

# Effectiveness of Gboard Application on Motivation to Learn Indonesian Language Through Direct Learning

RANDRIANATOLOTRINIAVONIRINA Mendrika Vatosoa Idealy\*  
Andi Mariono, Andi Kristanto

| INFO ARTICLE  | ABSTRACT  |
|---|---|
| <p><b>Riwayat Artikel:</b><br/>Diterima: 06-07-2023<br/>Disetujui: 10-10-2023</p>   | <p>This study investigates the influence of the Gboard application, a virtual keyboard that provides immediate translation of voice or text on motivation for language learning. This study centers on the acquisition of the Indonesian language through the usage of English. This research aims to determine how the use of the Gboard application effects motivation to learn Indonesian. The research was carried out among students from different countries learning Bahasa Indonesia in 2023. This quantitative research employs an online survey utilizing Likert scales. The results suggest that the majority of students who utilize Gboard for social media conversations with Indonesians people perceive it as beneficial for enhancing their proficiency in the Indonesian language. Consequently, Gboard has been regarded as a highly efficient educational system. A significant number of participants have reported an impressive increase in their motivation to learn Indonesian, attributing it to the utilization of Gboard as direct learning system. The study concludes that Gboard, when combined with the direct learning model, greatly enhances new language learning motivation from English. The result emphasizes the crucial role of technology, specifically Gboard, in augmenting motivation. These insights are advantageous for educators and academics seeking to use technology into learning a new language.</p> |
| <p><b>Keywords:</b><br/>Learning motivation<br/>Language learning,<br/>Technology<br/>Direct Learning,</p>  |   |
| <p><b>Correspondence Address:</b><br/>Randrianatolotriniavonirina Mendrika Vatosoa Idealy<br/>Fakultas Ilmu Pendidikan, Teknologi Pendidikan<br/>Universitas Negeri Surabaya<br/>Jl. Lidah Wetan, Lidah Wetan, Kec. Lakarsantri, Surabaya, Jawa Timur 60213<br/>E-mail: vatosoaidealy@gmail.com</p> |   |

## INTRODUCTION

The 12th Indonesian Language Congress (KBI) held in Jakarta from October 26–29, 2023. The main topic of the congress was to make the Indonesian language more widely spoken around the world. Indonesian language skills are important for both locals and international students who want to study in Indonesia. The main goal of this study is to find out how the Gboard application affects the motivation of Indonesian language learners.

The advanced features of Gboard, such as real-time translation(text or voice) and predictive text, can greatly boost learners' confidence. It is giving them instant feedback and help, which in turn improves their language learning skills. The interaction with the Indonesian community makes the the process of language learning more attractive.

Focusing on the use of mobile application like Gboard, this study looks into the role of drive in learning a new language. It shows how important technology is for language learning. It becomes simple and enjoyable

to learn a second language. The capabilities of this innovative tool, such predictive typing and real-time translation, help students feel confident and engaged during interactive conversations.

Ningsih (2019) talks about how constructivist learning theories can be used to help people learn languages. The study also looked at the situation of learning Indonesian, focusing on the problems that foreign students and how can help them. According to Yendrawaty (2018), it is important to make sure that students' motivation and their learning goals are in synchronization. They say that students are most inspired when they their way to learn meet their learning objective. Sahrihatin's study (July 21, 2020) focuses on how technology has an enormous impact on students' motivation to learn Indonesian and how that affects their ultimate learning outcomes. Hudaa (June 30, 2021) also talks about how important language learning applications are for foreign students.

The result of this research shows that foreign students in Indonesia in 2023 are using Gboard more and more to help them learn the language because they saw it as useful and simple for language learning. This study gives us new information about how Gboard and the Direct Learning method can help foreign students in Indonesia achieve their language learning goals. The importance of technology, especially Gboard, in language learning. Gboard precise vocabulary recognition features, mobile phones and application become necessary tools for learning languages, especially for people who want to learn a second language from English.

## METHOD

The goal of this study is to find out how the Gboard application affected the enthusiasm of international students in Indonesia in 2023. The study uses a quantitative method and an online poll with Likert scale questions to gather information (with answers given on a scale from 1 to 4 to rate variables). A stratified random sampling method was used to make sure that the sample is fair and representative. It is made up of foreign students who are currently studying Indonesian in 2023. Eight different countries' students are in the sample. They are from Chad, El Salvador, Tanzania, Madagascar, India, and Zimbabwe. Out of all the answers that were gathered, 10 met the criteria and were chosen for analysis. The online survey has sent to the students. The questionnaire is to find out how Gboard is used in language learning systems, how motivating learners think it is, and how well it works as a learning tool.

