

The Impact of Teaching Phonological Awareness and Morphological Awareness on Improving Students' Performance in Reading Comprehension

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أهمية تدريس الوعي الصوتي والوعي الصرفي في تحسين أداء الطلاب في الفهم القرائي

المدرسة أسماء بدع علوان

Abstract

This study aims to assess the impact of teaching phonological and morphological awareness ,teaching reading skills to improve the reading skills of fourth class students ,and to reveal the degree of their comprehend of reading skills . This study explains the importance of using phonological awareness and morphological awareness and regarding its relation to reading comprehension and the impact of them on students' performance in learning English language. Common misconceptions about phonological and morphological awareness are addressed. The researcher chose only one group as the sample of the study from fourth-year preparatory students at *Al-Bayan Secondary School for Girls* in the city of Tikrit ,during the first semester of the academic year 2024 – 2025 to assess the relationship of phonological awareness and morphological awareness on students' performance in reading comprehension. She uses pretest and posttest to measure students' improvement in reading comprehension. The findings demonstrated that the gap between reading comprehension of phonological and morphological awareness accuracy was noticeable for both unvoeled and voweled words, indicating that vowelization plays a significant role in elucidating modifications in fluency and word reading accuracy. Keywords: phonological awareness, morphological awareness, reading comprehension, performance.

المستخلص

تعرف هذه الدراسة الوعي الصوتي والوعي الصرفي وعلاقته بالفهم القرائي وأثرهما على أداء الطلاب. تتم معالجة المفاهيم الخاطئة الشائعة حول الوعي الصوتي والمورفولوجي. هدفت هذه الدراسة إلى تحقيق طريقة تعليمية جديدة من خلال - ربط استخدام تعليم الوعي الصوتي والصرفي ، وتعليم مهارات القراءة ، وتحديد درجة أهميتها في تحسين مهارات القراءة لدى طلاب الصف الرابع ، والكشف عن درجة فهمهم لمهارات القراءة. اختارت الباحثة مجموعة واحدة فقط من طالبات الصف الرابع العلمي في ثانوية البيان للبنات في مدينة تكريت ليكونوا عينة الدراسة، خلال الفصل الدراسي الأول من العام الدراسي ٢٠٢٤-٢٠٢٥ لتقييم علاقة الوعي الصوتي والوعي الصرفي على أداء الطالبات في الفهم القرائي. يستخدم الباحث الاختبار القبلي والبعدي لقياس تحسن الطلاب في فهم القراءة. أظهرت النتائج أن الفجوة بين الوعي الصوتي والصرفي في دقة القراءة كانت ملحوظة لكل من الكلمات غير المتحركة والمتحركة ، مما يشير إلى أن حروف العلة تلعب دوراً مهماً في تفسير الاختلافات في دقة قراءة الكلمات ومهارات الطلاقة. الكلمات المفتاحية: الوعي الصوتي ، الوعي المورفولوجي ، فهم المقروء ، الأداء .

1.1 The Problem of the Study

As a result of COVID-19 pandemic and the closure of the educational institutions, the disruption of in-person instruction, and the shift to e-learning, the researcher observed during his field visits to schools and the follow-up of students enrolled in practical education whom students performed poorly in reading. This is a persistent and growing complaint among teachers and parents about the students' weakness in reading comprehension, which has an impact on all students, particularly in primary and secondary school. Numerous studies and research

have attributed this to a number of factors. According to the findings of the Lyon et al. Lyon (2003) and Lerner (2000), roughly 85% of students whom they face difficulties in learning phonemic awareness. Peeters et al. (2019) and the study of Peters et al., 2009 (which found that a lack of phonological awareness is the cause of reading difficulties and hybridization), as well as the findings of studies by Michael et al. (2018), Levesque et al. (2019) and Kim et al. (2021), demonstrated the importance of morphological consciousness in the process of comprehending and understanding texts, as well as the acquisition of vocabulary and language skills required to learn foreign languages.

1.2 Aims of the Study

This study aimed to assess the importance of teaching phonological and morphological awareness in improving students' performance in reading comprehension.

1.3 Research Question

This study examined the efficacy of phonological and morphological awareness instruction in improving reading abilities among fourth-grade students. The primary research question guiding this investigation was:

- Does a phonemic and morphological awareness-based teaching strategy produce statistically significant differences ($p < .05$) in students' individual and composite reading skill test scores?

1.4 Limits of the Study

The current study was limited to a sample of fourth-year preparatory students at Al-Bayan Secondary School for Girls in the city of Tikrit, during the first semester of the academic year 2024 – 2025.

