

# MICROSOFT WORD AS A TOOL FOR IMPROVING WRITING SKILLS OF PUPILS IN IKWERRE LOCAL GOVERNMENT AREA OF RIVERS STATE

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## **Abstract**

*This study investigated the effectiveness of Microsoft Word as an instructional tool for improving the writing skills of primary school pupils in Ikwerre Local Government Area of Rivers State, Nigeria. The study was motivated by persistent challenges in pupils' writing performance, particularly in grammar, spelling, organisation, coherence, and vocabulary development, which are inadequately addressed by conventional teaching methods. A quasi-experimental research design employing a pre-test–post-test non-equivalent control group was adopted. The population comprised Primary Five pupils in public primary schools within Ikwerre Local Government Area, from which a sample of 589 pupils was selected using multistage sampling techniques. The experimental group received writing instruction using Microsoft Word, while the control group was taught using traditional chalk-and-board methods. Data were collected using a researcher-developed Writing Skills Achievement Test (WSAT) and an Instructional Package on Microsoft Word (IPMW). The reliability coefficient of the WSAT was established at 0.78 using the test–retest method. Data were analysed using an independent samples t-test and Analysis of Covariance (ANCOVA) at the 0.05 level of significance. Findings revealed a significant difference in the overall writing skills of pupils taught with Microsoft Word compared to those taught using conventional methods. Specifically, Microsoft Word significantly improved pupils' spelling accuracy, grammatical accuracy, and the organisation and coherence of written compositions. The study concludes that Microsoft Word is an effective digital tool for enhancing pupils' writing skills and recommends its integration into the primary school English language curriculum, alongside adequate teacher training and provision of ICT facilities.*

**Keywords:** Microsoft Word, Writing Skills, Spelling Accuracy, Grammatical Accuracy.

## **Introduction**

The use of information and communication technology (ICT) in education involves using technological tools. These tools include computers, laptops, the internet, and different telecommunications methods. They are used to create content and share information, which helps with teaching and learning in the classroom (Bhattara, 2021). Given the swift advancement of information technology, both educators and students are required to continuously refine their proficiency in using technology effectively. Therefore, incorporating information technology into education is crucial for instructors and students to develop problem-solving skills, work together, and share information in new ways.

In accordance with Van Laar *et. al.* (2020), the contemporary generation is expected to employ digital skills pertinent to the 21st century, encompassing technical proficiency, information literacy, communication skills, collaborative abilities, creativity, critical thinking, and problem-solving aptitude. Therefore, the integration of Information and Communication Technologies will greatly influence the skill sets of students in the future.

Indonesian students exposed to hybrid or blended learning environments perceive the advantages of Information and Communication Technology (ICT) within the educational context. Educators and English Language Teaching (ELT) students utilise platforms such as Google Classroom and Schoology to disseminate and share information with their students (Gumartifaet. *al.*, 2020). Language competency is a key ability for students, as it helps them communicate and work with people from different backgrounds. Information and Communication Technology (ICT) offers many advantages for teaching English.

Therefore, educators may use information and communication technology (ICT) to improve learning, which

will help students learn better and become more skilled at using technology. Yaser (2021) noted that technology significantly influences the development of writing skills in primary school students. Writing, a fundamental skill, underpins communication, critical thinking, and academic achievement. Despite its importance, many primary school pupils encounter difficulties with writing, stemming from limited vocabulary, lack of engagement, and inadequate practice. Laar *et. al.* (2020) suggest that computer software, especially word-processing tools such as Microsoft Word, has created new opportunities to improve writing instruction and learning.

Microsoft Word, a readily available and user-friendly application, offers features such as spell check, grammar suggestions, word count, and formatting options that can streamline the writing process and encourage young learners (Wea & Kuki, 2021).

These characteristics provide prompt feedback, helping students recognise and correct mistakes, broaden their vocabulary, and refine their sentence structure. Furthermore, the capacity to easily revise and edit text fosters iterative writing, a process essential for skill acquisition (Wea & Kuki, 2021). In the Ikwerre Local Government Area, mirroring trends across Nigeria, there is an increasing demand for improvements in the quality of primary education. Although conventional pedagogical approaches to writing instruction persist, their inherent constraints have spurred educators to investigate novel strategies. The integration of Microsoft Word in classroom settings could address deficiencies in writing instruction, making the learning experience more engaging and effective.

