

Digital Note-Taking Apps Impact on EFL Students' Writing Skill

تأثير تطبيقات تدوين الملاحظات الرقمية على مهارة الكتابة لدى طلاب اللغة الإنجليزية
كلغة أجنبية

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Abstract

This study investigates the perceptions of English as a Foreign Language (EFL) students on the use of specific digital note-taking applications such as Notion, Evernote, and Microsoft OneNote, and their self-reported impact on key writing skills, including grammar accuracy, idea organization, and writing coherence. Fifty third-year LMD students at Amar Thelidji University participated in answering a questionnaire during the academic year 2023–2024. The questionnaire consisted of 14 items measuring frequency of app use, perceived benefits, challenges faced, and preferences between digital and traditional note-taking. Results show that a majority of students positively view these apps as helpful tools to enhance their writing process, especially for grammar checking and idea organization, though some reported distractions and technical difficulties. This research highlights the growing role of digital note-taking tools in EFL writing and calls for further investigation including direct assessment of writing performance.

Keywords: EFL Writing; Digital Note-Taking; Writing Skills; Student Perception; Notion; Evernote; OneNote.

الملخص:

تبحث هذه الدراسة في آراء طلاب اللغة الإنجليزية كلغة أجنبية EFL - وتأثيرها المُبلَّغ عنه ذاتيًا على مهارات الكتابة الأساسية، بما في ذلك دقة القواعد، وتنظيم الأفكار، وتماسك الكتابة. شارك خمسون طالبًا من طلاب السنة الثالثة خلال السنة الدراسية 2023-2024 في قسم اللغة الإنجليزية بجامعة عمار ثلجي. بما في ذلك معدل استخدام التطبيق، والتحديات التي واجهوها، والتفضيلات بين تدوين الملاحظات الرقمي والتقليدي. أظهر النتائج أن معظم الطلبة ينظرون بإيجابية إلى هذه التطبيقات كأدوات مُفيدة لتحسين عملية الكتابة لديهم، وخاصةً لتدقيق القواعد وتنظيم الأفكار، على الرغم من أن بعضهم أفاد بوجود مُشتتات وصعوبات تقنية. يُسلط هذا البحث

الضوء على الدور المتنامي لأدوات تدوين الملاحظات الرقمية في كتابة اللغة الإنجليزية كلغة أجنبية، ويدعو إلى إجراء المزيد من البحث، بما في ذلك التقييم المباشر لأداء الكتابة
الكلمات المفتاحية: الكتابة باللغة الإنجليزية كلغة أجنبية؛ تدوين الملاحظات الرقمية؛ تصور؛ مهارات الكتابة؛ إدراك الطلاب؛ Notion؛ Evernote؛ OneNote.

Introduction:

Because it provides a platform for the expression of ideas and the comprehension of different topics, writing is an essential part of learning English as a foreign language. The way writing is taught and learned might be completely transformed with the use of technology in the classroom, especially with digital note-taking apps. Finding out how these apps affected the writing skills of Northern Star University's English as a Foreign Language (EFL) students is the primary goal of this research.

Especially in the field of English as a foreign language (FL), new opportunities have arisen in the dynamic field of language instruction as a result of the incorporation of technology into the classroom. Out of all these innovations in technology, digital note-taking apps have the most promise to completely alter how EFL students work on improving their writing abilities. The purpose of this research is to examine the ways in which these apps are perceived by EFL students in order to determine the extent to which they impact their writing skills. The project aims to shed light on the potential of digital note-taking to enhance writing proficiency by investigating the relationship between technology and language learning. This will provide a modern viewpoint on EFL teaching in the digital era.

Statement of Problem

The rise of digital technologies has transformed educational practices, with digital note-taking applications offering new opportunities for EFL students to improve writing. Features such as automated grammar correction, easy rearrangement of ideas, and collaborative functions are thought to facilitate the writing process. However, few studies have empirically examined students' perspectives on the effectiveness of these apps in EFL contexts, nor addressed potential challenges such as digital distractions or usability issues.

Understanding how students use and perceive these apps is essential for educators and developers to tailor instructional strategies and improve tool design. This study seeks to explore EFL students' usage patterns, perceived benefits, difficulties, and preferences related to Notion, Evernote, and Microsoft OneNote, focusing on their impact on writing skills.

Objectives of the Study

The main objectives of this study were put as follows:

1. To identify the prevalence and frequency of use of Notion, Evernote, and Microsoft OneNote among EFL students for writing tasks.

