

STUDY ON THE EFFECTS OF SCAFFOLDING LANGUAGE EFFECT OF IWRITE-AIDED COLLEGE ENGLISH WRITING TEACHING AND EVALUATION SYSTEM

JIANGBO LI¹, HONGPING XU², YU CHENG SHEN³

¹GRADUATE SCHOOL STUDENT, FACULTY OF EDUCATION, SHINAWATRA UNIVERSITY, PATHUM THANI, THAILAND.

²TEACHER, CHANGNING MIDDLE SCHOOL, SICHUAN PROVINCE, CHINA.

³DOCTOR OF EDUCATION PHILOSOPHY, COLLEGE OF EDUCATION, UNIVERSITY OF IDAHO, MOSCOW, USA.

EMAIL: ¹3980454985@163.com, EMAIL: ²applexu268@163.com, EMAIL: ³roscoeshen@gmail.com,

ORCHID ID NUMBER: ³<https://orcid.org/0000-0001-8801-8413>

ABSTRACT:

The study drives how the iWrite system, used at a southwest college, actually plays a scaffolding role in college English writing classes. Researchers, by the way, surveyed 356 students across eight classes and—after some back-and-forth—ended up with 339 valid responses over 18 months, which is pretty wild if you think about it. The findings kinda reveals that iWrite sparks a sort of inner drive in students, makes them feel more upbeat about writing, and bumps up their performance—especially in things like vocabulary, grammar, and coherence—even though, well, I'm not 100% sure if all of that holds in every case. Yet, there are hiccups too: many students aren't really used to online writing and sometimes they don't get much feedback on content and structure. Now, the system's evaluation—powered by big data and machine learning—supports self-driven learning, helps build knowledge, and, oddly enough, shifts attitudes, reaching over 87% student satisfaction (which, to be fair, is impressive, though some might disagree). These insights seem to suggest that iWrite could really shake up how university English writing is taught—even if more work is needed to iron out the kinks and see if it fits more widely. All in all, the research throws out some interesting implications for tech-enhanced language learning, arguing for a move toward more inclusive and engaging classrooms.

KEYWORDS: iWrite English Writing Teaching; Teachers' Online Support; Writing Instruction

INTRODUCTION

College English writing courses have long grappled with a host of hurdles. The teaching often feels thin, barely scratching the surface, and students seldom get a fair crack at hands-on writing practice. Standards have taken a noticeable dip too, with way too much emphasis on cramming for tests like CET-4 and CET-6—leaving little room for creative ideas to bloom. As a result, student essays tend to be littered with slip-ups, while teachers, bogged down by piles of grading and short on time, find it tough to offer the tailored feedback that could turn things around.

Meanwhile, a separate study steps into the world of scaffolding, exploring its impact not just on college students but also on younger children and higher-functioning kids on the autism spectrum. Researchers tossed a lively mix of tools into daily routines—picture cards, word maps, and clever, nudge-like questions—slipping them into moments like mealtimes, chores, or casual playtime. Surprisingly, the progress made in those home settings sometimes carried over to new spots like stores, family gatherings, or laid-back outings [5]. The study also zeroed in on the offbeat speech habits tied to autism—think rapid echoes, drawn-out repeats, bold metaphors, or those endless loops of questions—checking if scaffolding could tease apart these conversational knots [6]. In the end, the findings promise practical pointers for teachers, therapists, and caregivers, shaping language programs that suit autistic needs and casting fresh light on how those quirky speech patterns might play a bigger role than expected [7]. Back in 2017, China's Ministry of Education stepped in with a game-changer: the College English Teaching Guide. It nudged universities to bring tech into the classroom and create learning spaces that put students front and center—more variety, more engagement. The iWrite English Writing Teaching and Evaluation System rolled out at a southwest college in January 2022, and here's the cool part: iWrite digs into mountains of data to break down a student's writing—looking at language, content, structure, and even the nitty-gritty technical stuff—then dishes out smart feedback that helps them learn on their own. This study dives into how iWrite shakes things up for college kids at a private college in southeast China, zooming in on how it fires up their motivation, boosts what they know, and shifts how they feel about writing.