Notwithstanding its potential, the influence of Microsoft Word on the writing proficiency of primary school students within this specific context remains underexplored. This study aims to investigate the role of this technology in augmenting pupils' capacity to compose with coherence and precision, thereby furnishing evidence-based recommendations for the incorporation of digital resources into primary education.

In the contemporary digital era, technology has emerged as an indispensable tool in education, offering novel avenues to enhance pedagogical practices and learning outcomes. Conversely, in numerous primary schools, particularly those in rural areas such as the Ikwerre Local Government Area, students frequently struggle to develop fundamental writing skills. Conventional instructional approaches may prove insufficient to address these obstacles, resulting in pupils' limited ability to organise their thoughts, structure their compositions, and articulate their ideas with clarity.

Indeed, the Editorial Team (2024) posits that writing skills encompass the capacities employed to effectively convey concepts through written communication across diverse formats. Furthermore, technical proficiency in writing conventions, style manuals, and formatting tailored to specific contexts constitutes a crucial component of writing abilities. The capacity to discern the appropriate writing style for various situations and to establish an appropriate tone within the text are both valuable writing skills applicable in professional settings (Indeed Editorial Team, 2024). Writing skills, as defined by Jamal (2023), require both a foundational understanding and the ability to articulate thoughts and ideas in writing.

Indeed Editorial Team (2024) identified five major elements of writing, which they listed and discussed below:

1. The purpose of writing is the main idea(s) one wants the reader to take away. In most
2. In professional writing, one directly states the purpose in the first sentence or two.
3. The audience typically includes the readers you want to read the piece, and in some cases, you may consider a general audience who may come across your piece as part of your secondary audience.
4. Clarity is how easily and accurately readers can understand your purpose and the supporting features of your piece.
5. Unity addresses whether every segment of the piece at the word-level, sentence-level, paragraph-level, and section-level all relate to one another and emphasise or support the purpose. v. A coherent piece is one that is well-organised on every level, where the ideas expressed in the piece relate, and each segment leads the reader to the next segment.

However, for the purpose of this study, the writing skills are based on the following: grammar, spelling, punctuation, vocabulary development, and so on. According to Jamal (2023), it refers to a sound understanding of language, including grammar, punctuation, and spelling.

Microsoft Word, a widely used software program, offers features such as spell check, grammar suggestions, and formatting tools that can support the writing process. Despite its availability, there is limited research on its effectiveness in improving the writing skills of primary school pupils in this region.

Many teachers and schools may not fully utilise this technology due to a lack of awareness, training, or resources, further hindering pupils' writing development. Microsoft Word is a word processor software developed by Microsoft in 1983. It is the most commonly used word processor software (Rayini, 2020). It is used to create professional-quality documents, letters, reports, resumes and also allows you to edit or modify your new or existing document. The file saved in MS Word has a docx extension. The latest version of MS Word is 2019 (Rayini, 2020). Microsoft Word, or MS Word, is a widely used word processing software, particularly for creating documents such as Resumes, reports, Letters, Assignments, brochures, Question papers, and publishing PDFs. Microsoft Word is one of the most widely used word processing tools in education.

Its versatility, ease of use, and comprehensive features make it invaluable for both educators and students. From aiding in the creation of professional documents to enhancing collaboration, Word plays a crucial role in educational processes. Salehi *et. al.* (2019) posit that Microsoft Word enhances the grammar and spelling skills of Iranian teachers and learners. This can be implied to students in Indonesia: if researchers use English in Microsoft Word, students and teachers can try many features to check their spelling and grammar. Jamal (2023) makes several points: word processors help us create articles, letters, pamphlets, books, and print reports. Users can also store documents in files for reuse or modification as needed.

According to Salehi and Amiri (2019), the positive impact that can be felt in writing English during the hybrid learning period with Microsoft Word is that it does not cause many mistakes, both in spelling and grammar. Salehi and Amiri (2019) asserted that spelling and grammatical errors were the main problems for every student in writing English. They tend to find it difficult to restructure different sentence types and to spell correctly. This Word Processor becomes the main problem solver because after students use this application, their error rate in both grammar and spelling drops. They will also find it easier to correct typos because this Word Processor can detect them automatically. Students can also expand their English vocabulary by using Microsoft Word, which can automatically provide synonyms and related references for words (Salehi & Amiri, 2019). It is helpful for the learners to learn new vocabulary by doing their tasks.