2. To examine students' perceptions of the effectiveness of these apps in improving grammar accuracy, idea organization, and writing coherence.
3. To determine which app features (e.g., grammar checking, multimedia integration, collaboration) are most valued by students.
4. To explore difficulties encountered when using digital note-taking apps.
5. To investigate students' preferences between digital and traditional note-taking methods.
6. To provide practical recommendations for EFL educators and app developers to enhance writing instruction and tool usability.

By reaching these objectives, the study hopes to provide light on how digital note-taking apps fit into English as a foreign language (EFL) writing classes, which will help teachers and programmers make more educated choices about how to best assist EFL students in the modern digital era.

Research Questions

These were the questions that the study set out to address:

1. How do EFL students use and perceive the effectiveness of specific digital note-taking apps (Notion, Evernote, Microsoft OneNote) in improving key writing skills such as grammar accuracy and idea organization?
2. Which features of these digital note-taking applications do EFL students find most beneficial, and what challenges do they encounter when using them for writing tasks?
3. What are EFL students' preferences regarding digital versus traditional note-taking methods, and how might these preferences influence the integration of digital tools in writing instruction?

Hypothesis of the Study

EFL students will report favorable perceptions of Notion, Evernote, and Microsoft OneNote as tools that assist in improving their writing skills, particularly grammar accuracy and idea organization.

1- Literature Review

The integration of digital technologies in language education has significantly transformed the ways in which writing skills are developed, especially among English as a Foreign Language (EFL) learners. Writing, being a complex cognitive task involving organization, grammar, and coherence (Hyland, 2019), benefits from technological scaffolding that facilitates planning, drafting, and revising processes. Flower and Hayes' (1981) cognitive process theory of writing highlights the recursive nature of writing and the need for tools that support flexibility and reflection—features increasingly found in digital note-taking applications.

Digital note-taking apps such as Notion, Evernote, and Microsoft OneNote provide multifaceted functions including idea organization, multimedia integration, collaborative editing, and automated grammar and spelling correction. These features support not only the mechanical aspects of writing but also higher-order skills such as idea development and critical revision (Arnold, Ducate, & Kost, 2012; Cumming & Rodríguez, 2018). Their affordances align with the pedagogical shift towards learner autonomy, which Benson (2011) defines as the capacity of learners to take charge of their learning, a process these apps facilitate by allowing personalization and self-regulated learning.

The role of feedback, especially in second language writing, is critical to learners' progress. Bitchener and Ferris (2012) emphasize that timely and targeted corrective feedback promotes linguistic accuracy, which digital tools can provide instantly through grammar and spelling checks. Similarly, Hyland and Hyland (2006) recognize collaborative feedback as essential to improving writing quality, a process digital note-taking apps can enhance through real-time sharing and commenting features.

From a sociocultural perspective, Vygotsky's (Lantolf & Thorne, 2006) theory underscores the importance of social interaction and mediated learning. Digital tools extend the Zone of Proximal Development by enabling learners to collaborate and receive scaffolding beyond the physical classroom. Such interaction is foundational for developing writing skills and is supported by the collaborative affordances of digital note-taking apps.

Research also indicates that reading and writing on digital devices affects cognitive processing differently than traditional methods. Mangen, Walgermo, and Brønnick (2013) found that reading linear texts on paper enhances comprehension compared to screens, suggesting that digital writing tools should be designed to reduce cognitive load and screen fatigue to optimize learning.

Furthermore, Nguyen (2015) highlights the importance of self-regulated learning strategies in EFL writing, noting that technology-mediated environments empower learners to plan, monitor, and evaluate their writing independently. The capabilities of digital note-taking applications to support these metacognitive activities may contribute to improved writing outcomes.

Finally, Warschauer and Ware (2006) discuss how automated writing assessment tools integrated into digital environments facilitate formative feedback and iterative revision, which are crucial for language learners' writing development. Such insights affirm the potential of digital note-taking applications as valuable adjuncts in EFL writing instruction.

2- Methodology and Data Analyses

2.1- Research Design: This study used a descriptive survey design focused on students' perceptions and self-reported use of digital note-taking apps.

2.2- Participants: Fifty third-year LMD students (age 18–30) from Amar Thelidji University participated. Gender distribution was 40% male, 58% female, and 2% unspecified. The majority (65%) had studied English for 2–3 years.