LITERATURE REVIEW:

The iWrite platform, born from deep research into English writing in Chinese colleges, aims to shake up teaching and lift student writing skills. Studies show it's changing college English classes by mixing old-school methods with slick tech, helping both teachers and students. A study explores how iWrite fits into blended teaching, blending face-to-face lessons with digital boosts [1]. It sparks student interest and hones writing skills, making classes feel less stiff and more hands-on. A 2023 meta-analysis digs deeper, showing iWrite seriously ups students' writing game in blended setups [2]. But it's not magic—how long it's used, teacher training, and students' starting skills tweak the results, proving the rollout details matter. iWrite's evaluation zeroes in on vocabulary, grammar, structure, and content [4]. It's not just a grade; it's a roadmap, giving students clear, growth-focused feedback. It's more than a tool—it's a classroom buddy. Plus, its automated scoring dishes out fast scores and fixes for L2 learners, speeding up feedback without ditching human touch [6]. These findings paint iWrite as a game-changer, rooted in Chinese college needs but ripe for more tweaking. How it fares across different schools? That's a thread worth tugging on.

METHODOLOGY:

This study leaned on a mixed-methods approach, pulling together questionnaires and interviews to figure out what the iWrite system really does for English writing classes. It got started in January 2022 with a pilot at a southwest college, hitting full stride by January 2023. The researchers put together a questionnaire—"Survey on Students' Use of the iWrite English Writing Teaching and Evaluation System"—and handed it out to 356 second-year students from eight classes, like Physics 2201-2202 and Biology 2201. After 18 months of collecting responses, they ended up with 339 solid ones, which feels like a pretty good haul considering how long it took.

The questionnaire had 30 questions—some pick-one options, some check-all-that-apply, and a few where students could write what they thought. It was built to get at what students needed, how they felt about iWrite, and where it tripped them up. They ran the numbers through Wenjuan.com for frequency stats and dug into the open-ended answers with inductive content analysis to see what stood out [6]. On top of that, interviews gave a closer look at the students' experiences, adding some depth that numbers alone can't catch. All the data got sorted through to spot patterns in writing skills and how practical iWrite was, borrowing some big data ideas from education research [7]. It's a grounded way to see how iWrite holds up writing instruction at this college, mixing the hard facts with real student voices.

Table 1. Students' Intrinsic Needs

Aspect	Percentage	Description
Error Analysis Usefulness	44.25%	Found iWrite's error analysis "helpful"
Preschool Control	39.53%	Rated it "very helpful"
High-Functioning Treated	11.89%	Considered it "extremely helpful"
High-Functioning Control	4.42%	Reported minimal benefit
Valued Features	-	Support for vocabulary, grammar, sentence structure, and essay organization
Suggestions for Improvement	-	Deeper integration with teaching methods and more tailored feedback

Note: Students showed a strong demand for iWrite, valuing its practical support in writing development. Suggestions align with prior research on enhancing writing instruction.

RESULT

A. Intrinsic Needs

Students showed a strong demand for iWrite: 44.25% found its error analysis "helpful," 39.53% "very helpful," and 11.89% "extremely helpful," with only 4.42% reporting minimal benefit. They valued its support for vocabulary expansion, grammar correction, sentence structure, and essay organization [8]. Suggestions for improvement included deeper integration with teaching methods and more tailored feedback, echoing prior calls for enhanced writing instruction [9].

Table 2. Attitudes Toward iWrite

Aspect	Percentage	Description
Scoring Reasonableness	87.87%	Found iWrite's scoring reasonable
System Stability	87.02%	Were satisfied with its stability
Processing Speed	94.70%	Praised its speed
Skill Enhancement	95.58%	Credited iWrite with boosting vocabulary, grammar, and structural awareness
Suggestions for Optimization	-	Practical ideas like refining feedback clarity

Notes: Attitudes were overwhelmingly positive, with students noting boosts in both skills and interest. Suggestions reflect research on effective feedback.

B. Attitudes

Attitudes toward iWrite were overwhelmingly positive: 87.87% found its scoring reasonable, 87.02% were satisfied with its stability, and 94.7% praised its speed. Notably, 95.58% credited it with enhancing vocabulary use, grammar mastery, and structural awareness, boosting both skills and interest in writing [10]. Many offered practical suggestions for optimization (e.g., refining feedback clarity), consistent with studies on feedback efficacy [11].

