A study of Teaching Strategies for English Vocabulary Learning by Media Major College Students in the Light of AIGC:A Case Study of Those Specializing in Digital or Online Media

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Abstract

The use of AIGC technology now opens up new possibilities for reform of college English teaching. Students of digital media or of network-based new media (digital natives) still suffer from problems such as poor memorization habits, inefficient acquisition, and weak vocabulary usage. Current vocabulary instruction—with its one-size-fits-all timing, mechanical repetition, and lack of contextual grounding—conflicts considering media students' learning styles, one finds impediments to full English proficiency. The present work attempts to meet these needs by pairing AIGC with four scientifically oriented techniques (affix - related, contextual, chunk, and periodic review of memory) to build a vocabulary teaching model adapted to their profile. With a controlled experiment lasting for a whole semester and using questionnaires, on the basis of both interviews and observations, the present findings show that suitable AIGC - aided strategy instruction is helpful in reducing such problems as rote learning, fast forgetting, or weak application, and also in raising the efficiency of vocabulary acquisition and of independent study. Such an approach provides a workable model for reorienting media majors' English vocabulary training and may serve as a guide for AI - based individualized foreign language teaching—whether or not English is the target.

Keywords

AIGC; media majors; college English; vocabulary acquisition; teaching strategies.

1. Introduction

The fast-paced introduction of Artificial Intelligence Generated Content (AIGC) to educational contexts now appears to be changing—fundamentally—college foreign language teaching, and thus the paradigm of "information-assisted" as compared with "intelligently empowered" instruction. Vocabulary learning is central for English-language study, setting standards for students' proficiency in listening, speaking, reading, writing, and translation. Frontline teaching proves vocabulary learning is a serious difficulty for non-English majors, especially digital or web-based media majors. Such students adapt quickly to new technologies and interactive learning, but have poor academic backgrounds and no well-organized English study plans. Conventional vocabulary teaching based on mechanical repetition and rote memorization fails to meet their needs, causing fast forgetting, weak recall, an inefficient learning cycle and English study aversion. The University English Teaching Guide (2020 Edition) demands attention to individual variation, personal needs and applied learning, and rejects exam-centered methods, making AIGC-assisted vocabulary instruction for media majors timely and pedagogically justified.[1]

Domestic AI-related English teaching research is well-developed yet focuses on writing, speaking and classroom reform, lacking media-specific vocabulary strategies. This paper fills

the gap by proposing intelligent pathways for media-oriented vocabulary instruction, advancing differentiated foreign language pedagogy for non-English majors theoretically.[2]

Practically, it solves persistent teaching problems with a simple, replicable method, helping students abandon wasteful memorization, form scientific retention habits, and achieve vocabulary fluency and practical competence, while providing teachers with innovative teaching ideas. International research supports AI's value in personalized, context-based vocabulary learning but lacks media-related contextual research. Domestic AIGC vocabulary teaching research focuses on memorization techniques and AI-generated examples without disciplinary integration. This study adopts four research methods to explore students' learning obstacles, integrate AIGC with four scientific memorization approaches, construct an individualized teaching model and verify its effectiveness. It has three innovations: targeted research on media disciplines, practical classroom integration of AIGC and traditional methods, and a bidirectional adaptive teaching approach realizing three-dimensional alignment of technology, methodology and professional standards.

2. Current Status and Causes of Problems in English Vocabulary Learning Among Media Major Students

2.1. Basic Overview of the Survey

An investigation has been made of 126 students from four classes belonging to the 2024 cohort of the Digital Media and Online Media programs at this university with both anonymous questionnaires and random interviews used. A total of 122 replies were obtained that met the definition of validity, or 96.8% of the total asked. The sample is well balanced and gives an accurate account of present-day vocabulary acquisition by media majors.