1.5 The Importance of the study

The importance of the study is, firstly, its theoretical significance: the study of phonetic and morphological awareness is one of the topics through which modern strategies in education for students in their early educational stages can be identified. A school can also use this information to supplement the English language with new information and provide methods of treating students' reading impairment. Furthermore, by integrating phonetic and morphological awareness into the curriculum, educators can enhance students' overall literacy skills and foster a deeper understanding of language structure. This approach not only benefits individual learners but also contributes to a more effective and inclusive educational environment. Enhancing knowledge related to teaching phonological and morphological awareness in the learning and teaching processes and linking it to improving reading skills among students of the fourth preparatory school: This study linked the use of phonological and morphological awareness together with teaching reading skills, indicating an addition in the field of English language learning and teaching. The importance of the study is, firstly, its theoretical significance: the study of phonetic and morphological awareness is one of the topics through which modern strategies in education for students in their early educational stages can be identified. A school can also use this information to supplement the English language with new information and provide methods of treating students' reading impairment. Furthermore, by integrating phonetic and morphological awareness into the curriculum, educators can enhance students' overall literacy skills and foster a deeper understanding of language structure. This approach not only benefits individual learners but also contributes to a more effective and inclusive educational environment. Enhancing knowledge related to teaching phonological and morphological awareness in the learning and teaching processes and linking it to improving reading skills among students of the fourth preparatory school: This study linked the use of phonological and morphological awareness together with teaching reading skills, indicating an addition in the field of English language learning and teaching. Secondly is its applied importance, which stems from its attempt to focus on English language teachers' phonological and morphological awareness in line with technological and cognitive advancements to improve students' reading performance. This study also helps those responsible for developing curricula in the Ministry of Education to provide the programs that are required to improve reading skills, and it can also provide information that benefits researchers in this field, teachers, and students at all educational levels because of the importance of phonological and morphological awareness in raising students' reading proficiency.

1.6 Definition of the Basic Terms

This study included the following procedural terms and definitions :Phonological Awareness is defined as: “Knowledge of phonetic units represented by hybrid drawing .Understanding the systemic relationships between letters and sounds ,fragmenting symbols for words ,and dealing with symbols at the word level through the marriage of pronunciation and spelling of a word ,is achieved by adapting the learner to the language listening and producing” (Suleiman ,2006)Morphological awareness is :“the student's ability to perceive the morphological structures of words ,his ability to manipulate the structure of the word in relation to oral and

audible language ,and to distinguish between what is related to the knowledge that the student possesses regarding the morphological structures of his language ,and what is related to his ability to perform different tasks or operations about this knowledge” (Deacon et al ,.2013).Reading skills are defined as :“complex intellectual processes carried out by the reader to extract and understand meaning through interaction with the read text ,and understanding the message that the writer wanted to convey ,which are skills that allow the reader to obtain meaning from printed words or symbols ,and the ability to understand them and its interpretation” (Henry,2008).

2. Literature Review

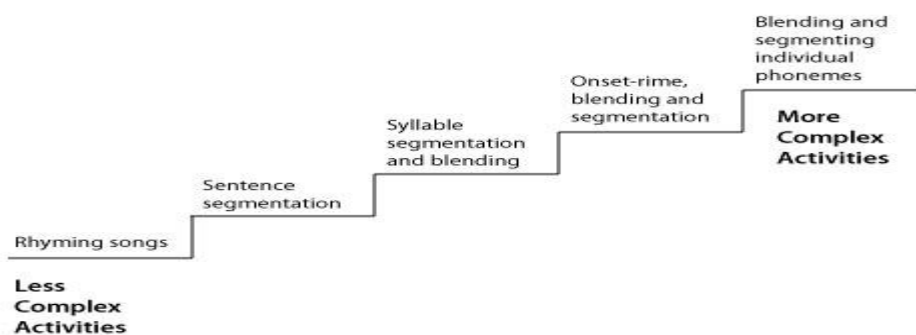
2.1 Phonological Awareness

Phonological awareness, a cognitive foundation for learning to read, can be developed in students through activities such as changing the first sound of a well-known song. Students who develop strong phonological awareness are better prepared for subsequent reading instruction, including lessons on spelling, phonics, and word analysis (Adams, Foorman, Lundberg, & Beeler, 1998). The inability to process language phonologically is the most common barrier to acquiring early word reading skills (Liberman, Shankweiler, & Liberman, 1989). Furthermore, emerging research has demonstrated that this phonological processing deficit typically hinders the development of early reading skills in students both with and without disabilities (Fletcher et al., 1994).Over the past two decades, phonological awareness has received more attention than any other area of reading research. One of the most compelling findings from this body of work is that students’ reading and spelling abilities can be significantly improved through the development of critical levels of phonological awareness, particularly when supported by well-structured instruction (Ball & Blachman, 1991; Bradley & Bryant, 1985; Byrne & Fielding-Barnsley, 1989, 1991).However, despite these promising results, many questions remain unanswered, and several misconceptions about phonological awareness persist. For example, researchers are still working to determine which students require specific types of instruction and how much of it is necessary. Additionally, many educators and stakeholders are unclear about the differences between phonics, phonemic awareness, and phonological awareness. Others continue to question the exact nature of the relationship between phonological awareness and early reading development.