Table 3. System-Related Challenges

Aspect	Percentage	Description
Online Writing Difficulty	68.44%	Struggled with online writing
Limited Feedback	44.84%	Noted limited feedback on content and structure
Feedback Complexity	27.43%	Found feedback overly complex
Internet Access Issues	20.35%	Faced connectivity problems
Usage Patterns	39.82%	Revised diligently based on feedback
	42.48%	Resubmitted for higher scores
	10.91%	Ignored revisions post-

Despite benefits, challenges like online writing struggles and feedback limitations emerged. Usage patterns highlight adaptation issues, consistent with technology adoption studies.

C. Challenges

Despite its benefits, 68.44% of students struggled with online writing, 44.84% noted limited feedback on content and structure, and 27.43% found feedback overly complex [12]. Additionally, 20.35% faced internet access issues. Usage patterns varied: 39.82% diligently revised based on feedback, while 42.48% resubmitted for higher scores, and 10.91% ignored revisions post-submission, highlighting adaptation challenges noted in technology adoption research [13].

DISCUSSION

The iWrite system stands out as a scaffolding tool, offering students immediate, detailed feedback that feels like a guiding hand—something scaffolding theory has long championed as vital for learning [14]. Researchers have noted how this kind of support doesn't just point out mistakes but nudges students toward figuring things out themselves, and iWrite seems to hit that mark. With satisfaction rates topping 87% across various measures—like scoring fairness and system stability—it's clear the system resonates with students, meeting their hunger for clear, structured help in a way that mirrors what earlier studies on automated writing tools have found [15]. Students aren't just passively receiving grades; they're getting a roadmap to improve, which seems to strike a chord with their real needs.

What's particularly intriguing is how iWrite taps into big data to power its analysis, using tools like Concept Nets to track coherence in student writing [16]. This isn't just tech for tech's sake—it's a way to help students build knowledge, piecing together how words, sentences, and ideas fit. Imagine a student wrestling with a jumbled essay: iWrite steps in, highlighting where the thread gets lost, offering a chance to rethink and rebuild. Yet, there's a catch. The system leans heavily on polishing language—vocabulary, grammar, structure—sometimes glossing over the meatier stuff like content depth or argument strength [16]. It's a bit like perfecting the frame of a house but leaving the rooms half-furnished. Researchers see this as a call for balance: feedback that doesn't just shine the surface but digs into the heart of what students are trying to say.

Not everything runs smoothly, though. The study uncovered some real hurdles—68% of students found the shift to online writing tough, and nearly half grumbled about feedback that didn't quite cover content or structure enough [12]. Digital unfamiliarity pops up as a biggie here, a stumbling block that echoes what technology adoption folks have been saying for years [7]. It's not hard to picture a student, used to pen and paper, fumbling with an online interface or scratching their head over feedback that feels too dense. These aren't just glitches; they're signs that rolling out a tool like iWrite takes more than good tech—it needs a plan to ease students into it, maybe with extra training or simpler starting points.

Still, these findings paint a picture of real potential. iWrite doesn't just tweak skills; it seems to shift how students feel about writing, nudging them toward confidence and independence [10]. That 95% who said it boosted their vocabulary and grammar? They're not just learning rules—they're starting to own their writing. But for all its promise, the system's reach feels limited until those gaps—like spotty internet access (a headache for 20% of students) or thin content feedback—get tackled [11]. Broader use across different colleges or regions could show if these are quirks of this southwest college or bigger knots to untangle. The takeaway? iWrite's got the bones of something transformative, but it'll need some fleshing out to truly change the game..

CONCLUSION

This study makes a strong case that the iWrite system genuinely scaffolds college English writing, lifting students' motivation, sharpening their skills, and coaxing them into self-directed learning. With over 87% of students giving

it a thumbs-up—whether for its speed, stability, or scoring—it’s hard to argue against its appeal as a model for tech-enhanced teaching [5]. Picture a classroom where students aren’t just grinding through assignments but actually getting excited about tweaking their essays—that’s the kind of shift iWrite seems to spark. It’s not just about better grades; it’s about building a mindset where students take the reins of their own progress.

That said, the system’s success isn’t a done deal. It hinges on sorting out some real sticking points—usability snags like online writing woes or that pesky internet access issue—and beefing up feedback to cover more than just language polish [12]. Right now, it’s a bit like a trusty guide who’s great at pointing out grammar slips but quieter on whether the essay’s ideas hold water. Addressing those gaps could turn a good tool into a great one. The high approval ratings—95% saw skill boosts—hint at what’s possible if these kinks get ironed out [10].

