). While extrinsic motivation can prompt initial engagement in reading tasks, its long-term effects on reading comprehension and learning outcomes are mixed. Some research suggested that extrinsic rewards, such as grades or incentives, may undermine intrinsic motivation and diminish learners' interest in reading (Deci et al., 1999). However, other studies proposed that extrinsic motivators can complement intrinsic motivation when used strategically (Vallerand, 1997). For example, providing performance feedback or recognition for reading achievements can reinforce learners' intrinsic motivation and sustain their engagement in reading activities. This present study aims to address these two types of motivation, whether it is extrinsic or intrinsic, while investigating the impact of scientific texts on motivation among freshmen.

2.9 Research Gaps

A research gap shows where more studies are needed to better understand a problem or improve educational practice. Identifying research gaps is important because it helps researchers focus on what still needs to be learned. In the field of language education, especially when it comes to how students read and understand scientific texts, there are several important gaps that still need to be addressed. This paragraph will explore these gaps by looking at what has already been studied and where the missing pieces are, especially in relation to language learning within university settings.

One of the most noticeable research gaps is that not much attention is given to scientific texts in language teaching practices. Many studies on reading motivation focus on general texts, such as stories, news articles, or short essays and not much on scientific texts (Grabe & Stoller, 2011). The previously mentioned text types are often used in classrooms because they are easier for students to understand and teachers to work with. However, in real academic life, especially in university courses, students are often required to read scientific texts that are more difficult. Despite this fact, most research still focuses on easier texts. This shows a clear gap between what students need to read and what researchers are studying.

Another gap lies in how first-year university students are affected by the introduction of scientific texts. These students often enter university with limited experience reading scientific material in English. Their reading motivation can be strongly influenced by how challenging or unfamiliar these texts are (Yamashita, 2013). While some studies have looked at reading motivation in general (Deci & Ryan, 2000), fewer have focused on how motivation changes when students must read difficult scientific content. This is especially important for students who are studying to become teachers themselves. If their first experience with scientific texts is negative, they may develop a long-term dislike for academic reading.

Based on my observation, many researchers study general English classes or high school learners, but fewer focus on university students who are training to become English teachers. These future teachers have a special role because their reading experiences will influence how they teach reading in the future. As Applegate and Applegate (2004) suggest, teachers who are not motivated readers themselves are unlikely to inspire reading habits in their own students. Despite this, not many studies look at how reading scientific texts affects student-teachers' motivation and confidence. This lack of research is an important gap.

Another gap appears in the study of academic reading strategies. According to Pressley & Afflerbach (1995) research has shown that strategies like summarizing, questioning, and predicting can help students understand texts and fewer studies focus on how these strategies are used with scientific texts. Therefore, there is a need for more research into which strategies work best for reading scientific texts and how teachers can help students learn them.

Technology in reading is also an area where research gaps can be found. Digital reading tools like e-books, reading apps, and online dictionaries are becoming more common in education. Some research has shown that these tools can help students to understand scientific texts better (Huang, 2015). However, there is still a little research on how these tools specifically support students when they read scientific texts. Also, it is not fully clear how students interact with these features or whether digital tools really help reduce the difficulty of reading such texts. More research about this topic could help educators make better use of digital tools in teaching reading. As the field continues to grow, future research should aim to fill these missing areas so that teachers can teach reading more effectively.

That is why, based on gaps mentioned above, this current study aims to fill that gap by exploring how scientific texts in required courses impact the students' majoring in English motivation. This study focuses especially on first-year learners, where motivation and confidence are still forming and will determine their motivation levels in the future. The findings may help improve teaching strategies the teachers may use while teachers reading and during material selection as well.

2.9.1 Future Directions for Research and Practice

In addition to that, teacher training also plays a critical role while teaching reading. For example, research by Feiman-Nemser (2001) supports this view, and mentioned the need for continuous professional development to make sure that students are motivated to learn during their studies. Moreover, Grabe and Stoller (2011) stated that EFL teachers who received training in teaching reading are more responsive to meet their student needs, making them motivated to study.

2.9.2 Teacher Feedback and Its Role in Building Reading Motivation

In addition to that, receiving feedback from teachers is very important for learners. It is because it significantly influences learners' engagement with reading tasks, particularly when reading scientific texts. According to Hyland and Hyland (2006), effective feedback is not only about mentioning their mistakes but also praising the students for even their small efforts. For example, Feiman-Nemser (2001) stated that when future teachers receive clear, empathetic feedback during their own time being a student, they are more likely to replicate such practices in their future classrooms after becoming a teacher. This case explains the importance of learning how to give high-quality feedback for teachers. The current study takes into account how teacher feedback affects the confidence and reading motivation of first-year students when interacting with scientific materials. In support of this, Gass and Mackey (2007) highlight that feedback given by teachers in language classrooms is closely linked to student motivation.

2.9.3 The Interplay Between Reading Fluency and Motivation

Reading fluency appears to be a vital skill to better understand the text and to foster motivation while reading. (Rasinski, 2004). Nation (2009) noted that complex vocabulary in scientific texts often hinder fluency, reducing learners' motivation due to its complexity.