2.1.1 Phonological Awareness and Its Development

Phonological awareness is the understanding that oral language can be broken down into smaller parts and manipulated. There are various ways to deconstruct spoken language, including breaking sentences into words, words into syllables (e.g., *simple* = /sim/ and /ple/), into onsets and rimes (e.g., *broom* = /br/ and /oom/), and into individual phonemes (e.g., *hamper* = /h/, /a/, /m/, /p/, /er/) (Snider, 1995).

Figure 3. A Continuum of Complexity of Phonological Awareness Activities



Operationally, students’ phonological awareness is reflected in a range of skills that fall along a *spectrum of complexity* (see Figure 3). At the simpler end of this continuum are activities such as rhyming, rhyming songs, and sentence segmentation—these show an understanding that speech can be divided into individual words. At the midpoint are activities involving syllable segmentation and blending, where students break words into syllables or combine syllables to form words. More complex still are activities involving onset-rime segmentation and blending (Snider, 1995).At the highest level of phonological awareness is phonemic awareness—the understanding that words are made up of individual sounds, or phonemes, and the ability to manipulate those sounds by segmenting, blending, deleting, or substituting them to form new words. According to the National Research Council (Griffin, Burns, & Snow, 1998), phonological awareness refers to the broad understanding that speech sounds are distinct from meaning. Phonemic awareness is a more refined level of this understanding, referring specifically to the insight that words can be broken down into individual phonemes.It is important to

distinguish between phonological awareness and phonics at this stage. Phonological awareness is the *oral and auditory* ability to recognize and manipulate sounds in spoken language. In contrast, phonics is a system of reading instruction based on the *alphabetic principle*—teaching students the relationships between letters or letter combinations and their corresponding sounds (Adams, 1990). Phonics involves using these sound-letter relationships to decode written words (Snider, 1995). While closely related, phonological awareness and phonics are not the same. Students typically begin to show early signs of phonological awareness through an appreciation of rhyme and alliteration. This often emerges early in language development and may be fostered by exposure to rhyming or alliterative texts. However, the development of more sophisticated phonemic awareness does not automatically follow. Many students struggle with acquiring phonemic awareness, and for some, it presents a significant challenge (Adams et al., 1996; Stanovich, 1986).

2.1.2 The Importance of Phonological Awareness

Understanding the alphabetic principle that underlies our written language system requires an awareness of phonemes. In particular, developing readers must understand the internal structure of words in order to benefit from formal reading instruction (Lieberman, Shankweiler, Fischer, & Carter, 1974). When students recognize that words can be broken down into individual phonemes—and that those phonemes can be blended to form words—they are better able to use their knowledge of letter sounds to read and construct words. Because of this strong connection, phonological awareness in kindergarten is a powerful predictor of future reading success (Ehri & Wilce, 1980; Lieberman et al., 1974). Research has consistently shown that phonological awareness and reading success are closely linked throughout the school years (Calfée, Lindamood, & Lindamood, 1973; Shankweiler et al., 1995). For the past two decades, the role of phonological awareness in reading acquisition has been a central focus of educational research. Importantly, the relationship between phonological awareness and reading is reciprocal, not one-directional (Stanovich, 1986). While phonological awareness is essential for beginning reading, instruction in reading—especially explicit teaching of letter-sound correspondences—can, in turn, enhance phonological awareness, particularly the more advanced skill of phonemic awareness (Snow, Burns, & Griffin, 1998). Phonological awareness is a skill that many students with learning disabilities struggle to acquire (Shaywitz, 1996). However, many students who do not have identified learning disabilities also experience difficulties with phonemic awareness. While poor phonemic awareness is often associated with reading struggles, it should not automatically be interpreted as evidence of a learning disability (Fletcher et al., 1994). Crucially, students who lack phonemic awareness can be identified early, and many can benefit from targeted instruction. In fact, most students—regardless of disability status—are likely to benefit from explicit instruction in phonological awareness. Such instruction has been shown to improve early reading outcomes, particularly for students with limited phonemic awareness (O'Connor, 1998). In short, a certain level of phonological awareness is necessary for early reading success. Moreover, while all students benefit from phonological awareness instruction, it is essential for some. The intensity and explicitness of instruction should be adjusted based on students' individual needs—especially for those at risk of reading difficulties. Smith, Simmons, and Kameenui (1998) provide a range of evidence-based methods for teaching phonological awareness in support of this differentiated approach.

