

**Subject:** Submission 1- literature review and competitors

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## **Competitor research**

### **A. Platforms for English grammar and other errors**

#### **1. WhiteSmoke**

WhiteSmoke provides a comprehensive suite of tools for grammar, punctuation, and style, making it well-suited for professional writing and business tasks. It includes templates for various workplace documents, adding to its versatility. However, its outdated interface and slower performance compared to modern alternatives may hinder the user experience.

#### **2. Grammarly**

Grammarly is a user-friendly tool that offers real-time feedback on grammar, punctuation, tone, and style. It integrates seamlessly with platforms like Google Docs and email services, making it a versatile choice for various writing needs. However, its premium version is expensive, and there are privacy concerns since the tool processes user data on external servers.

#### **3. ProWritingAid**

ProWritingAid excels in providing detailed analysis with reports on grammar, style, and structure, making it ideal for writers seeking to refine their craft. Its depth of feedback is a significant strength, especially for advanced users. However, its wide range of features can be overwhelming for beginners, and the user interface is less intuitive than some competitors.

#### **4. LanguageTool**

LanguageTool is a multilingual writing assistant that supports various languages and offers cost-effective solutions, with basic features available for free. It is ideal for users who require corrections across multiple languages. However, it lacks advanced features such as tone detection and style enhancement, which may limit its effectiveness for professional or creative

#### **5. Ginger Software**

Ginger Software stands out for its unique features, including sentence rephrasing and translation, which help users improve phrasing and communicate across languages. Its real-time grammar and spelling corrections are useful for general writing tasks. However, the free version is limited, and its interface is less modern compared to other tools, which could affect usability.

These tools are specifically designed to assist individuals with dyslexia in producing error-free English texts. While they are highly effective in facilitating daily communication and writing tasks, they generally do not contribute to the long-term development of the user's English language proficiency, with the notable exception of WhiteSmoke, which incorporates grammar improvement tips. However, despite their utility, these tools risk fostering a reliance among users, potentially limiting their ability to function independently without them.

## B. Improve typing skills in English

### 1. **Typing.com**

Typing.com is a free platform offering a wide range of features for beginners and advanced users alike. It provides interactive lessons and games, instant feedback on accuracy and speed, and supports touch typing in multiple languages. Users can track their progress through a personal dashboard, making it an excellent choice for structured learning. However, its simple design may not appeal to those who prefer more visually advanced interfaces, and it may run slowly on older devices.

### 2. **Keybr**

Keybr adopts a statistical approach to typing practice by tailoring exercises to address specific user weaknesses. Its clean interface and error-tracking system help users improve speed and accuracy effectively, with no registration required for basic use. However, it lacks interactive elements like games, focusing primarily on English typing with limited support for other languages, which might not satisfy users looking for engaging activities.

### 3. **TypingClub**

TypingClub offers an engaging experience with animations, games, and completion certificates, making it ideal for children and beginners. Its instant error feedback and tailored content cater to users of all ages, while the progress-tracking system provides a clear view of improvements. Despite its robust features, some advanced tools require a paid subscription, and its interface may feel overwhelming to new users initially.

### 4. **10FastFingers**

10FastFingers focuses on speed typing through short, competitive tests, allowing users to compare their results globally. It supports multiple languages and various test formats, making it ideal for improving speed through repetitive practice. However, the platform prioritizes speed over accuracy or touch typing techniques and lacks a structured lesson plan, limiting its utility for comprehensive skill development.

### 5. **Ratatype**

Ratatype provides a structured typing course system with performance tracking and a modern, visually appealing design. Users can earn typing certifications for achieving high speeds, and the platform is well-suited for both individual and group practice. However, registration is required to access certain tools, and it offers fewer interactive games compared to other platforms, which may reduce engagement for some learners.

### **C. Articles and literature references about individuals with dyslexia and typing skills in English.**

- Typing Fluencies of 12–13-Year-Old Students with Dyslexia and Typically Developing Students: This study found significant differences between handwriting and self-taught typing fluency in students with dyslexia, with handwriting being more fluent.

[https://www.tandfonline.com/doi/full/10.1080/10573569.2024.2304758?utm\\_source=chatgpt.com#d1e125](https://www.tandfonline.com/doi/full/10.1080/10573569.2024.2304758?utm_source=chatgpt.com#d1e125)

- Why Children With Dyslexia Struggle With Writing and How to Help: This article addresses various writing issues faced by children with dyslexia and provides information about research-based practices aimed at remediation.

[https://pmc.ncbi.nlm.nih.gov/articles/PMC6430506/?utm\\_source=chatgpt.com](https://pmc.ncbi.nlm.nih.gov/articles/PMC6430506/?utm_source=chatgpt.com)

These studies indicate that individuals with dyslexia are likely to face greater challenges in learning touch typing and improving typing speed. Therefore, practicing touch typing may not be an effective strategy for enhancing writing skills in individuals with dyslexia. Instead, focusing on accurate writing without prioritizing speed appears to be a more effective approach for improving writing skills in this population.

#### **D. Tools designed to teach and enhance typing skills in English for individuals with dyslexia (TTRS and Nessy).**

**TTRS** (Touch-Type Read and Spell) offers a multisensory, dyslexia-friendly approach to improving typing, reading, and spelling skills, making it particularly effective for individuals with learning difficulties. It emphasizes accuracy over speed and is endorsed by the British Dyslexia Association. The program is structured in incremental modules and levels, allowing users to progress gradually and build their skills over time. In comparison, **Nessy Fingers** provides an intuitive and engaging method for learning typing by presenting keys in alphabetical order, combined with spelling practice, to support students with dyslexia, dysgraphia, and ADHD. Its interactive games and child-friendly design make the learning process enjoyable and highly motivating.

Both **TTRS** and **Nessy Fingers** are valuable tools for students with dyslexia, providing structured, interactive learning environments that enhance typing and literacy skills. These platforms prioritize accuracy and integrate typing with spelling practice, specifically designed to meet the needs of dyslexic learners. They support the development of essential skills, fostering both typing proficiency and literacy. As such, they offer significant benefits for students with dyslexia, dysgraphia, and ADHD.

Although these tools are highly effective, they are designed in a simplistic and childlike manner, targeting a younger audience and failing to appeal to a wider and more diverse user base. Additionally, these platforms do not track specific words or areas where users struggle, and they lack targeted practice to address these challenges. To improve their effectiveness, it would be beneficial to integrate a feature that allows teachers to connect with their students, monitor progress, view performance data, and provide personalized advice by the teachers to support individual learning needs.