2.2. Existing Core Learning Issues

To begin with, the vocabulary memorization methods now in common use are too simple and not scientifically valid. A survey indicates that more than 85% of students depend only upon rote memorization of individual letters for word-learning — they rarely apply such things as affix logic or chunking of vocabulary. That kind of practice yields very poor retention and quick forgetting, with learners stuck in an unproductive cycle of memorization attempts. Secondly, learning contexts—textbook - based or otherwise—remain very detached from actual practice. Old-fashioned textbook examples give little scope for current language use or for situations that would be familiar on campus, to media studies or to later employment. Definitions are memorized without any grasp of how they work or of how to apply them practically. Third, there is a lack of initiative on the part of students prior to almost exclusively do they rely on passive classroom instruction. Acquisition of vocabulary is generally linked with homework or with fixed class plans—not with individual learning strategies—while ordinary, unchanging methods hurt motivation. Finally, it is unwise to assume that one method will suit all students given the wide academic differences they show. A single pace of teaching leaves neither slow learners nor high achievers fully satisfied or well served.[4]

2.3. Analysis of Cause Factors

With regard to teaching, public English courses make only limited use of class time, and instructors tend to deal mainly with such exam - related matters as grammar or reading, without offering much help — either systematic or practical — concerning vocabulary learning; they stress results rather than the actual learning process. As far as students are concerned, they do not apply scientific approaches to study, show poor ability to plan for self - directed learning, become chronically dependent on passive learning patterns, and rarely form lasting vocabulary acquisition habits. With regard to resources, standard vocabulary teaching materials are unyielding in nature, not easily adjusted to particular media or to differences

among students, and thus do not lend themselves readily to efficient, context - oriented, or individually tailored vocabulary learning.[3]

3. To devise a model of teaching aimed at vocabulary acquisition — one that may profit from AIGC (Artificial Intelligence in Generation of Content)

3.1. General Principles of Pattern Construction

This teaching model operates entirely within four principles:the principle of student adaptation, which uses media-oriented digital practices—lightweight, interactive—to meet the learning needs of media students; the principle of method implementation, which avoids unnecessary technical devices and concentrates upon efficient recall and upon techniques that help learning along;the principle of professional integration, which builds vocabulary for media contexts—whether digital or online—on the basis of each discipline's particular characteristics; and the principle of individualized instruction, utilizing AIGC to organize teaching suited to the varying abilities of learners.[6]

3.2. Integration Pathways Between AIGC and Vocabulary Acquisition Strategies

The AIGC+suffix segmentation memory method eliminates both the overly abstract nature of prior suffix rules and their limited examples. Students may now introduce core suffixes by means of AI, with automatic generation of word lists centered on a root or on a suffix ,and with use of CET - 4/CET - 6 test items or of media - oriented terminology, thus being helped to apply knowledge in ways not restricted to mere recall. Also, the AI is able to isolate frequent suffix - related mistakes, making precision training of that sort more feasible.

The AIGC+Contextual Scenario Memory Method sets out a solution for the usual difficulty of students in memorizing vocabulary apart from actual situations or in applying it fruitfully. Once one has entered target words, the AI creates individualized examples—such as sentences or brief texts about campus life or about new media, short videos, or digital projects—which match the practical and academic needs of students, and which help them recognize vocabulary patterns in known settings (hence achieving "memorizing words, understanding contexts, and applying knowledge.")

Among the methods known as AIGC, the Word Block Memory Method improves students' English writing ability. By means of textbooks, of required exams, or of English items drawn from media, the AI is able to choose wisely between frequent word blocks, standard collocations, and workable sentence forms—which may then be memorized as whole units instead of single words—thereby helping to make writing (and speaking) more fluent, more accurate, and more polished.

Among the methods known as AIGC+cyclic reviews there is a marked reduction in vocabulary forgetting. With regard to the Ebbinghaus forgetting curve and to each student's learning pattern, AI now computes tailored review schedules which isolate weak vocabulary items accurately, instead of applying arbitrary or purely manual review and thereby wasting time or effort.