2.1.3 Teaching Phonological Awareness

Phonological awareness training has been shown to benefit beginning readers as early as age four (e.g., Bradley & Bryant, 1985; Byrne & Fielding-Barnsley, 1991). According to Smith et al. (1998), who reviewed phonological research, phonological awareness can be developed before formal reading instruction begins—and doing so supports the development of future reading skills. Effective phonological awareness instruction typically includes age-appropriate, highly engaging activities. For example, four-year-olds may begin by learning to recognize rhymes, while kindergarten and first-grade students are introduced to blending and segmenting words at the onset-rime level. As their skills progress, they move on to manipulating individual phonemes (blending, segmenting, deleting). This progression aligns with the complexity spectrum of phonological awareness (see Figure 3). Instructional tools such as puppets that speak slowly or “magic bridges”—which students cross when they blend phonemes correctly—are often used to model word segmentation. Colored cards, pictures, and other concrete props can help students visualize and manipulate abstract sounds. In recent years, publishers have developed several research-based phonological awareness programs, including *Ladders to Literacy* (O'Connor, Notari-Syverson, & Vadasy, 1998) and *Teaching Phonemic Awareness* (Adams et al., 1996).

2.1.4 A Teaching Exercise Covering Segmentation at Multiple Phonological Levels

Activity Goals:

To provide students with opportunities to recognize and distinguish different components of oral language.

Segmentation Activities:

a. Sentence Segmentation

Introduce students to the concept of breaking down sentences into individual words. For example, use a familiar chant such as "I scream, you scream, we all scream for ice cream!" Have students clap for each word as it is spoken.

b. Syllable Segmentation

As students become more comfortable with oral language, teach them to break words into syllables or onsets and rimes. Practice using their names:

- *Ra-chel*
- *Al-ex-an-der*
- *Rod-ney*

c. Phoneme Segmentation

Once students can isolate syllables or onsets/rimes, teach them to segment words into individual phonemes, such as:

- *sun* → /s/ /u/ /n/
- *pat* → /p/ /a/ /t/
- *stop* → /s/ /t/ /o/ /p/

d. Phoneme Deletion and Substitution

After learning phoneme segmentation, guide students in deleting and substituting sounds. A fun and effective example is having students change the first sound in their names (e.g., "Rachel" becomes "Machel"). Begin with simple consonants like /m/, /t/, and /p/, and gradually introduce more complex blends like /ch/ and /st/.

e. Connecting to Early Writing

Although most phonological awareness activities are conducted orally and without print, early writing activities—such as spelling words phonetically—can support the development of phonemic awareness (Ehri, 1998; Treiman, 1993). Students may begin combining print knowledge and phonological sensitivity during spelling tasks. For those who have difficulty holding a pencil, word processing software or letter tiles can be used to support spelling development.

Designing Effective Phonological Awareness Instruction

Curriculum design is a crucial factor in successful phonological awareness instruction. Research-based guidelines can inform effective lesson planning. While these principles benefit all students, they are particularly important for those who struggle with reading. According to Chard & Osborn (1998), the following strategies increase the effectiveness of instruction:

- Model each activity clearly before asking students to perform it.
- Begin with continuous sounds (e.g., /s/, /m/, /f/), which are easier to stretch and hear than stop sounds (e.g., /p/, /b/, /k/).
- Move from larger units of language (words, syllables, onset-rime) to smaller units (individual phonemes).
- Progress from simple tasks (e.g., rhyming) to more complex ones (e.g., segmenting and blending phonemes).
- Use visual or tactile supports (e.g., blocks, bingo chips) to help students, especially struggling readers, manipulate sounds more effectively.

2.1.5 Phonological Awareness Assessments: Purpose and Practices

The primary purpose of phonological awareness assessments is to identify students who are at risk for reading difficulties and to monitor their development over time. Effective assessments must be able to predict future reading proficiency and distinguish between high and low performers. Progress monitoring should be flexible and utilize a variety of formats. The *Appendix* outlines measures that are both valid and reliable (Kaminski & Good, 1996). Screening tools designed to predict future reading ability must be both highly predictive and capable of distinguishing student performance levels. Among the most effective tools are automatic naming and segmentation tasks, especially when they involve familiar stimuli such as colors, objects, numbers, or letters (Torgesen, Wagner, Rashotte, Burgess, & Hecht, 1997; Wolf, 1991). These tasks not only help identify students at risk but also support reading development through targeted instruction. It is critical that developmentally appropriate skills are used in screening procedures. Phonological awareness skills develop progressively—from rhyming to segmentation—and should be assessed accordingly. For example, first-grade students often perform well on onset-rime tasks, while kindergarten students frequently struggle with segmentation. A variety of