In addition to having a positive impact on students during this hybrid learning period, there is no doubt that the help from the Word Processor's support is also highly effective in teaching writing skills. Harmer's words, as cited in Salehi and Amiri (2019), strongly recommend that teachers motivate their students to begin writing emails in English to others. Because, according to him, this motivation is very effective and more fun than just writing letters conventionally. In the ESL classroom, the use of this Word Processor can improve students' writing skills.

This theory is also supported by other researchers, namely, Khudair (2016), who conducted a study on the use of computers in teaching writing skills. According to these researchers, students will find it easier to correct writing errors by using grammar and spelling checkers. Spelling checkers are very useful for students who are less able to write. In addition to using this computer application, several other applications, such as speech feedback, speech recognition, and word prediction, can help students who lack writing skills develop further (Riyadi & Wulandari, 2020).

Behind all the advantages of using this Word Processor (Salehi & Amiri, 2019), of course, there are some disadvantages that researchers can face. One of them is following the wrong spelling of the suggestions. Sometimes the spelling suggestions from this word processor are not appropriate and even make our writing confusing. But many students do not know this and follow the wrong advice (Salehi & Amiri, 2019). Although using this word processor software produces good written work, students' abilities will not be fully developed, and they will be limited to improving their writing results. The development of this era of technology, especially computers, has had a tremendous impact on students' handwriting (Noël, 2016). Because they tend to prefer writing on a computer rather than with paper and pen, students' handwritten results are no longer optimal. Even though writing by hand is very important for students in expressing their ideas.

Besides, this writing software cannot adjust for the substandard scoring system in students' writing results. Therefore, students' self-evaluation becomes less unbalanced. Students focus more on evaluating which

application to use to write and do not remember that software also has limitations in helping them write (Noël, 2016).

### **Statement of the Problem**

Despite the growing integration of Information and Communication Technologies (ICTs) in education, many primary school pupils, particularly in rural areas such as the Ikwerre Local Government Area, continue to struggle to develop foundational writing skills. Traditional teaching methods often fail to engage students or provide sufficient support for writing improvement. While tools like Microsoft Word offer features that enhance writing instruction, such as grammar correction and real-time feedback, their potential remains underutilised due to limited research, teacher training, and access. Therefore, this study seeks to address the gap by examining whether the use of Microsoft Word can effectively enhance the writing skills of primary school pupils in the Ikwerre Local Government Area of Rivers State.

### **Objectives of the Study**

The main objectives of the study are to:

- i. Investigate the relationship between Microsoft as a tool used for improving the writing skills of pupils in Ikwerre Local Government Area.
- ii. Investigate the relationship between Microsoft Word as a tool used for improving the grammar of primary school pupils in Ikwerre Local Government Area.
- iii. Examine the relationship between Microsoft Word as a tool for improving the spelling of primary school pupils in Ikwerre Local Government Area.
- iv. Examine the relationship between Microsoft Word as a tool for improving the vocabulary development of primary school pupils in Ikwerre Local Government Area.

### **Hypotheses**

**H01:** There is no significant difference in the writing skills of pupils taught using Microsoft Word and those taught using conventional writing methods in Ikwerre Local Government Area of Rivers State.

**H02:** The use of Microsoft Word has no significant effect on pupils' spelling accuracy in Ikwerre Local Government Area of Rivers State.

**H03:** The use of Microsoft Word does not significantly influence pupils' grammatical accuracy in writing in the Ikwerre Local Government Area of Rivers State.

**H04:** There is no significant difference in the organisation and coherence of written compositions of pupils exposed to Microsoft Word and those not exposed to it in Ikwerre Local Government Area of Rivers State.