For example, strategies such as repeated reading, guided oral reading, and the use of simplified texts have been proved to improve fluency and motivation as well. (Rasinski, Reutzel, & Chard, 2011). Kuhn and Stahl (2003) found that when learners become more fluent they are more likely to read more often. In the present study, classroom observations provide data on what extent students are fluent in reading scientific texts, offering information about how fluency levels of students influence their motivation. Similar topic was examined by Taguchi, Takayasu-Maass, and Gorsuch (2004), who found that reading frequently significantly improved both fluency and learner motivation in Japanese EFL learners.

2.9.4 Reading Autonomy and Independent Reading Habits

Autonomy is another thing that helps students to have more sustained reading motivation. Ryan and Deci (2000) argued that autonomous learners have higher intrinsic motivation because they view reading as personally meaningful and useful. Unfortunately, many EFL programs maintain rigid structures that do not fully support students' independence.

For example, integrating independent reading activities such as journals and book reports can promote independence and long-term engagement of students with the texts that they are reading during that time (Guthrie & Wigfield, 2000). These activities allow learners to explore texts that align with their interests and language proficiency levels. The current research gives

more information about how first-year students respond to opportunities for choice and autonomy in reading tasks such as scientific texts. In addition, Yamashita (2013) found that self-selected reading experiences significantly increased Japanese university students' willingness and motivation to read in English.

2.9.5 Integrating Reading with Other Language Skills

Reading motivation also may increase when reading is linked with writing, speaking, and listening tasks. According to Leki and Carson (1994), integrated skills instruction encourages deeper engagement with texts. For example, discussing a scientific article or transforming it into a presentation can help learners get more new information while practicing communication skills during delivering the material to the audience.

Nation (2009) supports the idea that communicative tasks not only improve comprehension but also boost motivation by showing learners how the theoretical knowledge they got can be immediately used in practice after reading. In my opinion, this is particularly useful for English majors who will later teach integrated language skills themselves. The present study investigates the impact of integrating scientific texts with class discussions and collaborative activities to explore their role in promoting sustained motivation of students. Studies by Stoller (2004) and Grabe (2009) further suggest that project-based reading tasks that involve multiple language skills improve learners' engagement and make reading more interesting activity for students.

2.9.6 The Role of Reading Assessment in Shaping Motivation

Assessment greatly influences students' attitudes toward reading and overall how motivated the students are to learn language. Traditional assessments such as timed comprehension tests, may lead to anxiety and can make reading a boring activity (Paris & Paris, 2003). In contrast, alternative assessments such as portfolios, reading reflections, and self-assessments have been shown to enhance their motivation to read. (Paris & Paris, 2003).

Black and Wiliam (1998) highlighted the importance of formative, ungraded assessment in reducing anxiety and making the students read more. For example, when learners are not penalized for errors, they are more likely to experiment with new strategies and texts, leading to deeper learning and sustained interest to read in foreign languages. The current study supports this approach with reflective tasks as scientific texts contribute to students' ability to read complex reading materials. Research by Andrade and Du (2007) supports the use of student self-assessment as a motivational tool.

2.9.7 Peer Influence and Collaborative Reading Contexts

To continue with, reading is not just an individual activity. It is because reading is also shaped by the social environment. For example, in many classrooms, the way students interact with one another plays a big role in how they experience reading. When students notice their peers getting involved with actions such as asking questions, showing interest, or participating in group discussions, they are often more likely to engage themselves in reading activity. For example, activities like summaries written in pairs have been shown to support reading comprehension among students (O'Donnell, 2006).

Working together on reading tasks also helps students feel less alone, especially when the material is challenging, as is often the case with scientific texts. For instance, being able to discuss the confusing parts with classmates or ask questions in a group can make a big difference in both understanding and confidence in reading. Teachers can support this kind of learning by regularly organizing paired reading, small group discussions, and peer mentoring activities that make collaborative reading an engaging activity for students.

Reading motivation has long been a significant concern in English as a Foreign Language (EFL) settings, particularly among university students. Many studies have explored how motivation affects reading comprehension and language acquisition (Grabe, 2009). One common finding is that reading motivation is influenced by a learner's beliefs, external contexts, teaching methods, and the content of reading materials. In recent years, the role of scientific texts in shaping motivation has gained attention, especially in contexts where reading such materials is mandatory or required. These types of texts, which are typically complex, often fall into the category of intensive reading. While they are useful for academic development, their complexity can be tiring particularly for first-year students. The current study examines this issue in depth by focusing on how these texts influence motivation among freshmen English majors, many of whom are preparing to become future educators.

Overall, reading has been approached through either extensive or intensive strategies. Extensive reading is about engaging with large amounts of relatively simple texts with the goal of improving fluency. (Day & Bamford, 2002). In contrast, intensive reading focuses on the detailed analysis of shorter, often more difficult texts. Scientific texts clearly belong to the intensive reading category (Nation, 2009). Grabe and Stoller (2011) stated that EFL students often benefit from extensive reading practices more as they help build fluency and confidence to

read in foreign languages, especially during the first years of study. However, academic courses frequently prioritize intensive reading. This can be problematic for first-year students who are still adjusting to the demands of university-level English.