screening tools can be used to assess students' phonemic awareness sensitivity or segmentation ability, both of which are strong indicators of potential reading difficulties (Torgesen et al., 1994; Vellutino & Scanlon, 1987; Yopp, 1988). In many schools, kindergarten students are screened during the second semester to identify risk factors that may affect reading development. These screenings focus on predictors of success in phonemic awareness instruction and help guide early intervention. Assessment tools used to monitor progress should be comprehensive and responsive to student growth. Teachers are encouraged to regularly observe and record students' abilities in spelling, reading, and phonemic awareness. Additional assessments may include nonsense word fluency and oral reading fluency, which are both useful in evaluating decoding and automaticity (Tindal & Marston, 1990).

2.2 The Concept of Morphological Awareness.

The ability to deconstruct words into their most basic meaning units is known as morphological awareness. This includes knowing how words are formed from roots, prefixes, and suffixes. Mastering reading skills, encouraging vocabulary growth, deepening reading comprehension, and enhancing spelling proficiency all depend on morphological awareness. Early on, young pupils produce single morphemes as they acquire morpheme knowledge (Beringer et al., 2010). This development is supported by language syntax, or the way words are used in sentences. Understanding how the English language has evolved over time is crucial when examining morphology and its relationship to spelling and reading. Having a comprehension of words with irregular spelling patterns is helpful when teaching them, to clarify why a word may not be spelled exactly as it sounds (Carlisle, 2004). One of the main or most significant predictors of reading and spelling skills, morphological awareness serves as a bridge between phonemic awareness and overall reading proficiency, according to research.

2.2.1 The Importance of Teaching Morphological Awareness

It is the responsibility of the instructors to raise students' awareness of morphemes. This awareness helps students to improve their spelling and word recognition. It also enhances writing and comprehension while assisting them in expanding their vocabulary. While there are many ways to teach students new words, morphology provides a foundational understanding: not all word spellings are determined solely by the sounds they hear. The English language is morphophonemic—*phono* means sound, and *morpho* means meaning. This means that we spell words using both units of sound and units of meaning. A good example of this is how we spell past tense verbs. Consider the words *slammed*, *fluffed*, and *pointed*. They all end in *-ed*, indicating the past tense. However, when spoken, they sound different: *pointed* ends with the /ed/ sound, *slammed* with /d/, and *fluffed* with /t/. If we spelled these words exactly as they sound, we would lose the meaning that they refer to past events.

What Sound Do You Hear?

fluffed	slammed	pointed
ed=/t/ Unvoiced	ed=/d/ Voiced	ed=/ed/ D or T

Why can't we just spell what we hear?



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Figure 1. *What Sound Do You Hear* (percent Group LLC) (2023) According to Kim (2023), morphological awareness was the only factor—among phonemic awareness, morphological awareness, orthographic awareness (the ability to recognize word and spelling patterns), vocabulary, and rapid naming—that could predict spelling skills. Additionally, morphological awareness and orthographic awareness were the only factors that could predict reading skills in second and third graders. Students who are morphologically aware tend to be better at decoding and comprehension. Morphology instruction, which teaches students how units of meaning are pronounced and spelled, has been shown to improve both decoding and sight word recognition. Furthermore, because students can use their knowledge of morphemes to identify related words with shared meanings, morphological awareness significantly expands vocabulary and, in turn, background knowledge. Learning to recognize morphemes also helps students develop an understanding of language structure and syntax. It supports identifying how a word can

be used in different parts of speech or sentence contexts. This raises an important question: How can morphological awareness instruction be effectively integrated into structured literacy lessons?