2.3- Instrument: A 14-item questionnaire was developed covering:

- App usage frequency (Notion, Evernote, Microsoft OneNote, others).
- Perceived usefulness on grammar, organization, and coherence.
- Valued features (grammar checks, multimedia, collaboration).
- Difficulties encountered (distractions, technical issues).
- Preferences between digital and traditional note-taking.

Responses used Likert scales, multiple-choice, and open-ended questions.

2.4- Data Collection and Analysis: The survey was administered during the academic year of 2023–2024. Data were analyzed descriptively, with results presented in tables and graphs.

2.5- The Results: As for the main results about the use of the apps, the data gathered revealed the following results are shown in the following tables and graphs:

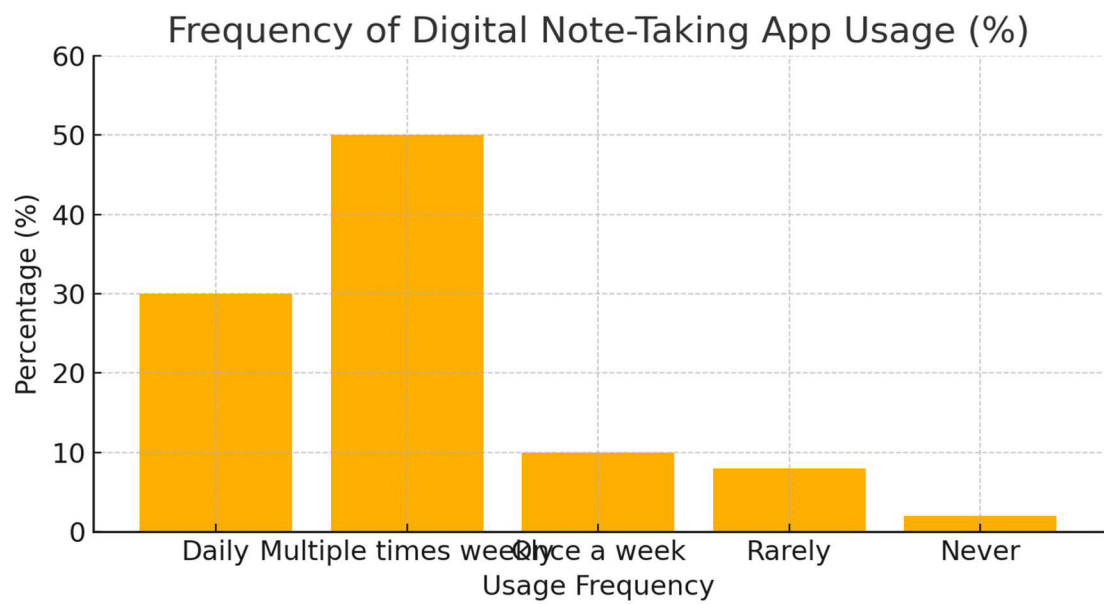
Table 1: Distribution of Most Used Digital Note-Taking Apps (%)

Application	Percentage of Users
Notion	25%
Evernote	20%
Microsoft OneNote	15%
Google Keep	10%
Others	12%

Table 1 illustrates the distribution of digital note-taking applications used by the participating EFL students. Notion emerged as the most popular app, used by 25% of respondents, followed by Evernote at 20%, and Microsoft OneNote at 15%. Google Keep and other apps accounted for smaller portions of use. This distribution indicates a clear preference among students for feature-rich apps that support flexible note organization and multimedia integration. The diversity of app usage also reflects varied learner preferences and suggests that multiple platforms currently contribute to EFL writing support.

Table 2: Frequency of App Usage (%)

Frequency	Percentage of Respondents
Daily	30%
Multiple times weekly	50%
Once a week	10%
Rarely	8%
Never	2%