A key aspect of this discussion involves the types of motivation students bring into the classroom. Intrinsic motivation refers to doing an activity for the inner satisfaction related to their personal goals, whereas extrinsic motivation involves performing an activity to achieve some outcome, such as grades or teacher approval. In the context of reading, students who are intrinsically motivated are more likely to enjoy reading and persist in it even when the material becomes challenging (Deci et al., 1999). In contrast, extrinsically motivated students may engage with reading tasks only for academic rewards or to avoid punishment. While this may result in short-term motivation.

Candry and Chamber (2012) found that learners with high intrinsic motivation were more willing to engage deeply with reading materials despite its difficulty. They often used more effective reading strategies and were less likely to give up when faced with unfamiliar vocabulary while reading. On the other hand, students with predominant extrinsic motivation tended to rely more on strategies such as memorization or translation, which do not necessarily support deeper comprehension of the texts. That is why, based on arguments above, it is important to understand the differences in motivation types to see how students respond to scientific texts.

Research also suggests that the way reading tasks are designed by teachers can significantly affect students' motivation. For example, when teachers present reading as a meaningful and useful activity that is connected to students' future careers or personal interests,

students are more likely to engage with the material and be motivated to read (Guthrie & Davis, 2003). For example, if a scientific text on child development is linked to a future assignment where students create lesson plans for primary school learners, students may see the relevance and usefulness of reading such material. This sense of relevance plays a major role in shaping students' willingness to engage with scientific texts.

The current study investigated the motivational levels of freshman English majors when they are required to read scientific texts as part of their academic coursework. Many of these students are enrolled in teacher preparation programs and will eventually be responsible for teaching reading themselves. Their attitudes toward reading, therefore, are not only important for their own academic success but also have implications for their future teaching practices as a teacher. For example, if these future educators develop a negative attitude toward reading scientific texts, they may struggle to convey the importance of reading to their own students. Thus, understanding their motivation and the factors that influence it is critical.

According to Bandura (1997), students with high self-efficacy are more likely to engage in reading, persist when faced with difficulties, and use effective strategies while reading. Several studies have mentioned that there is a link between self-efficacy to reading motivation and achievement (Schunk & Pajares, 2002). For EFL learners, who often face both linguistic and cultural barriers, developing a strong reading self-efficacy can be particularly beneficial. Unfortunately, scientific texts can undermine self-efficacy if students feel overwhelmed by unfamiliar terminology and complex structures. This is especially true for first-year students who are still developing their academic reading skills.

One way to support reading self-efficacy is through providing temporary support from teachers' side that is gradually removed as students become more competent (Vygotsky, 1978). Teachers can support the students by previewing key vocabulary, offering summaries, asking guiding questions, and encouraging peer collaboration. These strategies not only improve comprehension but also help students feel more confident in their ability to read difficult texts. The current study takes these pedagogical insights into account by examining how teacher support affects students' motivation to read scientific texts.

Peer collaboration also plays a significant role in reading motivation. O'Donnell (2006) noted that students are often more willing to engage with challenging material when they can work together. Group discussions, partner reading, and peer explanation tasks allow students to share their interpretations and clarify misunderstandings. This collaborative learning environment can reduce feelings of isolation and increase a sense of community in the classroom, which in turn supports motivation. In the current study, students reported that reading was less intimidating when they worked with classmates. These findings support those of Dornyei and Murphey (2003), who emphasized the importance of social interaction in sustaining high motivation to learn language.

Additionally, the role of text complexity should be also mentioned. Scientific texts are often written in formal language and include complex vocabulary that is mostly unfamiliar to EFL learners. Nation (2009) argues that such texts are particularly challenging because they require not only general language proficiency but also background knowledge. When students lack this background, they may feel lost or frustrated, which can quickly decrease their motivation levels. One of the goals of the current study is to identify the specific features of

scientific texts that students find most difficult, in order to suggest more effective teaching strategies.

To continue with students' autonomy, this involves choosing texts and setting goals about reading. Autonomy is strongly linked to intrinsic motivation because it allows students to feel a sense of control over their learning. Extensive reading programs often support autonomy by letting students choose what to read and how much to read. However, in academic settings where scientific texts are required, opportunities for autonomy may be limited. Undoubtedly, this can reduce motivation, especially among students who prefer to learn at their own pace or who struggle with the assigned material. The current study explores how limited choice in reading materials affects motivation and whether students feel more engaged when they are given more opportunities to choose.

The context of this study is also important. It takes place at a university where reading scientific texts is a mandatory part of the curriculum for English majors. These texts are included in a required reading course that is designed to build academic reading skills. However, the texts may not take into account differences in students' proficiency levels, interests, or goals of students. As a result, some students may feel that the readings are irrelevant or too difficult, which can negatively impact their motivation. By analyzing students' responses and teacher observations, the study aims to provide information on how these texts are perceived and what can be done to make them more accessible and engaging.