Descriptive statistics are used in data analysis to sum up how respondents thought Gboard affected their desire to study a new language. Methods of statistical analysis, with SPSS, are used to find links between frequency of using Gboard and motivation to learn a language (by finding means and ranges). The analysis is mostly about checking for regularity, homogeneity, and statistical variable analysis for the following two variables: The independent variable is the use of the Gboard and the dependent variable is the motivation to learn Indonesian language. When the importance value (Sig.) is more than 0.05 ( $P > 0.05$ ), the data is said to be normally distributed. If the Sig. value is bigger than 0.05, it means that there is no difference in the data between the groups. This assumption is important for carrying out statistical analyzes to ensure the veracity and reliability of the study results.

The employment of random sampling ensures that the chosen sample is a robust representation of the entire population. It's facilitating the interpretation of study results. The selection of all foreign students currently studying Bahasa Indonesian in 2023 is particularly meaningful. The study is considering their diverse origins and language learning experiences. With thorough statistical analysis, the outcomes will be valuable for the field of language teaching, especially in educational technology, aiming to enhance the learning process.

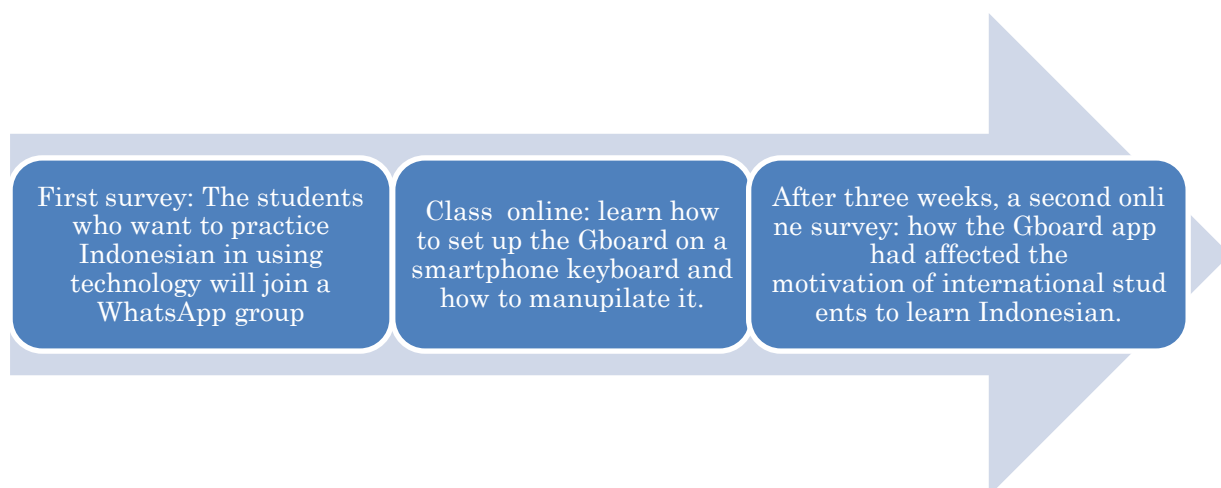


Figure 1: Data collection process

## RESULTS

The results of this research show the influence of the Gboard application on the motivation of international students to acquire proficiency in the Indonesian language. The findings demonstrate that most participants rated Gboard system with a high score, indicating a firm conviction that it is a valuable instrument for language acquisition. This system is capable of establishing a productive and pleasurable learning atmosphere. The majority of respondents consistently gave scores above 3 for each facet. That result demonstrated their strong preference for using Gboard actively. In addition, international students currently studying Bahasa Indonesia clearly felt their progress after 3 weeks of using this direct learning method.

A total of ten students provided accurate responses to the survey, representing a diverse range of eight countries: Tanzania, Madagascar, India, El Salvador, Ukraine, Zimbabwe, East Timor, and Chad.

The Kolmogorov-Smirnov test resulted a p-value of 0.107, indicating statistical significance. This discovery is essential in ascertaining the normal distribution of the data. A p-value equal to or greater than 0.05 indicates a statistically significant normal distribution, which is crucial for generating more precise analysis. The homogeneity test of gain values revealed that the use of the Gboard application and motivation for learning the Indonesian language exhibited equal variance. The p-value of 0.698 exceeds the significance level from 0.05.

