

LEVERAGING ARTIFICIAL INTELLIGENCE TO BRIDGE THE WORD CLASS DIVIDE IN ENGLISH LANGUAGE LEARNING

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Abstract

This paper explores the potential Artificial Intelligence. Meaning of Artificial Intelligence as a concept in addressing the challenges of English language learning particularly in the context of word class acquisition. AI tools and platforms that support word class instructions. Framework for AI power word class instruction, component description. The role of the teacher in AI language learning. Benefits of AI powered word class instruction. The challenges of word class, challenges and limitations. Suggestion, recommendations and conclusion were made accordingly.

Keywords: Artificial intelligence, English language learning, word class acquisition, language education.

Introduction

English language has become a global language with over 2 billion learners worldwide. However, mastering English remains a significant challenge, especially in countries where it is not the primary language (Eko et al 2020). One of the fundamental hurdles in understanding word class, which is crucial for effective communication, is to master proper usage of word class (parts of speech). AI can revolutionize English language learning by providing personalized, adaptive and immersive learning experiences. The increasing importance of English language as a global language has led to a surge in demand for effective language learning solutions (Leech, G., 2000). One of the fundamental challenges learners face in understanding word class also known as parts of

speech is poor usage. AI can play a transformative role in addressing this challenge by providing personalized, adaptive and immersive learning experiences. Today technology has become an unavoidable part of the passage of time. Technology has not only changed people's life style but has also changed how we work, learn and interact. Various kinds of innovations appear all the time, making our activities and work more practical and effective. A more recent technological development is the emergence of the term artificial intelligence, which is abbreviated as AI- Artificial intelligence is currently starting to steal attention as a tool to act like humans. Artificial intelligence (AI) is the process of modeling human thinking and designing a machine so that it can behave like humans. (Dorfler, 2022) AI technology referred to here, refers to machine that can think, weigh the actions to be taken and can make decision as humans do. This technology is said to be able to help simplify human life which is very complex (Fitria, 2021) AI can also be implemented in the world of education. Teachers/ lecturers can understand student need more easily and more deeply (Fitria 2020b) The main purpose of developing artificial intelligence is to make computer combined with mechanical equipment competent for some complex work which usually need human intelligence and greatly reduce the burden of human beings (Xue & Wang, 2022b) The term AI was first coined and used by John McCarthy in the year 1956 during a two month long workshop held in Dartmouth college, USA (Zawacki-Richter et al, 2020).

AI powered word class instruction

AI can help bridge this gap by:-

- Personalized learning paths: AI can assess learners' strength and weakness creating tailored learning plans that focus on specific word classes. (Mufdalifah, 2017)
- AI will collect data from learning activities that have been carried out by users, and then provide alternative learning solutions according to users' needs. Personalized learning allows each student to progress and develop according to their desires and abilities (Mufdalifah, 2017).
- AI will collect data from learning activities e.g, word class that have been carried out by users and then will provide alternative learning solutions according to users' needs. It will also provide content recommendations. Notify the users study schedule, and various other important functions.
- Contextualized learning: AI powered tools can provide contextual examples, making it easier for learners to understand word class usage.
- Real time feedback: AI can offer instant feedback on learners' usage, helping them improve their understanding and usage of word class.

The challenges of word class

Word class or part of speech is a fundamental or vital concept in language learning (Quirk R, et al 1985) in this concept, we are talking about:- Noun, Pronoun, Adjective, Verb and adverb, preposition, conjunctions etc. However, word class it can be daunting for learning, particularly those from non English speaking backgrounds (Biber et al 2020). Traditional teaching methods often focus on rote memorization, leading to lack of understanding and application. From personal observation, such learners can define a noun but cannot locate a noun in a sentence. Besides, this has left many acquiring English language at the Pidgin level.