Overall, motivation to read in a second language is shaped by some factors, including the type of the texts, the type of motivation, teaching strategies, peer influence, and learner autonomy. Scientific texts may pose particular challenges due to their complexity. However,

undoubtedly, these challenges can be solved through effective scaffolding, relevant task instructions, and opportunities for collaboration with other students. The current study contributes to this field by focusing on a specific population of first-year English majors preparing to become teachers and examines how their experiences with scientific texts influence their reading motivation. The findings can give both theoretical and practical knowledge by offering insights that can help educators design more effective reading strategies to make them more motivated to read in English.

CHAPTER 3

3. Methodology

This chapter will mention the research design, participants, instruments, procedures, and data analysis methods used in this qualitative study on the impact of scientific texts on the reading motivation of first-year university students majoring in English. The objective was to explore how learners perceive and respond to scientific texts included in their academic reading coursebooks, and to understand their motivation levels while they are reading scientific texts. The study was designed to show that understanding students' lived experiences can provide valuable insights for improving reading instruction in English.

This study uses a qualitative research design. In the context of the qualitative method of the research, it was aimed to learn the reading motivation levels of students towards scientific texts and the views of teachers on this topic. It uses a multi-method approach, incorporating both surveys and observations in order to investigate the perceptions, attitudes, and reading motivation levels of freshman English learners towards scientific texts. The study seeks to find answers to three primary research questions concerning the complexity of scientific texts as their influence on reading motivation and the strategies employed by students to overcome some challenges, if there are any.

3.1 Participants

The participants in this study are 47 freshman English learners enrolled in the Foreign Language Department with varying levels of language proficiency and 6 teachers that have experience in teaching reading. In qualitative research, the small number of teachers makes it possible to go deeper into the data. Criterion sampling, one of the purposive sampling methods,

was used to determine the teachers that participated in this study. For students participating in this study, purposive sampling technique was employed to ensure diversity in participants' backgrounds and experiences. In this way the richness of the data collected was enhanced.

3.2 Data Collection Instruments

1. **Surveys:** A survey questionnaire was used to gather qualitative data on participants' perceptions, attitudes, and feelings towards scientific texts. The survey consisted of both closed-ended and open-ended questions, allowing for a comprehensive and in-depth exploration of participants' views. The survey will include specific questions aimed at understanding how the complexity of scientific texts influences the motivation to read in English. Survey data was collected through an online platform. To be specific, Google Forms was used in this study.
2. **Observations:** Experienced teachers were asked to observe students when they engage with scientific texts in classroom environments. Observation report forms were utilized, using prepared in advance questions to guide the observation process. Teachers were documenting students' behaviors, reactions, and strategies employed while reading scientific texts and then submit those reports to the researcher.

3.3 Data Collection Procedures

Data collection will be conducted throughout the academic year to capture evolving perceptions and experiences. Surveys and observations will be conducted at multiple intervals to monitor changes over time in participants' attitudes and motivations towards scientific texts. Observations will be carried out during regular classroom lessons where students interact with scientific texts as part of their coursework. The observations were conducted two times throughout the year. There are seven open-ended questionnaires in the online survey. These

questions can be listed as follows: ‘How would you describe the impact of reading scientific texts on your overall motivation to read in foreign language?’, ‘In what ways do you think educators could further enhance the motivational aspects of using scientific texts in coursework?’, ‘How often do you find yourself actively engaged and interested in scientific texts compared to other types of reading materials?’, ‘Have you noticed any improvement in your overall reading skills as a result of incorporating scientific texts into your language studies?’, ‘What specific aspects of scientific texts contribute to or hinder your motivation to read them as part of your language curriculum?’, ‘Have you noticed any changes in your overall reading motivation since the introduction of scientific texts into your language coursework?’. Experienced teachers in language teaching evaluated the questions in the online survey in terms of accuracy and content relevance. After learning their opinions, no change was made in the number of questions. However, the experts' opinions on the question content were considered. Also, data were collected with the reading motivation scale. The scale consisted of two factors such as ‘Not motivated at all’ and ‘Extremely motivated’, the participants were asked to fill out the scale choosing the number from 1 to 5. All instructions were given to the participants by the researcher for the students to fill in the scale. During the observation process, the students were raising their papers with emojis to show their motivation levels during the reading of scientific texts in classroom environments. The observers were asked to fill the report form and answer questions provided by the researcher.

3.4 Teacher Observation Form

Teachers were asked to complete structured observation forms based on their regular classroom experiences. The observation form included prompts to note students’ behavior during

reading activities involving scientific texts. These behaviors included levels of participation, willingness to volunteer answers, signs of boredom or confusion, and engagement during group discussions. Teachers also provided narrative comments about their perceptions of student motivation and the challenges they observed.

Observation forms were designed to allow both objective recording (e.g., frequency counts) and subjective interpretation (e.g., notes on individual student reactions). This balance was intended to provide comprehensive and contextualized data.