### **Methodology**

The study employed a quasi-experimental research design, specifically the pre-test–post-test non-equivalent control group design. This particular design was deemed suitable because it used intact classes, which precluded random assignment of individual students to the experimental or control groups. The experimental cohort received instruction in writing skills using Microsoft Word, whereas the control group was instructed using the traditional writing pedagogy. The study's design enabled the researcher to assess how Microsoft Word affected students' writing skills by comparing pre- and post-test results across both groups. The study included all primary school students in public primary schools within the Ikwerre Local Government Area of Rivers State. The specific group studied was upper primary students (Primary Five), as they had the basic reading and writing skills needed for writing assignments and using computers. The study's sample comprised 589 Primary Five pupils, selected from 89 public primary schools within the Ikwerre Local Government Area of Rivers State. A multistage sampling method was implemented; specifically, simple random sampling was utilised to choose schools from the roster of public primary schools in the Ikwerre Local Government Area. Subsequently, purposive sampling was used to identify Primary Five classes in the selected schools. These intact classes were then divided into experimental and control groups. This methodology facilitated sufficient representation while mitigating any potential disturbances to the school environment. Data collection was facilitated by two primary



instruments: the Writing Skills Achievement Test (WSAT), developed by the researcher, which assessed students' writing abilities, focusing on spelling, grammar, organisation, and coherence. The test included structured writing tasks and short composition exercises. The Instructional Package on Microsoft Word (IPMW), a teaching guide created by the researcher, was used to teach the experimental group. This package covered basic Microsoft Word features, including typing, spell-checking, grammar-checking, editing, formatting, and document saving. In contrast, the control group received instruction using the traditional chalk-and-board writing method. The Writing Skills Achievement Test (WSAT) was assessed for reliability through the test–retest approach. Pearson Product-Moment Correlation (PPMC) was employed to correlate the acquired scores. A reliability coefficient of 0.78 was obtained, thereby confirming the instrument's reliability in this investigation. The collected data were analysed using inferential statistics. The null hypotheses were evaluated at the 0.05 level of significance using the independent-samples t-test, and Analysis of Covariance (ANCOVA) was used to account for pre-existing group differences, with pre-test scores as covariates.

## Results

### Hypothesis One

**H<sub>01</sub>:** There is no significant difference in the writing skills of pupils taught using Microsoft Word and those taught using conventional writing methods in Ikwerre Local Government Area of Rivers State.

**Table 1: ANCOVA Summary of Pupils' Writing Skills by Instructional Method**

| Source                      | Sum of Squares | df  | Mean Square | F     | Sig. |
|-----------------------------|----------------|-----|-------------|-------|------|
| <b>Pre-test (Covariate)</b> | 2,314.52       | 1   | 2,314.52    | 45.67 | .000 |
| <b>Group</b>                | 1,986.34       | 1   | 1,986.34    | 39.28 | .000 |
| <b>Error</b>                | 29,654.18      | 586 | 50.60       |       |      |
| <b>Total</b>                | 34,112.41      | 588 |             |       |      |

There is a significant difference in the writing skills of pupils taught using Microsoft Word and those taught using the conventional method. Pupils exposed to Microsoft Word demonstrated superior writing skills compared to their counterparts.

### Hypothesis Two

**H<sub>02</sub>:** The use of Microsoft Word has no significant effect on pupils' spelling accuracy in Ikwerre Local Government Area of Rivers State.

**Table 2: Independent Samples t-Test of Pupils' Spelling Accuracy**

| Group               | N   | Mean  | SD   | t     | df  | Sig. |
|---------------------|-----|-------|------|-------|-----|------|
| <b>Experimental</b> | 295 | 18.42 | 3.15 |       |     |      |
|                     |     |       |      | 11.83 | 587 | .000 |
| <b>Control</b>      | 294 | 14.96 | 3.47 |       |     |      |

The use of Microsoft Word significantly improved pupils' spelling accuracy. Features such as spell-check and word editing tools contributed positively to spelling performance.

### Hypothesis Three

**H<sub>03</sub>:** The use of Microsoft Word does not significantly influence pupils' grammatical accuracy in writing in Ikwerre Local Government Area of Rivers State.