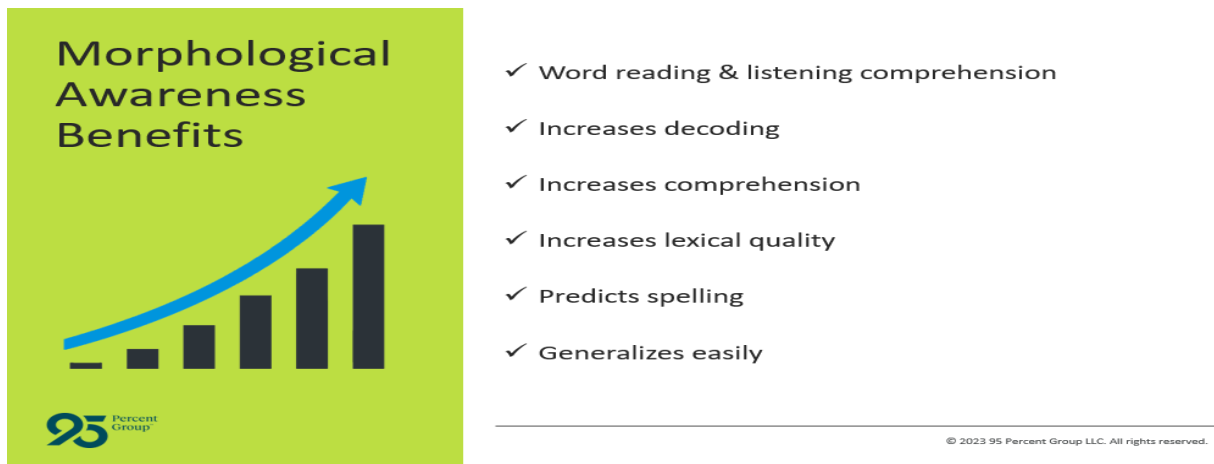


Figure 2 Morphological Awareness Benefits Precent Group LLC (2023)

2.2.2 Developing Morphological Awareness

As with all foundational literacy skills, the age of your students will determine how you teach them. Below, you will find comprehensive information and recommendations on how to help your students develop morphological awareness at every learning level. Morphological awareness lays the groundwork for students' understanding of both encoding and decoding. Teachers are prioritizing numerous facets of literacy instruction, including phonemic awareness, phonics, handwriting, spelling, vocabulary, and comprehension. Laura Stewart believes that teaching students morphology should begin with compound words. This approach helps students understand that words are made up of meaning-containing parts that work together to form the overall meaning of the word (Perfetti, Beck, Bell, & Hughes, 1987). During their initial phase of language acquisition, students encounter texts that contain words of Old English or Anglo-Saxon origin. These are often single-syllable words that do not follow regular phonetic spelling patterns. Although they make up the smallest portion of the current language, they are among the most frequently used words. Word webs are a useful exercise for upper elementary students. By using prefixes and suffixes, students can create numerous related words from a single base word. This activity helps them understand the power of word expansion (Chard, Simmons, & Kameenui, 1998). As students enter intermediate school and beyond, the demands on their word knowledge and academic vocabulary will only increase. Teaching morphology in content areas such as language arts, science, and history can significantly enhance students' comprehension. When they are able to deconstruct difficult and unfamiliar words, they improve their ability to read and understand academic material (Adams, 1990). According to O'Connor, Jenkins, Leicester, and Slocum (1993), secondary school students can learn morphology effectively through the following instructional strategies:

- Review syllable types and common syllable division rules
- Start with common prefixes and suffixes
- Search for common roots in texts
- Explicitly teach spelling patterns and roots
- Transition from simple to complex word structures
- Provide frequent opportunities to write and spell the morphemes they study

3. Methodology

3.1 Experimental Design

To determine whether there are statistically significant differences between the mean scores of the two groups on the pre- and post-tests, the researcher selects one group to represent the study's sample. As an experimental group, they are taught reading comprehension based on phonological and morphological awareness. The posttest, which the researcher will construct based on phonological and morphological awareness, will be the study's instrument. A quasi-experimental design, specifically a "Pre-Posttest Design," is required by the study.

3.2 The Population and the Sample of the Study

Arikunto (2006), on page 130, states that "the sample is the portion of the population that is taken into consideration in the research, whereas the population is the sum of the research subjects." Without a doubt, a population consists of everyone who has some connection to the research topic. A tiny percentage of the students

selected for examination and observation make up the sample (Best, 1981). Thirty female students from the fourth class in the first semester of the 2024–2025 school year made up the study's sample; they were specifically chosen from Tikirt City's Al-Bayan Secondary School for Girls. Teaching reading comprehension based on phonological and morphological awareness is the study's sample. The researcher used phonological awareness to create the lesson plan, abilities, such as morphological awareness. The phonological awareness activities included eight phonemic awareness skills (discrimination, cutting, classification, isolation, deletion, addition, installation, and compensation), as well as the general goals of each skill, its significance, activities, and the steps required to apply it. The morphological awareness activities included eight morphological awareness skills: determining the word's root, evaluating the relationship between words, identifying extraneous words, and producing some derivatives through the context of certain knowing as many roots as possible, comprehending and handling suffixes, the exchange fluidity of precedents, and the exchange liquidity of suffixes).

3.2 Validity of the achievement test

Each skill's overall goals are to highlight its significance, associated activities, and the steps required to apply it. The test was created in its final form after the researcher took into consideration the opinions and observations of the jury members, reexamined the number of phonological and morphological awareness skills, linguistically formulated some skills, and increased the number of examples for each skill during the application process. Based on literary and linguistic texts from relevant sources, the researcher created a reading assessment, and it was used on an individual basis for each student in order to diagnose their skills and provide a precise description of their reading abilities. Its goal was to gauge how much the fourth-grade students had improved in the four fundamental reading skills – phonemic awareness, vocabulary, letter sound reading, and reading comprehension.