3.5 Data Analysis

Data analysis was conducted in two phases: quantitative analysis of the survey's Likert scale items and thematic analysis of the open-ended responses and teacher observations. The data collected in this qualitative study were analyzed through a careful and systematic process aimed at capturing the experiences, perceptions, and motivations of freshman English learners when reading scientific texts. As the study was designed to explore the lived experiences and attitudes of participants rather than to test hypotheses or measure variables, the analysis focused on thematic interpretation. The data sources included open-ended student survey responses and structured teacher observation forms, both of which offered rich, contextual insights into the learners' engagement with scientific reading.

Although the student surveys contained some Likert-scale items, these were used to support and inform the qualitative findings rather than for statistical analysis. Their purpose was to help identify general attitudes and patterns, guiding the deeper thematic exploration of open-ended responses.

3.6 Ethical Considerations

Informed consent was collected from all participants. Participants were assured of confidentiality, and their privacy was strictly maintained throughout the research process. So, during the data collection process, the data obtained was used for academic purposes, and personal information was kept extremely confidential. Thus, it was ensured that all participants voluntarily participated in the study.

Ethical approval was obtained from the university's research committee prior to data collection. Informed consent was received from all student and teacher participants. Participation was voluntary, and students were assured that their responses would remain confidential and would not affect their academic standing.

Surveys were administered during regular class hours to maximize participation. Students were given 20–30 minutes to complete the questionnaires. The researcher was present to clarify any questions about the survey items. After collection, surveys were anonymized and stored securely.

Teachers completed the observation forms over a two-week period during regular reading classes, documenting their impressions immediately after each session. The researcher held a short briefing session with each instructor before data collection began to ensure consistency in observation focus and form completion.

CHAPTER 4

4. Results

According to the findings, it was found out that about 8.5% of students weren't motivated to read science texts because they found them too wordy, hard to understand, and too complicated. Most of the students (more than 90%) said they would like to see about the same and more scientific texts in their course materials.

As students spent time reading science texts, they noticed big improvements in their reading skills and motivation towards reading in English. They started thinking more critically, got better at using language, and learned more words in English. They even started to read science texts more frequently because they knew they'd expand their horizons by reading. Based on the participants' responses on the survey, several strategies were mentioned that students use in overcoming challenges while reading scientific texts. A suggestion provided in participants' responses, was the integration of visual aids, particularly short summary videos that can be used as course materials in addition to scientific texts.

One student in response said, "Now when I see science texts, I want to read them fast because they teach me a lot." This feeling was shared by many others. That student thinks that including science texts in language studies helped to learn new words better and understand some scientific terms more easily. This made it easier for them to read in foreign language. Students also noticed that getting better at reading science texts helped them understand other kinds of difficult texts as well. One participant shared, "Not much, but yes. When I started reading scientific texts about animals or animal behavior, I became very interested. Upon arrival at the Dormitory, I began to become more interested in information and continued reading scientific texts. Sometimes, I can take a book from the library and read a little. Recently, I saw

scientific texts on psychology, and in the near future I plan to start reading them, for my own benefit. Thanks to this course for teaching me to love reading scientific texts, to be able to highlight main and additional information, and also to supplement my essays with information from scientific texts."

This response proves that participants have evolving interests and engagement with scientific texts. So, reading science texts can change how students feel about reading. It helps them think better, learn new words, and understand scientific terms more easily. So, including science texts in course materials can make a big difference in how well students learn a foreign language. Most of the teachers (more than 90%) approved that students were very interested in reading science texts, and decided to incorporate science texts into their own teaching in the future.

4.1 Discussion

The survey results, with classroom observation reports completed by experienced teachers, offer evidence of the high levels of motivation and enthusiasm of freshman English learners towards reading scientific texts. Moreover, the strategies used by students experiencing difficulties reflect a good approach for learning English.

The efforts undertaken by students to improve their vocabulary and comprehension skills outside the classroom setting make the students develop their language proficiency further. By providing students with opportunities for authentic engagement with scientific texts to develop their reading skills, educators can make students more engaged in reading texts in English.

According to the responses of students participating in this study, by explicitly learning linguistic challenges students face while reading scientific texts, educators can equip students with the necessary tools and strategies to effectively read complex texts with confidence and

comprehension. For example, vocabulary-building exercises, authentic language activities, and collaborative reading activities can improve students' reading proficiency while deepening their understanding of scientific reading materials.

4.2 Signs of Emotional Responses: Frustration, Boredom, and Confidence

Teachers also described noticeable emotional reactions among students. These reactions ranged from quiet frustration to visible enthusiasm. Several instructors mentioned that when a reading task felt too hard, especially when students did not understand the vocabulary they quickly lost interest. Some students would stop following along, put down their pens, or start looking around the room. At the same time, some students responded positively when they understood the material. Teachers noted small signs of confidence like students volunteering answers, smiling when they got something right, or even helping their classmates. These observations reinforce the importance of ensuring that tasks are appropriately challenging but not beyond students' reach.