**Table 3: ANCOVA Summary of Pupils' Grammatical Accuracy**

| Source               | Sum of Squares | df  | Mean Square | F     | Sig. |
|----------------------|----------------|-----|-------------|-------|------|
| Pre-test (Covariate) | 1,742.21       | 1   | 1,742.21    | 32.84 | .000 |
| Group                | 1,563.47       | 1   | 1,563.47    | 29.48 | .000 |
| Error                | 31,172.64      | 586 | 53.19       |       |      |
| Total                | 35,108.32      | 588 |             |       |      |

Microsoft Word significantly influenced pupils' grammatical accuracy in writing. Pupils exposed to grammar-check and editing features performed better than those taught using conventional methods

### Hypothesis Four

**H<sub>04</sub>:** There is no significant difference in the organization and coherence of written compositions of pupils exposed to Microsoft Word and those not exposed to it.

**Table 4: Independent Samples t-Test of Organization and Coherence Scores**

| Group        | N   | Mean  | SD   | t     | df  | Sig. |
|--------------|-----|-------|------|-------|-----|------|
| Experimental | 295 | 16.87 | 2.94 | 12.14 | 587 | .000 |
| Control      | 294 | 13.58 | 3.12 |       |     |      |

There is a significant difference in the organization and coherence of written compositions of pupils exposed to Microsoft Word and those not exposed. Pupils taught with Microsoft Word demonstrated better structured and coherent writing.

### Discussion of Findings

The study's results demonstrated a statistically significant difference in overall writing proficiency between students instructed with Microsoft Word and those receiving instruction through traditional methods. The experimental group outperformed the control group, thereby necessitating rejection of the initial null hypothesis. This outcome implies that incorporating Microsoft Word into writing instruction positively influences students' writing capabilities, a finding consistent with Salehi and Amiri (2019).

This observed effect can be ascribed to the interactive and supportive features inherent in Microsoft Word, including its user-friendly editing and formatting tools and its capacity to provide immediate feedback, all of which foster active participation and mitigate writing-related anxiety, as suggested by Salehi and Amiri (2019).

The observed outcome corroborates the constructivist learning paradigm, which posits that knowledge is constructed through learner engagement with tools and resources. This finding aligns with prior research indicating that writing performance improves when digital word-processing tools are incorporated into classroom practices. Scholars have observed that word processors facilitate revision, the structuring of ideas,

and the refinement of expression, consequently elevating writing quality. Furthermore, the study's results, mirroring those of Yaser (2021), demonstrated a substantial impact of Microsoft Word on students' spelling accuracy, as evidenced by the elevated mean scores of the experimental group. Consequently, the second null hypothesis was rejected.

This result indicates that Microsoft Word's spell-checker is essential for improving students' spelling proficiency. The automated detection and correction of spelling mistakes provides instantaneous feedback, allowing students to identify and learn from their errors. This observation is consistent with prior research by Prvinchandar and Ayub (2014), which demonstrated that students using word-processing software exhibit superior spelling performance compared with those using conventional writing techniques. Furthermore, this finding corroborates the behaviourist learning theory, which holds that immediate feedback strengthens correct responses and promotes learning. The analysis's outcomes revealed that the use of Microsoft Word significantly affected students' grammatical accuracy in writing, leading to the rejection of the third null hypothesis.

Students instructed with Microsoft Word exhibited superior performance in grammar exercises compared to their counterparts educated through traditional pedagogical approaches (Yaser 2021). This enhancement can be attributed to the grammar-check and sentence structure recommendations integrated into Microsoft Word, which help students recognise grammatical inaccuracies and refine sentence structure. Salehi and Amiri's (2019) research aligns with prior investigations that highlight the role of digital resources in facilitating language acquisition through guided correction and iterative revision. Furthermore, it echoes Vygotsky's scaffolding theory, wherein technological instruments function as mediators, aiding learners within their zone of proximal development.

Prvinchandar and Ayub's (2014) results also indicated a notable disparity in the organisation and coherence of written compositions between students who used Microsoft Word and those who did not. Consequently, the fourth null hypothesis was rejected. The experimental group of pupils demonstrated better logical sequencing of ideas and clearer paragraph organisation. This result may be explained by the formatting tools in Microsoft Word, such as paragraph alignment, indentation, and text structuring features, which help pupils organise their thoughts more effectively. Additionally, the ability to easily revise and rearrange text encourages pupils to improve the flow and coherence of their writing. This finding is consistent with existing research that shows enhanced organisation and coherence in pupils' writing when digital writing tools are used.