Benefits of AI powered word class instruction

- ❖ Improve accuracy: AI powered tools can help learners improve their understanding and usage of word class
- ❖ Increased confidence, personalized feedback and practice can boost learners confidence in using English (word class)
- ❖ Enhanced engagement. Immersive experience and interactive exercise as AI tools can make learning more engaging and enjoyable
- ❖ Better retention: AI powered tools can help learners retain information better by providing spaced repetition and review

The role of teachers in AI powered language learning

Teachers' intelligence is unmatched as the natural teacher's intelligence that has been bestowed by the creator. However a gift needs to be maintained properly and optimally. Artificial intelligence that emerged as an industrial revolution is also the result of the creative minds of human natural intelligence. (Abu Ghali 2022) so that when compared between the two will never have an equal position. Precisely artificial intelligence can collaborate with natural intelligence to become a perfect whole.

In the future progress of science and technology, teachers work such as correcting student attendance, giving daily tasks and exams, explaining knowledge, making a mini-report and other systematic work can be submitted to be completed by technology devices. Teachers can serve more energy and can focus more on non systematic work to create a golden generation with more character and quality with natural intelligence where robots cannot.

The existence of artificial intelligence may be able to provide knowledge to students, but developing character cannot be done. That is an educator's job: how to inspire, motivate and make students become good students. So, the role of the teacher in providing motivation, inspiration and developing character are what AI cannot replace because AI is not given to feelings and emotion like human in general. This is a very vital aspect which the teacher plays (Education) in learning.

Word class in English

The structures realizing sentence elements are composed of units which can be referred to as parts of speech. These can be exemplified for English as follows: noun, adjective, adverb, verb, pronoun, preposition, conjunction, interjection (Quirk et al 1989).

Nouns are names of persons, places, animals, things days, months or concept (Ayo et al, 2012) examples:

The boy is very tall

The cat is black in colour

Obi is a beautiful woman

This house is newly built

I ran into a herd of cattle while driving

Pronouns are words used in place of nouns or noun phrases. They are used mainly to avoid unnecessary repetition of nouns which makes a passage clumsy and boring. A good example of this is shown below:

Madam Scott is a teacher, Madam Scott teaches in a school near Madam Scott's house. Madam Scott is loved by Madam Scott's husband.

This repetitive passage can be re-written in a more interesting and acceptable way by employing the use of some pronouns to replace the monotonous phrases “Madam Scott” and some other nouns in the passage.

Madam Scott is a teacher. She teaches in a school near her house. She is loved by her husband.

Pronouns

She is a kind woman

I went to school yesterday

This ruler is mine

This house is yours

This chair is theirs

Whose hat is that?

I looked at myself in the mirror

Verbs

In a given sentence, the verb is the most important word because it expresses the action in the sentence. (eg, “dance”, “sing”, “fight”, “kill”, “ask”, “bake”, “sleep”, “sweep”. All these words stand for actions. They are known as lexical verbs.

Examples

Joseph danced yesterday

Ada is singing

I have read the book

The underlined words are the verbs (action words) in their respective sentences.

Adverbs

An adverb usually modifies (give more meaning to) a verb, an adjective or another adverb. The position of the adverb in a sentence depends on what the speaker wants to emphasis. Examples of adverbs are: now, tomorrow, today, often, never, always, there, here, joyfully, smartly and beautifully.

Examples

He travelled yesterday

Ojua writes neatly

We seldom eat snails

The children can do the cooking here

Mr. Ojua dressed shabbily to school

Adjectives

Adjectives are words which describe or qualify nouns or pronouns. Adjectives can be formed from other words by adding “able”, “ish”, etc.

Examples

I bought a golden pair of shoes

We drove across dangerous bridge

The drink has a strong smell

There is no fix position for an adjective in a sentence (e.g)

I bought a red car (pre-qualifier)

The baby is fat (post-qualifier)

The man set the cat free (post qualifier)

The foolish boy was dismissed (pre-qualifier)

Prepositions

Careful investigations have revealed the fact that nothing exist alone. So prepositions are functional words which express the relationship between two entities in a sentence (Ayo et al 2012).
Examples;

There is water in the bottle

The bottle is on the table

The table is placed near the wall

The wall is part of the house

The house is inside a big compound

Prepositions show position, place, time or direction

Conjunction

A conjunction is a word that joins words, phrases, clauses and sentences together. Examples: and, but, until, because, after, when, either or neither nor, both, although, despite. Examples;

In the room and outside the room

I went there and got what I wanted

Come and see

Come inside but don't sit down

They went to the hospital but did not see the doctor

I went there but did not see anyone

Interjection

In grammar, an interjection is a word which is used to show a short sudden expression of emotion – “Hey”! is an interjection. More examples:

Oh my God!