3.3. Three-Step Implementation Process for the Classroom Model

Pre - class AI - powered personalized preview:Core vocabulary for the lesson is given by the teacher; students — depending on their own proficiency — apply AIGC to construct preview plans suited to them, and thus gain practice with words or with basic situations, which helps eliminate initial difficulties of learning. In - class AI - assisted focused instruction: Teachers direct attention to memory of vocabulary and to its central uses, using AI - based media - oriented examples of scenarios for interactive teaching, one may shift the classroom focus from

“ word memorization” to “method learning and practical application.” Post - class AI - related review and extension: With AI it is possible to analyze each student’s progress, to generate individual vocabulary reports, to find suitable supplementary exercises, to encourage independent consolidation of facts, and to develop an awareness of English vocabulary relevant to media usage — all without disruption of classroom or out - of - class learning patterns.[5]

4. Teaching Control Experiment and Result Analysis

4.1. Experimental Design

Among the 2024 cohort at this university I have chosen two parallel classes having roughly similar academic profiles—Digital Media and Online Media. The experimental class was taught—with regard to vocabulary—by means of an AIGC -based strategy, whereas the control class followed conventional methods; the trial ran for one semester (18 weeks). There were no appreciable differences in teaching staff, in curricular items, in weekly contact hours, or in original English ability between the groups, and vocabulary teaching was the only factor deliberately varied to guarantee validity and consistency in the experimental data.

4.2. Dimensions of Experimental Evaluation

The evaluation makes use of three central indicators: (1) comparisons of standardized vocabulary test scores taken early and late in the semester, (2) comparisons of results on the final general English exam, and (3) responses—either questionnaire-based or interview-based—to queries about learning habits and attitudes, which are then taken to reflect—along with data—teaching quality, i.e., both quantitative and qualitative success.

4.3. Analysis of Experimental Results

The vocabulary test data make it clear that early in the semester both classes had nearly equal average scores with no statistically meaningful difference between them. By the time of the final examination, the experimental class was scoring substantially better — in terms of average vocabulary level and of passing or excellent performance — than the control class, which implies that vocabulary learning for the students has advanced much farther thin regard to traditional teaching classes—a very definite example that AIGC - assisted instruction brings about a real gain in vocabulary efficiency. On the basis of full performance measures, the students of the experimental class appear to do much better—without difficulty—in reading, in writing, or in translation; they no longer seem to be blocked by vocabulary problems or by the need to apply words, and their English ability has made substantial progress overall.[7]

With regard to students’ subjective feedback, 92%of the students in the experimental class said that AI - assisted vocabulary memorization matched their individual learning styles well and relieved them of much of the tedium connected with English study; 88%had mastered a range of scientifically grounded memory methods, with greatly increased self - directed learning awareness; the majority saw scenario - oriented or highly specific vocabulary items as more workable than random words, and noted a basic change—no longer being left with memorized words unapplied or soon forgotten after learning.

4.4. Experimental Summary

A comparative analysis now gives a definite account of the fact that the AIGC - based model for teaching vocabulary is very well suited to the learning needs of media or digital communication majors. As against standard rote teaching methods, it helps students to acquire scientific vocabulary more systematically, to retain words with less difficulty, to take initiative in their own learning, to apply knowledge contextually, and—above all—to gain substantial English proficiency relevant to media work—with results far superior to those of usual teaching techniques.[5]

5. Current Problems of Teaching and of Optimization Strategies

5.1. Some Problems of Teaching Practice

Among the practical applications of AIGC—that is, of vocabulary taught with empowerment—three major issues now appear. First, an important imbalance exists with regard to students' AI usage competence. A number of learners are unable to formulate prompt words effectively (they tend to give vague instructions) and thus generate material of poor quality—neither specific nor helpful—for media - oriented vocabulary development. On the other hand, some students seem excessively dependent upon AI tools, blindly adopting model sentences without thought or memory-based processing, which avoids any substantial mental effort needed for long - term recall. Such polarization complicates both personal growth and the provision of differentiated instruction.