4.3 The Role of Teacher Scaffolding

Scaffolding came up in every teacher's report. It was clear that students needed a lot of support to engage meaningfully with scientific texts. Teachers who previewed vocabulary, summarized the text before reading, or guided students through the structure of the text reported better classroom energy and higher participation.

One teacher mentioned a lesson where she first asked students to predict what a scientific text would be about based on the title and headings. "That simple activity made a huge difference," she wrote. "They felt like they had a foothold and were less intimidated."

Another teacher explained that reading aloud together helped students stay on track. In her class, students took turns reading short sections, and the class would pause to clarify or discuss difficult parts. This collaborative reading made the experience feel more interactive and less isolating.

What these observations show is that students are more willing to engage when they feel supported, and that small teaching strategies can shift motivation significantly.

4.4 Peer Influence and Group Work

Several teachers commented on how students responded differently in group settings. When reading tasks were done individually, some students became passive. But when teachers organized small group discussions, students who were usually quiet became more vocal. They asked each other questions, explained things in their own words, and even disagreed respectfully.

This dynamic seemed especially helpful for students who lacked confidence. In one class, a teacher noted that a struggling student became more active in a group setting where peers helped explain parts of the text. “He wasn’t confident reading aloud to the whole class,” she said, “but in a small group, he opened up.”

The collaborative atmosphere also made the reading feel more social and less intimidating. Teachers saw that when students felt safe with their peers, they were more willing to take risks and stay engaged, even with complex material.

Most importantly, the teachers who believed in their students had the best results. When teachers gave kind feedback, noticed improvement, and said things like “You can do it” or “I’m proud of your effort,” students smiled and tried harder. One student said, “When my teacher says

I'm improving, I want to keep going.” Even when students made mistakes, if the teacher responded with patience and support, motivation grew. Believing in students helps them believe in themselves. The classroom is a place where small actions make a big difference. A smile, a kind word, a short break, or an interesting example can change how students feel about reading.

4.5. Motivation and the Perceived Purpose of Reading

Another important theme was the way students responded based on how the reading task was framed. Teachers noticed that when they explained the purpose of reading such as connecting the topic to a future teaching scenario or using the content for a follow-up writing task, students were more focused. One teacher described how she linked a scientific text on childhood development to a later task where students had to create a mini-lesson plan. “Once they knew they’d be using the information, they paid closer attention.” This observation ties back to the broader theme of relevance. When students see that reading has a real-world application or that it connects to something they care about, they’re more motivated to try.

4.6 Challenges Observed During Scientific Text Reading

Despite these positive strategies, teachers also identified persistent challenges. The most frequently mentioned issue was vocabulary. Many scientific texts include technical terms that even advanced students have not seen before. Teachers reported spending a lot of time explaining these words.

Another issue was students’ reading stamina. Some students were not used to reading longer texts in English, and they struggled to stay focused. One teacher commented, “They were fine for the first page, but after that, they started checking out.”

Also, some students did not know how to approach difficult texts strategically. Rather than skimming, scanning, or underlining key points, they would either try to translate every word or skip entire sections. Teachers said that students needed more explicit instruction in reading strategies.

4.7 Interpreting the Observations: What They Tell Us About Motivation

All these observations point to the same conclusion: reading motivation is not fixed. It changes depending on the support students receive, the clarity of the task, the difficulty of the text, and the atmosphere in the classroom. Teachers described students who were completely disengaged one day and deeply involved the next, simply because the topic changed or the lesson was structured differently.

During our classroom observations, we were able to watch closely how students reacted when asked to read scientific texts. We noticed that how motivated students felt had a lot to do with what the teacher did. If the teacher introduced the reading with excitement, explained why the topic was important, or connected it to real life, students were much more likely to show interest. On the other hand, if the teacher gave out a reading without any explanation or support, students quickly became silent, distracted, or frustrated. This shows us that motivation is not just something students have or don't have—it depends on the learning environment, and especially on the teacher.

During the observation, teachers noticed that students felt more motivated when they were supported during the reading process. For example, teachers who stopped to check if students understood the material, answered questions clearly, or allowed students to work in pairs or groups helped to reduce stress. Students said they felt more comfortable and confident

when they could talk to a partner about what they were reading. They were more willing to ask questions or try to figure out difficult words and ideas. In this way, peer support made the task feel less scary.

Another important thing we noticed is that students reacted positively when teachers were aware of their emotions. Some students felt anxious about not understanding the scientific words or ideas. In classrooms where teachers said things like, “This is challenging, but we’ll figure it out together,” students were more likely to try. They didn’t give up as quickly. But in classes where the teacher didn’t seem to notice that students were struggling, or didn’t give any emotional support, students became frustrated or completely disengaged.

Based on observation, I understood that this tells us something important, motivation does not come only from inside the student. It is also shaped by what is going on around them, especially the way teachers talk and behave. Teachers play a very big role in creating the kind of classroom where motivation can increase. If they show they care, plan lessons carefully, and try to understand how their students feel, they can help students enjoy even readings that can be considered difficult.