An examination of the attributes of the independent variable (X), namely the utilization of the Gboard application, revealed that participants exhibit a propensity for active usage. The majority of respondents also reported high scores in the dependent variable (Y), which represents the motivation to learn the Indonesian language. Let's see in this table the result of the average score provided by the sample with a scale of 1 to 4 of with Likert model:

Table 1. Conclusion of the research findings

| No. | Conclusion   | Average Score |
|-----|--|---------------|
| 1   | Gboard Usage Frequency (X1)                                    | 3.6           |
| 2   | Understanding of Gboard Features (X2)                          | 3.5           |
| 3   | Effectiveness of Gboard in Learning (X3)                       | 3.9           |
| 4   | Motivation to Learn Language with Gboard (Y1)                  | 3.7           |
| 5   | Desire for Achievement in Indonesian Language with Gboard (Y2) | 3.6           |
| 6   | Perception of Gboard Assistance in Language Learning (Y3)      | 3.8           |

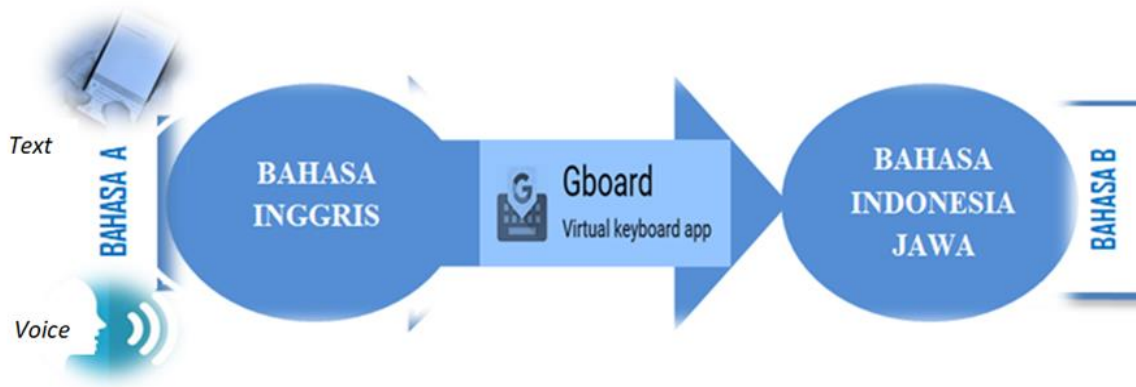


Figure 2: Modelization of the system direct learning with "Gboard" in practice for language baths

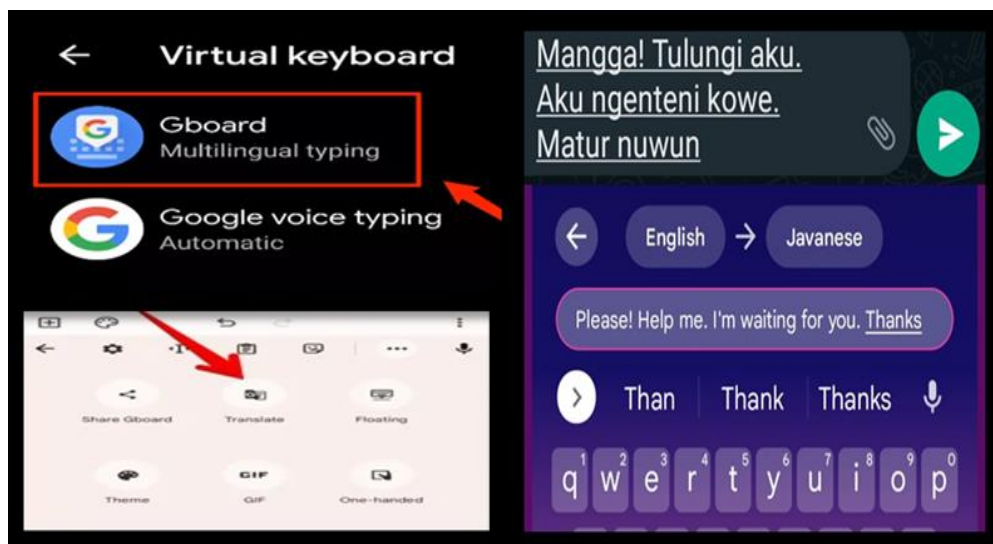


Figure 3: Practical language system modeling with Gboard

## DISCUSSION

The results indicate that a substantial proportion of students actively employ the Gboard application for the purpose of language learning (Andrew et al., 2018; Myakala & Jonnalagadda, 2024). The majority perceive the application as being successful in aiding their language acquisition process, leading to an enhancement in their language proficiency (Esteban, 2024; Chamani, Razi, & Xodabande, 2023). The evaluation of the effectiveness of Gboard application highlights its potential as a beneficial instrument for language learners starting from English (Guberović, Lipić, & Čavrak, 2021)..

This result of this study also revealed the influence of the Direct Learning model incorporated into the Gboard application. The technique has a favorable effect on the language acquisition process (Grigoryan, 2022). They are aware of the importance of a tongue bath system with technology like Gboard application. They can learn a new language in direct practice with a native speaker (Shaheen et al., 2022). The combination of the Gboard application with the Direct Learning paradigm creates an optimal setting for efficient language acquisition (Xodabande et al., 2023). A substantial correlation was found between the use of the Gboard application in conjunction with the Direct Learning paradigm and the high motivation claimed by many respondents to learn the Indonesian language (Seo, Zhang, & Rong, 2023)..