3.3 Reliability of the Achievement Test

Cronbach alpha coefficients (internal consistency) for the test domains, the test overall, and the stability coefficient (reapplication) were computed in order to confirm the stability of the reading skills test. The four test dimensions had Cronbach alpha coefficients ranging from 0.74 to 0.80, while the overall test had a coefficient of 0.85. All four of the test's dimensions had coefficients of repetition stability that were higher than the indicated cut-off point of 0.70, ranging from 0.77 to 0.81 and 0.88 for the entire test.

3.4 Pilot study

To verify the validity of the reading skills test's design, the Pearson correlation coefficient between the paragraph score and the total skill score was calculated using the test construct. Twenty female students from the research population who were selected as an experimental sample were given it; they were then taken out of the sample and reapplied two weeks later. The researcher calculated the corrected correlation coefficient (Corrected item-total correlation) between the paragraph score and the overall skill level.

3.5 Statistical Processing

To achieve the objective of the study ,mean scores and standard deviations were extracted ,and to determine the statistical significance of the differences in students 'performance in reading skills combined ,type ,and the interaction between them ,the analysis of binary variance was used (Two-way ANCOVA).The researcher construct the study plan to teach reading comprehension focusing on phonological and morphological awareness.

3.6 Instructional Material

The same textbook, which covers comprehension skills for First-Stage students, was used to teach the two student groups. The experimental and control groups study the first three chapters. The researcher has been informed about the two groups: the experimental group and the control group. The experimental group receives reading comprehension instruction that emphasizes phonological and morphological awareness, while the control group receives instruction using the traditional method. The experiment for the study was carried out in the first semester of the 2024–2025 academic year. It ended on December 5, 2024, having started on October 27, 2024. For six weeks, it continued. For both groups, the classes are held on Sundays and Mondays.

3.7 The Behavioral Objective of the Questions of the Achievement Posttest

According to Richards et al. (1992), a test is any process used to gauge performance, knowledge, or ability. In light of the behavioral goals and content of the course materials, an achievement posttest has been developed. Four questions make up the posttest. The behavioral objectives for every question set are explained as follows:

Q1// Phonemic Awareness Questions it takes twenty marks. it assess:

1. Identify the Sound: Evaluate pupils' capacity to identify and separate a word's beginning sound.

Goal: Students will show that they can recognize phonemes in spoken words.

2. Rhyming Words: Assess the capacity to identify rhymes. Goal: By using word associations, students will demonstrate their comprehension of rhyme.

3. Sound Blending: Assess pupils' ability to create words by fusing phonemes. Goal: Students will combine different sounds to form a complete word.

4. Sound Segmentation: Assess the capacity to separate words into their constituent sounds. Goal: Students will break down words into their individual phonemes.

5. Find the Odd One Out: Evaluate your capacity to group words according to their phonemic similarity. Goal: Students will distinguish words according to their phonetic characteristics.

Q2// Questions Using Vocabulary Twenty marks are required. It assesses the following:

1. Word Meaning: Assess knowledge of word meanings. Goal: Students will show that they understand vocabulary words.

2. Synonyms: Assess your understanding of terms with related meanings. The goal is for students to expand their vocabulary by finding synonyms.

3. Antonyms: Evaluate your knowledge of words that have opposing meanings. The goal is for students to become more proficient in language by identifying antonyms.

4. Using in a Sentence: Assess vocabulary application skills in context. Goal: By correctly utilizing a term in a phrase, students will show that they understand.

5. Fill in the Blank: Evaluate the use of contextual vocabulary. Goal: Students will use their vocabulary to meaningfully finish sentences.

Q3// Questions on Reading Letter Sounds Twenty marks are required. It evaluates:

1. Letter Recognition: Evaluate the capacity to identify letter-related sounds. Goal: Students will be able to recognize the sounds that particular letters make.

2. Match Letter to Sound: Assess knowledge of connection between letters and sounds. The goal is for students to show that they can connect letters to sounds.

3. Identify the Sound: Assess the ability to recognize sounds connected to particular letters. Goal: Students will correctly recognize the sounds that letters produce.

4. Sound in Words: Evaluate your capacity to recognize a word's basic sounds. Goal: Students will be able to identify words by their first sounds.

5. Letter Sound Correspondence: Assess your knowledge of particular letter sounds. Goal: Students will show that they understand the correspondence between letters and sounds.

Q4// Reading Comprehension Questions this question takes twenty marks. it assess:

1. Main Idea: Evaluate your capacity to recognize a text's main idea. Goal: Students will provide a synopsis of a story's core idea.