In addition to that, I understood that different students needed different things to stay motivated. Some students liked having clear goals and step-by-step guidance from teachers’ side. Others preferred more freedom like choosing which part of a topic to explore or read. Based on observation, I can state that the best teachers are the ones who offer a mix of both structure and choice opportunities for students about what they want to read. This helped more students stay interested and feel in control of their learning. For example, teachers can let students pick the topic they want to read.

Based on findings, I noticed some students who started out unmotivated slowly changed over time. Once they had a few successful reading experiences, they started to enjoy the reading process. Some said they liked the feeling of finally understanding something difficult. Others said they began to enjoy science more. This shows that motivation can change. It grows when students feel successful and when they see that it can be useful for them.

Motivation also improved when teachers gave specific, positive feedback. When a teacher said, “You explained that idea clearly,” or “That’s a good question to ask,” students smiled, sat up straighter, or wanted to speak again. This kind of feedback builds confidence and helps students feel that they are capable. However, when teachers ignored student effort, or only pointed out mistakes, students became quiet and stopped participating at all.

CHAPTER 5

5. Conclusion

This chapter brings together the main points of this research on how scientific texts influence the reading motivation of first-year English major students. It reflects on what was learned through students' voices and teachers' observations and connects those findings to real classroom practice. The goal was to understand the challenges and supports students experience when reading scientific texts in English, especially at the beginning of their university studies. In this chapter, I summarize what I found, explain what it means for teaching, and suggest ways both teachers and institutions can better support students. I also offer some final thoughts about how this study helped me see reading instruction differently.

5.1 Summary of Key Findings

One of the clearest things that came through from the students' responses was how much their motivation to read depended on whether they saw the texts as relevant. If they could connect the scientific text to their future as teachers or to something they were already curious about, they were much more willing to put in the effort. But if they could not see the point, or if the topic felt too far removed from their interests, they quickly lost focus. Another major factor was difficulty. Most students found scientific texts harder than other materials they were used to. They mentioned struggling with vocabulary, unfamiliar ideas, and even the layout and structure of these texts. When something was too hard, it did not just slow them down it made them doubt themselves. On the other hand, when a text was just challenging enough but not overwhelming, they felt more confident and were willing to try.

In classrooms where teachers used step-by-step scaffolding strategies, motivation grew significantly. These teachers did not just tell students to read; they guided them through the process. They previewed key vocabulary before reading, gave short summaries of each section, and allowed students to ask questions freely. Some teachers broke the text into smaller sections and checked for understanding after each one. These small supports helped students feel they could manage the text, and each small success encouraged them to keep going.

Another motivational factor was the type of feedback students received. Teachers who gave specific, helpful feedback (e.g., “You explained that paragraph clearly” or “Good job using context clues to understand that word”) helped students focus on improvement. In contrast, vague or overly negative comments, such as “Not enough effort” or just marking things as wrong, made students feel discouraged. Feedback that highlights what the student did well, while also giving advice on how to improve, leads to a growth mindset and builds motivation.

What also stood out was how important the classroom environment was. When teachers provided support such as pre-teaching vocabulary, explaining the background, or organizing group discussions students felt more prepared and less alone. Peer interaction played a big role too. Students said that when they worked together or talked about the text in class, it helped them stay motivated. Finally, students’ past experiences shaped how they approached reading now. Some came into university with strong reading habits and saw scientific texts as just another step in their learning. Others had very little experience with reading academic texts, especially in English, and felt overwhelmed from the start.

5.2 Pedagogical Implications

For teachers, this research is a reminder that motivation is not something students either have or do not have, it's something that changes, and that we as educators can influence. The way we introduce texts, the kinds of support we offer, and even the words we use to encourage students all play a part in how motivated they feel. One big takeaway is the importance of scaffolding. We can't just hand students a dense scientific article and expect them to manage on their own. They need help breaking it down, understanding new words, and seeing the structure of the text. Even small things like asking a warm-up question related to the topic can make a difference. Choosing the right text also matters. Of course, not every text can be perfectly tailored to each student's interest, but we can at least choose examples that connect to their field of study or future career. Even better, when possible, we can offer a few choices and let students pick. That way, they feel more in control of their learning.

5.3 Institutional Recommendations

Beyond the classroom, there is also work to do at the institutional level. Those who design reading courses and choose textbooks need to think about how the materials they select affect motivation. If students are expected to read difficult texts, there should also be built-in supports like glossaries, guiding questions, or follow-up tasks that help students reflect on what they read. Teacher training is another area where institutions can improve. Many teachers are skilled at teaching grammar or writing but might not feel as confident when it comes to reading instruction, especially when motivation is involved. Providing training or resources on how to teach reading strategies, how to build motivation, or even how to choose appropriate texts can go a long way. Finally, schools can promote a culture that values reading beyond just the classroom.

5.4 Recommendations for Future Research

While this study gave me a good understanding of how students experience scientific texts, it also made me realize how many other questions are still open. For example, it would be helpful to track how students' motivation changes over time. Are they more confident with scientific texts by the second or third year?