What a beauty!

Jesus!

Word class usage in context

CONDUCT: Peter's conduct is very satisfactory – **Noun**

Please conduct yourself properly in the hall - **verb**.

MARKET: I am going to the market – **Noun**

Abang, market the goods quickly – **verb**

DISCOUNT: Mrs. Nchu, please give me a discount – **Noun**

Discount five percent for me – **verb**

Possessive Adjectives & Possessive Pronouns

This is my ruler (possessive adjective)

This ruler is mine (possessive pronoun)

These are our goods (possessive adjective)

These goods are ours (possessive pronoun)

Just as we have the comparative and superlative forms of adjectives, we also have the comparative and superlative form of adverbs. This is done by using “er” and “est” or “more” and “most” as in:

Adverbs

Positive	Comparative	Superlative
Soon	sooner	soonest
Fast	faster	fastest
Late	later	lastest
Slowly	more slowly	most slowly
Clearly	more clearly	most clearly
Often	more often	most often

SPECIAL ADVERBS

Well	better	best
Little	less	least
Badly	worse	worst
Much	more	most

Comparism of Adjectives

Big	bigger	biggest
Bad	worse	worst
Good	better	best

+Adjective = verb

beauty, false	beautify falsify
black, deaf	blacken, deafen
popular, regular	popularize, regularize

Adjective

Noun

good, kind	goodness, kindness
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lax, odd	laxity oddity
intelligent	intelligence
Verb	Adjective
suit, read	suitable, readable
slow, happy	slowly, happily
back	backward

The following words can be converted from one word class to another without any change.

Verb - Noun

Retreat, cheat, bow, answer, laugh, love

Noun - Verb

Bottle, coat, nurse, cripple cash, mail

Adjective -Verb

Calm, dirty, dry, empty

Framework for AI-powered word class instruction. Component Description

AI – powered assessment identify learners' strength and weakness in word class

- ✓ Personalized learning paths create tailored plans focusing on specific word classes
- ✓ Contextual learning provide contextual examples and exercises
- ✓ Real time feedback offer instant feedback on learners usage
- ✓ Immersive experiences create immersive environments for practice

Examples of AI powered tools and platforms that support word class instructions include

1. Language learning apps; Duolingo, Babbel, and Rosetta stone use AI to provide personalized language learning experiences
2. Virtual assistant: virtual assistants like Amazon Alexa and Google assistant can help learner practice conversational English
3. Language learning platforms: platforms like course and edx offer AI powered language courses and exercises.

Challenges and limitations of AI

1. Data quality: AI powered tools require high quality data to provide effective instruction
2. Teacher training: educators may need training to effectively integrate AI powered tools into their practices
3. Equity and access: AI – powered tools may not be accessible to all learners, particularly those in low- resources environments

Recommendations

1. Attempt should be made to safeguard the personal data of users, especially students, educators should make students aware of the fact that the data, the personal data are being collected as per their consent. The objective of AI in education is to focus on learning outcomes and for learning, trust is an essential component (Mhlana, 2023)
2. Integrate AI-powered tools into language learning curricula
3. Develop AI driven word class instruction framework

4. Conduct further research on AI impact on language outcomes
5. AI can assist teachers but would not replace them. The teacher should act as a facilitator and mediator in the adoption of AI in order to enhance their Pedagogical practices (Queiroz et al, 2022).

Conclusion

AI has the potential to transform English language learning, particularly in word class acquisition. By leveraging AI –powered tools and frameworks, educators can provide more effective, personalized and engaging learning experiences. However, addressing challenges and limitations is crucial to ensuring equitable access and effective implementation. Besides, the potential of AI in teacher education is significant, but its implementation requires careful consideration of ethical, social, technical and cultural factors.

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