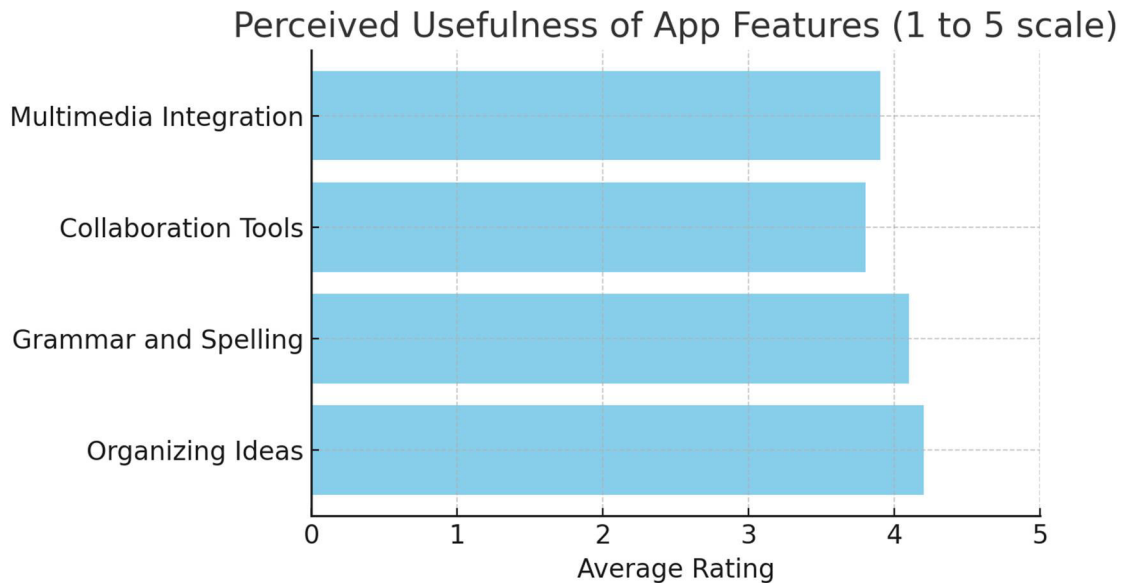


Frequency of App Usage

Table 2 and the accompanying bar chart display the frequency with which students use digital note-taking apps for their English writing assignments. The data show that 80% of students engage with these apps at least multiple times per week, with 30% using them daily and 50% several times weekly. Only a small minority (10%) use them once weekly or less. These results highlight the integral role of digital note-taking apps in the writing habits of EFL learners, indicating that the majority rely heavily on these tools to support their writing process consistently.

Table 3: Perceived Usefulness Ratings (Scale 1 to 5)

Writing Aspect	Average Rating
Organizing ideas	4.2
Grammar and spelling	4.1
Collaboration tools	3.8
Multimedia integration	3.9



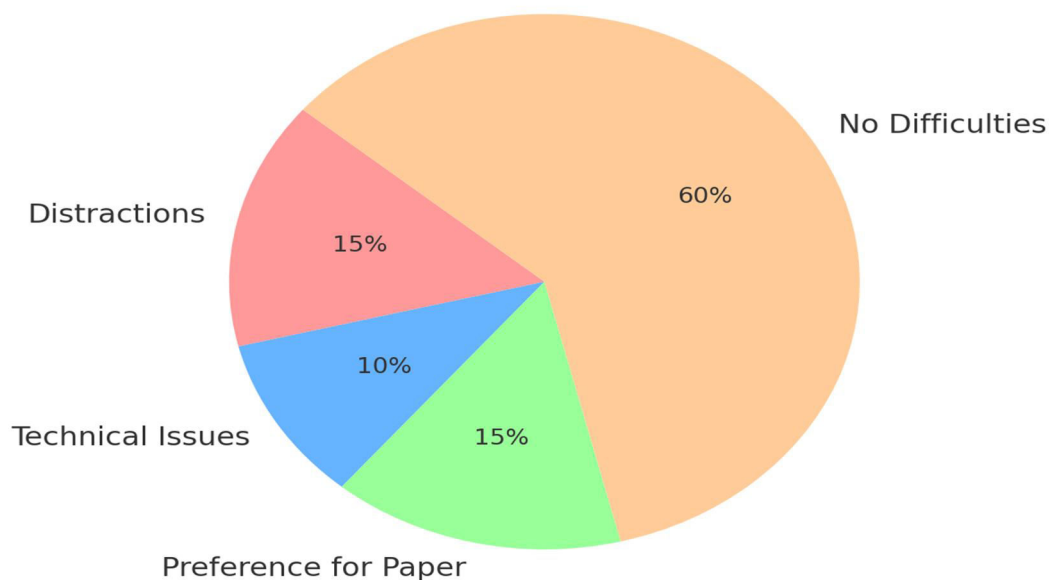
Perceived Usefulness Ratings of App Features

As shown in Table 3 and Figure 2, students rated the usefulness of various app features on a scale from 1 (not helpful) to 5 (very helpful). Organizing ideas received the highest average rating of 4.2, closely followed by grammar and spelling checks at 4.1. Multimedia integration and collaboration tools were slightly less valued but still rated favorably with scores of 3.9 and 3.8, respectively. These findings suggest that the primary benefits students perceive are related to cognitive organization and language accuracy, essential components in writing development. Collaboration and multimedia features, while appreciated, play a complementary role in enhancing the overall writing experience.