Another area worth exploring is how students respond to digital scientific texts. With more reading happening online, we need to know if things like hyperlinks, videos, or interactive tools help or distract students. English majors might react differently to scientific texts than engineering or medical students. Their background knowledge, expectations, and goals are different, and these things might affect how they see reading tasks.

5.5 Final Reflections

When I started this research, I was curious about how scientific texts affect students' reading experiences. What I found was more complex than I expected. Motivation is not just about interest or effort, it's about confidence, support, habits, and whether students feel that what they're doing matters. Some students said that scientific texts were the hardest thing they had read. Others said they liked the challenge because it made them feel like real university students. In both cases, the key was how the reading was introduced, discussed, and supported. That's where teachers make the biggest difference. What also became clear is that reading is emotional. Students get frustrated when they feel lost, but they feel proud when they understand something difficult. They like sharing ideas with classmates and knowing their opinions matter. If we want them to become better readers, we have to care about how they feel, not just what they understand. As future teachers, these students will soon be helping others learn to read. If they

develop good reading habits now, if they learn that reading can be meaningful and manageable even when it's difficult, they will be better prepared to teach reading to their own students. That makes our role as educators even more important. In closing, I hope this research encourages more thoughtful reading instruction in university classrooms. Scientific texts are not just assignments, they are opportunities for students. When introduced with care, they can help students grow in skill, confidence, and motivation. When we teach students to approach difficult texts with curiosity instead of fear, we give them a gift they can carry far beyond the classroom.

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Appendix A

Survey questions (“Google Forms”)

Closed- ended questions

“*” - Required questions

1. What is your current academic grade/year level? * *Mark only one oval.*
 - A. Freshman
 - B. Sophomore
 - C. Junior
 - D. Senior

2. In which department are you currently studying? * *Mark only one oval.*
 - A. Social sciences
 - B. Natural sciences
 - C. Engineering
 - D. Language department

3. How often do you encounter scientific texts in your current coursework? **Mark only one oval.*
 - A. Very frequently
 - B. Frequently
 - C. Occasionally

4. On a scale of 1 to 5, how motivated are you to read scientific texts in your course materials?
*Mark only one oval. **
 1. *Not motivated at all*
 2. *Slightly motivated*
 3. *Moderately motivated*
 4. *Very motivated*
 5. *Extremely motivated*

5. Would you like to see more or less emphasis on scientific texts in your course materials? *
Mark only one oval.
 - A. More
 - B. Less
 - C. About the same

Open-ended questions

“*” - Required questions

1. Can you recall a specific instance where a scientific text in your coursework motivated you to explore the topic further outside of class? **Please provide details.** *

2. How would you describe the impact of reading scientific texts on your overall motivation to read in foreign language? *

3. In what ways do you think educators could further enhance the motivational aspects of using scientific texts in coursework? *

4. How often do you find yourself actively engaged and interested in scientific texts compared to other types of reading materials? *

-
-
5. What specific aspects of scientific texts contribute to or hinder your motivation to read them as part of your language curriculum? *

-
-
-
-
-
6. Have you noticed any changes in your overall reading motivation since the introduction of scientific texts into your language coursework? *
-
-
-
-
-

Appendix B

Observation Report Form

Date of Observation: _____

Observer's Name: _____

Instructions for Observers:

Observe the students as they engage in reading scientific texts in class. Use the following questions to guide your observations and record your answers. Pay close attention to student behaviors, engagement levels, and the use of emojis as indicators of motivation.

General Observations:

1. How engaged are the students with the scientific text?

(Check all that apply)

- Actively reading
- Glancing at the text, occasionally distracted
- Not engaging with the text

2. Are the students asking questions about the text or discussing it? ○

- Yes, frequently
- Occasionally
- No, they are not asking or discussing

3. Do students seem confident in understanding the material? ○

- Yes, they seem to understand the content well
- Somewhat, they might need clarification
- No, they seem confused or uncertain

Motivation Level:

The students will use emojis to indicate their motivation level while reading. Observe and note which emojis are used by the students:

1. Motivation Level – Emoji Reactions:

- **Very Motivated (green)** – The student is actively reading, deeply engaged, and excited about the content.
- **Somewhat Motivated (yellow)** – The student is reading but

appears distracted or indifferent.

- **Not Motivated (red)** – The student is not engaged, and may appear bored or uninterested.

2. Student Emoji Reactions (Count the number of students who use each emoji):

- Very Motivated (green): _____
- Somewhat Motivated (yellow): _____
- Not Motivated (red): _____

3. Do students appear to enjoy reading the scientific text or find it interesting?

- Yes, students are showing clear interest
- Some students seem to enjoy it, others less so
- No, students seem disinterested

1. Are students interacting with the content in a meaningful way (e.g., taking notes, underlining, highlighting)?

- Yes
- No

2. Are there any specific challenges that affect student motivation to read the scientific text?

- Yes, (please describe):

- No

3. What strategies or approaches seem to improve or decrease motivation to read?

Based on the observation, how would you rate the overall motivation of the class during