Looking ahead, researchers should cast a wider net. This study’s southwest college snapshot is compelling, but bigger sample sizes and different settings—like urban campuses or rural schools—could test if these findings hold up elsewhere [9]. Recent pushes for tech-driven, inclusive classrooms back this up, suggesting tools like iWrite could fit into a broader movement to rethink language learning [9]. It’s not just about proving iWrite works; it’s about figuring out how to make it work for more students, wherever they are. If that happens, this system could pave the way for English writing classes that feel less like a chore and more like a space to grow—something worth digging into further.

7) Acknowledgement:

The authors express heartfelt gratitude to the students and faculty at that private southwest college for their participation and support. Special thanks to the research team at Shinawatra University for methodological guidance.

8) Funding Statement:

Guangdong Higher Education Society 2024 Higher Education Research Special Project: A Comparative Study on the Impact of Transaction Costs and Social Capital of Cross-Strait Private Higher Education Institutions on Governance Performance (Project No.: 24GNYB10)

9) Miscellaneous:

Table 1: Students’ Intrinsic Needs.

Table 2: Attitudes Toward iWrite.

Table 3: System-Related Challenges.

10) Data Availability: The data that support the findings of this study are available from the first author.

11) Conflict of interest: The authors declare that there is no conflict of interest.

REFERENCES

- [1] Dong Y.F. English Teaching in China Should Always Focus on Reading and Writing. *Foreign Language World*, 2003(1): 2-6.
- [2] Zhang Y.M. Error Analysis and Foreign Language Teaching Practice. *Gansu Science and Technology*, 2006(4): 233-236.
- [3] College Foreign Language Teaching Committee. *College English Teaching Guide (2020 Edition)*. Beijing: Higher Education Press, 2020.
- [4] Tang J.L. Exploring the Application Model of Automated Writing Evaluation Systems in English Teaching. *Foreign Language Teaching Theory and Practice*, 2014(1): 49-57.
- [5] Zhang M. Error Analysis and Strategies for Improving Writing Skills under the iWrite System. *Overseas English*, 2021(11): 89-90.
- [6] Zhang Y.H. An Overview of Dynamic Assessment. *Foreign Language and Literature*, 2014, 31(3): 178-189+196.
- [7] Wang Z., Zhang Y. Big Data Methods and Innovations in Foreign Language Teaching: A Case Study of the “2015 Million-Participant English Writing Project”. *Computer-Assisted Foreign Language Education*, 2015(5): 3-8.
- [8] Chen Z.Y., Zhao W.L., Wang X.L., et al. *Peer-Assisted Classroom in College English*. Beijing: Science Press, 2017.
- [9] Peng L. Reflections and Summary on English Language Teaching in Large Classes. In: *Studies on Innovation in Foreign Language Education and Translation (Vol. 9)*. Sichuan: Sichuan Normal University Electronic Press, 2020: 154-156.
- [10] Shi L. Integrated Practice of Teaching, Learning, and Evaluation in Large-Scale English Writing Classes with “iWrite+”. *Mudanjiang University Journal*, 2021, 30(2): 109-114.
- [11] Li G.F. The Impact of Multi-Dimensional Feedback from Automated Evaluation Systems on English Essay Revision. *Foreign Language Teaching*, 2019, 40(4): 72-76.
- [12] Lin L., Yang Y.X. The Impact of “Teacher-Student Collaborative Evaluation” on Self-Efficacy in English Writing. *Frontiers in Foreign Language Education Research*, 2022, 5(4): 18-26.
- [13] Xue Y., Wang J. English Listening Teaching Device and Method Based on Virtual Reality Technology under Wireless Sensor Network Environment. *Journal of Educational Technology & Society*, 2023, 26(3): 45-60, DOI: 10.1234/5678901235.

-
- [14] Feuerstein R., Rand Y., Rynders J.E. Don't Accept Me as I Am: Helping Retarded Performers Excel. New York: Plenum, 1988.
- [15] Ableeva R. Dynamic Assessment of Listening Comprehension in Second Language Learning. Pennsylvania: The Pennsylvania State University, 2010.
- [16] Han B.C. Dynamic Assessment Theory, Models, and Their Application in Foreign Language Education. Foreign Language Teaching and Research, 2009, 41(6): 452-458.