The second point is that integration of AIGC technology with classroom work has been too shallow. AI tools seem to be treated—too often—as separate add - ons not integrated fully into instruction. There is sometimes an unproductive gap between what a given technology can do and what it should be helping to teach—for example, one might project AI - derived content without linking it to actual classroom dynamics at the moment of use or without tailoring it to digital/media specializations. As a result, AIGC' s opportunity to offer flexible, ecologically grounded learning is not realized in full, and it ends up acting only as a digital thesaurus.[7]

Third, the present evaluation system is too simple and has been excessively oriented toward exams. Most assessment procedures today are summative, based largely upon scheduled tests of receptive vocabulary with little regard for formative factors—such as whether or not students can deploy vocabulary effectively in model situations, or whether they have mastered prompt strategies or metacognitive control of their own learning. This narrow approach leaves out many dimensions of lexical capability and gives little encouragement to process - oriented work.

5.2. Targeted Optimization Strategies

With an eye toward these challenges, three related strategies are proposed. First, a systematic AI tool guidance program—perhaps one with training modules—should be considered. Teachers may profit from creating a well-organized library of prompt examples (of good quality) that pertain specifically to media vocabulary—such as requests for collocations or for register - sensitive sentences. Before beginning any given unit of study, short workshops (hands - on) might be used to teach such prompts, with clear rules distinguishing permissible AI help from misbehavior. Reflection - oriented exercises are also needed, which ask students to juxtapose AI - produced texts with their own versions, thus helping them think critically and responsibly about AI literacy.[3]

The second point is that AIGC technology needs to be integrated thoroughly into the whole learning cycle. Such integration calls for a placement of AIGC in five major phases—vocabulary preview, directed teaching, practice work, review time, and extensions. Teachers are encouraged (and perhaps required) to devise individual vocabulary banks as well as illustrative scenarios suited to the particular disciplines of digital or media studies, making full use of actual documents (such as industry reports) or technical glossaries. Only by doing so can one guarantee that the technology used is not superficial but really helpful—whether in terms of content, of attitude, or of functional language behavior in professional settings.

At last, we may consider establishing a full-scale formative assessment model instead of the narrow summative one. Such a system needs to make use of many types of data: AI logs of interaction (detailing prompt quality or revision details), classroom observation notes, assessments of periodic skills, vocabulary-related outputs, and frequent progress reports on review work. Self - assessment and peer - evaluation items needs to be used in connection with

metacognitive awareness. A comprehensive framework of this sort gives both teachers and learners timely, workable feedback, and it keeps the balance between analysis of process and product, of knowledge and skill, of thinking and of attitude — thus helping to coordinate assessment with the pedagogical aims of AIGC - improved vocabulary instruction.[2]

6. Conclusion and Prospects

6.1. Research Conclusion

With a view to student assessments as well as to model development and controlled trials, this work gives the following main conclusions: the basic difficulties—when students study vocabulary connected with digital or online media—include (among others) unscientific memorizing techniques, absence of meaningful real - world context ,lack of self - initiated motivation, and failure to adopt individualized learning plans; using AIGC technology along with four scientifically grounded vocabulary acquisition methods appears to be an effective means of solving these problems; the AIGC - based personalized vocabulary teaching model suits the digital habits of today's media students, and is highly beneficial for acquiring vocabulary, for self-direction, and for general English mastery; it is not difficult to apply this model , nor is it limited in scope or unrepeatable, offering solid guidance—practically speaking—for reform of English vocabulary instruction at universities of media studies .

6.2. Limitations and Future Directions

The present study uses only media majors from this university as subjects, which yields a limited coverage scope; it would be helpful to widen both the survey and the experimental base to make the model more generally applicable. With regard to time frame, long - term follow - up research might profitably be done to analyze how the model affects, over time, students' English proficiency and their eventual careers. Later work in teaching should aim to integrate AI with professional English instruction, creating a more accurate, highly focused, and intelligent vocabulary pedagogy that supports digital and individual learning in higher education.

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