2. Details: Assess comprehension of particular story points. Goal: Pupils will remember significant plot points from the narrative.

3. Character Motivation: Evaluate comprehension of the emotions and behaviors of the characters. Goal: Students will describe the reasons behind the actions of characters.

4. Inference: Assess the capacity to draw conclusions from context. Goal: Students will make inferences on the feelings or circumstances of characters.

5. Conclusion: Use the narrative to assess forecasting abilities. Goal: By using tale events as a guide, students will predict possible outcomes.

By using these behavioral objectives to direct instruction and evaluation, teachers may make sure that the students are mastering the fundamentals of vocabulary, phonemic awareness, letter sounds, and reading comprehension.

3.8 Students' Scores in the Pretest and Posttest

The pretest is administered to the experimental group. By using independent group and the t-test method. According to the results, the experimental group's mean score in pretest was 1.44, while in the posttest 7.50. The standard deviation for the pretest was 3.02 and standard deviation was 9.56. The computed t-value is 5.08 at the degree of freedom 29 and the significance level of 0.05, which is less than the tabular t-value of 2.00. As indicated in Table (1) below, this result suggests that there is a statistically significant difference between the pre and posttest and th favor for the posttest that mean the effectiveness of phonological and morphological awareness on improve their performance **Table 1The Mean Scores, Standard Deviations and T- Value in the Pretest and posttest**

Group EX	No. of students	Mean	SD.	T-Value		DF	Level of Significance
				Calculated	tabulated		
Pre-test	30	1.44	3.02	5.08	2.00	29	0.05
Posttest	30	7.50	9.56				

4. Discussion

The present study investigated the impact of teaching phonological and morphological awareness on improving students' reading comprehension performance. The results showed a statistically significant improvement in students' reading skills after the intervention, confirming the crucial role of phonological and morphological instruction.

4.1 Phonological Awareness and Reading Comprehension

The findings align with previous research emphasizing the importance of phonological awareness as a foundational skill for reading development (Lieberman et al., 1974; Adams et al., 1998). Students who received instruction targeting phonological awareness demonstrated noticeable improvements in:

- Reading fluency
- Word recognition
- Decoding unfamiliar words

These improvements facilitated smoother reading processes, allowing students to allocate more cognitive resources to understanding the meaning of texts. As previous scholars have noted, phonological awareness directly supports early reading success by strengthening students' decoding abilities (Ball & Blachman, 1991; Bradley & Bryant, 1985).

4.2 Morphological Awareness and Reading Comprehension

Morphological awareness training also yielded positive results. Students developed a deeper understanding of word structure, which enhanced their:

- Vocabulary acquisition
- Inferencing skills
- Comprehension of complex academic texts

This finding supports studies suggesting that morphological awareness becomes increasingly important as students encounter more complex vocabulary and textual structures (Carlisle, 2010; Deacon et al., 2014). The ability to analyze prefixes, suffixes, and roots allowed students to decode and infer meanings for unfamiliar words, thereby improving overall reading comprehension.

4.3 Combined Effect of Phonological and Morphological Awareness

Teaching phonological and morphological awareness together produced a synergistic effect on students' reading abilities. Students who received integrated instruction outperformed those who traditionally learned reading skills in previous studies. The dual approach supported:

- Bottom-up processes: Efficient decoding and word recognition
- Top-down processes: Enhanced vocabulary understanding and contextual inference

This supports findings by Verhoeven and Perfetti (2003), who emphasized the mutual reinforcement of phonological and morphological awareness in developing reading proficiency.

4.4 Practical Implications

The results of this study suggest that:

- Phonological and morphological awareness instruction should be systematically incorporated into English language teaching curricula.
- Early intervention programs focusing on these skills can prevent future reading difficulties.
- Teachers should be trained to use targeted strategies that address both sound-based and meaning-based aspects of language learning.

These implications are particularly relevant for EFL learners, where explicit instruction is critical for reading development.

5. Conclusion

This study provides strong evidence that explicit instruction in phonological and morphological awareness significantly improves students' reading comprehension performance. Students who participated in the intervention showed remarkable gains in decoding skills, vocabulary knowledge, and the ability to comprehend complex texts. Phonological awareness, by enhancing students' decoding and word recognition abilities, laid the foundation for reading fluency. Morphological awareness further enriched students' understanding of word meanings and structures, equipping them with tools to decode unfamiliar vocabulary and infer meaning from context. The integration of both phonological and morphological strategies offered a comprehensive approach that strengthened both lower-order (decoding) and higher-order (comprehension) reading skills. Thus, the results affirm that phonological and morphological awareness are essential components in developing proficient readers, particularly for learners of English as a foreign language.

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