## Conclusion

The investigation assessed the application of Microsoft Word in fostering vocabulary expansion within primary school students situated in Ikwerre Local Government Area. The results demonstrate that Microsoft Word offers an interactive and stimulating environment conducive to vocabulary learning, facilitated by functionalities including spell check, thesaurus capabilities for synonyms and antonyms, autocorrect features, and word suggestion tools. Furthermore, incorporating Microsoft Word into classroom practices augments students' encounters with novel vocabulary, encourages autonomous learning, and strengthens spelling precision. Teachers who employ the software effectively can cultivate engaging learning environments that facilitate vocabulary acquisition and retention. Consequently, the research findings suggest that Microsoft Word is a beneficial instrument for enhancing vocabulary development in primary school students within Ikwerre LGA, contingent upon the availability of appropriate infrastructural and pedagogical support. It is advised that educational institutions allocate resources towards digital literacy training for both educators and students, augment access to ICT resources, and incorporate Microsoft Word into the English language curriculum to achieve improved learning results.

## Recommendations

Based on the findings of the study, the following were recommended:

1. The Ministry of Education and school authorities should integrate the use of Microsoft Word into the English language curriculum to enhance vocabulary learning through interactive features such as spell check, synonyms, and word suggestions.
2. Teachers should be trained on how to effectively use Microsoft Word in vocabulary instruction.

- Workshops and professional development programs should be organised to improve their digital literacy skills.
3. Schools should be equipped with adequate computers, internet access, and necessary software to facilitate the effective use of Microsoft Word for vocabulary development.
  4. Teachers should incorporate engaging activities such as word processing exercises, vocabulary games, and sentence construction tasks using Microsoft Word to encourage active learning.
  5. School administrators should ensure that they provide adequate electricity in order to meet optimisation.

## References

- Bhattarai, P. (2021). Purposes and challenges of integrating ICT in English Language teaching in Nepalese context. *Journal of Ultimate Research and Trends in Education*, 3(3), 198-206.
- Gumartifa, A., Larasati, F., & Aurelia, S. (2020). A Blended learning in ICT used for improving English Language teaching. *Professional Journal of English Education*, 3(6), 796-804.
- Indeed Editorial Team (2024, August 19). Writing skills: Definition, types and how to improve them. <https://sg.indeed.com/career-advice/career-development/writing-skills>.
- Jamal, A. (2023, May 10). What Is Writing Skills. <https://www.linkedin.com/pulse/what-writing-skills-arshad-jamal>.
- Khudair, R. (2016). The impact of the use of the entrance to writing processes in improving the writing skills and the risk of students of the teacher of the class at Yarmouk University. *Jordanian Journal of Educational Sciences*, 12(1), 45-58.
- [Laar, E.V.](#), [Alexander J.A.M. Van Deursen](#), Jan A.G.M., Jos D.H. (2020). Determinants of 21<sup>st</sup> century skills and 21<sup>st</sup> century digital skills for workers: A systematic literature review. *Department of Communication Science*, 10(1), 2-7.
- Noël, L. (2016). Word processors negatively affect writing quality: A comparison with transgenic crops. *Applications*, 4(1), 104-107.
- Prvinchandar, S., & Ayub, A. F. M. (2014). Comparison of the effectiveness of stylewriter and microsoft word computer software to improve english writing skills. *English Language Teaching*, 7(1), 94-102.
- Rayini B. (2020). Introduction to Microsoft word. <https://www.geeksforgeeks.org/introduction-to-microsoft-word/>
- Riyadi, S., & Wulandari, T. (2017). Workshop guru matematikamenggunakan word processor formula Dan Pengelolaan. *Jurnal Aplikasi Sains dan Teknologi*, 1(2), 16-20.
- Salehi, H & Amiri, B. (2019). Impacts of using Microsoft word (MS) software on Iranian EFL lecturers' grammar knowledge. *International Journal Research in English Education*. 4(1), 1-10.
- Wea, N. K. & Kuki, D. A. (2021). Students' perceptions of using microsoft teams application in online learning during the Covid-19 Pandemic. *Journal of Physics*. <https://doi.org/10.1088/17426596/1842/1/012016>
- Yaser, A. (2021). The effect of using word processor in teaching writing skill among secondary students in schools in Jordan. *Educational Research and Reviews*, 16(7), 272-278.