Table 4 : Reported Difficulties (%)

Difficulty Type	Percentage of Respondents
Distractions	15%
Technical issues	10%
Preference for paper	15%

Reported Difficulties with Digital Note-Taking Apps



Reported Difficulties with Digital Note-Taking Apps

Table 4 and the related pie chart provide insight into the challenges EFL students face when using digital note-taking apps. Approximately 40% of respondents reported some form of difficulty, including distractions (15%), technical issues (10%), and a preference for traditional pen-and-paper methods (15%). The majority, however, did not report significant problems. This pattern suggests that while digital tools offer considerable advantages, a notable portion of students encounter barriers that could impede their effective use. These obstacles underscore the importance of user-friendly app design, digital literacy training, and the continued availability of traditional methods to accommodate diverse learner needs.

3- Discussion of the Results

Findings confirm that EFL students widely use and positively perceive Notion, Evernote, and Microsoft OneNote as effective tools to enhance writing, particularly for grammar accuracy and idea organization. These results are consistent with Novak and Johnson (2024), who reported increased engagement and writing quality through digital note-taking. Similarly, Lee and Tan (2024) emphasize the value of collaborative features, reflected in our participants' appreciation of teamwork tools.

Despite positive perceptions, 40% of students reported challenges, such as digital distractions and technical difficulties, echoing concerns raised by Johnson et al.

(2025). The preference by 30% for traditional methods highlights the importance of maintaining blended approaches catering to diverse learning styles.

Overall, this study underlines the potential of digital note-taking apps in EFL contexts while emphasizing the need for app developers and educators to address usability issues and support balanced integration.

Conclusion

EFL students at Amar Thelidji University demonstrate positive attitudes toward Notion, Evernote, and Microsoft OneNote for improving their writing skills, especially grammar and idea organization. While a majority favor digital note-taking, some prefer traditional methods, indicating the need for flexible instructional approaches. Challenges reported call for continuous app improvement and user training. Future research should complement perception surveys with objective assessments of writing outcomes to fully understand the impact of digital note-taking on EFL writing proficiency.

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Appendix: Students' Questionnaire on the Impact of Digital Note-Taking Apps on EFL Students' Writing Skills

Dear Participant,

Thank you for agreeing to participate in this survey. Your honest responses will help us understand how English as a Foreign Language (EFL) students perceive and use digital note-taking applications to support their writing skills. All answers will be kept confidential and used only for research purposes.

Section 1: General Information

1. **Age:** _____
2. **Gender:**
 - Male
 - Female
 - Prefer not to say
3. **How many years have you been learning English?**
 - Less than 1 year
 - 1–2 years
 - 2–3 years
 - More than 3 years

Section 2: Experience with Digital Note-Taking Applications

4. Have you ever used a digital note-taking app for English writing assignments?
 - Yes
 - No

If yes, please specify which app(s) you use:

5. How often do you use digital note-taking apps for your English writing tasks?
 - Daily
 - Several times a week
 - Once a week
 - Rarely
 - Never

Section 3: Perceptions and Usage

6. On a scale from 1 to 5, how helpful do you find digital note-taking apps for organizing your ideas and thoughts for writing?
(1 = Not helpful at all, 5 = Very helpful)
1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐
7. Do you feel that your writing skills have improved by using digital note-taking apps?
- Yes
 - No
 - Unsure
8. Which features of digital note-taking apps have been most helpful to you when writing in English? (Select all that apply)
- ☐ Spelling and grammar checks
 - ☐ Easy organization and rearrangement of ideas
 - ☐ Multimedia integration (images, audio, video)
 - ☐ Collaboration tools (sharing, commenting)
 - ☐ Other (please specify): _____
9. Have you experienced any difficulties using digital note-taking apps for writing?
- Yes
 - No
 - Unsure

If yes, please describe:

10. If you had to choose, would you prefer digital note-taking or traditional pen-and-paper methods for writing tasks? Please explain your choice.
11. Do you think digital note-taking apps will replace traditional note-taking methods in the future for EFL writing?
- Yes
 - No
 - Unsure
12. What improvements would you like to see in future digital note-taking apps to better support EFL writing?

13. Would you recommend using digital note-taking apps to other EFL students?

- Yes
- No
- Unsure

14. Do you have any additional comments or recommendations regarding digital note-taking apps and EFL writing skills?

Thank you for your valuable participation!