These findings highlight the capacity of technology, specifically Gboard application, to improve the language learning process and aid in the advancement of Indonesian language skills among foreign students (Xu et al., 2020; Gabrielli, Pica, & Tolomei, 2023). These results encourage the use of technology in language learning. This can offer a valuable idea for educators and especially in the research for systems or tools to facilitate foreign language learning (Ye et al., 2024).

## CONCLUSION

This study revealed the influence of utilizing the Gboard application with the Direct Learning model on the motivation of foreign students to learn Bahasa Indonesia. They should acquire the competence in the Indonesian language before starting the academic study in 2023. Data was collected and analysed by using a quantitative research approach with online survey involving Likert scale score. The analysis was done descriptively.

The technique consist that foreign students in Indonesia use the Gboard application to practice the Indonesian with local people. Most of them consider it highly useful in enhancing their language acquisition, especially in terms of writing and speaking skills. Significantly, a considerable number of participants had a strong inclination to acquire competence in the Indonesian language, and their motivation was further enhanced by the combined use of Gboard and the direct learning methodology.

These findings have important implications for the internationalization of the Indonesian language. Also, promoting the integration of technology in language instruction, and supporting the use of different teaching methods. Implementing this strategy interactive can improve the language learning and proficiency of international students in Indonesian, consequently fostering cultural interaction and promoting second language learning.

Despite the valuable information obtained and the simplicity of this system (only need an internet connection) it is crucial to recognize the limitations of the research. That is the limited number of respondents. The future research should consider larger and more diverse samples. The article also suggests examining the social and cultural effects of using the Gboard application.

## REFERENCES

- Abimbola, O. (2013). Towards the integration of mobile phones in the teaching of English language in secondary schools in Akure, Nigeria. *Theory and Practice in Language Studies*, 3(7), 1–6.
- Abu Naba'h, A., Hussain, J., Al-Omari, A., & Shadeifat, S. (2009). The effect of computer assisted language learning in teaching English grammar on the achievement of secondary students in Jordan. *The International Arab Journal of Information Technology*, 6(4), 431–439.
- Adara, R. A., & Haqiyah, A. (2021). Improving Indonesian EFL learners' motivation through computer assisted learning (CALL). *Journal of English Language Studies*, 6(1), 110–118.
- Ahmadi, D., & Reza, M. (2018). The use of technology in English language learning: A literature review. *International Journal of Research in English Education*, 3(2), 115–125.
- Andrew, G., Eichner, H., Sun, H., et al. (2018). *Applied Federated Learning: Improving Google Keyboard Query Suggestions*. arXiv:1812.02903. <https://arxiv.org/abs/1812.02903>
- Budiawan, R. Y. S., & Rukayati, R. (2018). Kesalahan bahasa dalam praktik berbicara pembelajaran Bahasa Indonesia bagi penutur asing (BIPA) di Universitas PGRI Semarang tahun 2018. *Kredo: Jurnal Ilmiah Bahasa dan Sastra*, 2(1), 1–10.

- E. Guberović, T. Lipić and I. Čavrak, "Dew Intelligence: Federated learning perspective," *2021 IEEE 45th Annual Computers, Software, and Applications Conference (COMPSAC)*, Madrid, Spain, 2021, pp. 1819-1824, doi: 10.1109/COMPSAC51774.2021.00274.
- Esteban, A. J. (2024). *Theories, principles, and game elements that support digital game-based language learning (DGBLL): A systematic review*. Semanticscholar. [Link](#)
- Fryer, L. K. (2019). Getting interested: Developing a sustainable source of motivation to learn a new language at school. *System, 86*, 102120.
- Gabrielli, E., Pica, G., & Tolomei, G. (2023). *A survey on decentralized federated learning*. arXiv:2308.04604. <https://arxiv.org/abs/2308.04604>
- Grigoryan, T. (2022). *Investigating the effectiveness of iPad-based language learning in the UAE context*. Journal of Open, Distance and e-Learning. <https://www.tandfonline.com/doi/abs/10.1080/02680513.2020.1718488>
- Hudaa, S. (2021). Pemanfaatan aplikasi SPAI untuk mahasiswa asing dalam pembelajaran Bahasa Indonesia. *Jurnal Bahasa Indonesia bagi Penutur Asing (JBIPA)*, 3(1), 1–7.
- Kadenova, Zh. (2023). Extracurricular work as a means of motivation to learn a foreign language. *Bulletin of Science and Practice, 9*(5), 572–576.
- Kubś, J., & Michałowska-Kubś, A. (2020). Motivation of foreigners to learn the Lithuanian language. *Philologia Estonica Tallinnensis, 5*, 101–115.
- Ningsih, N. (2019). Aplikasi teori belajar konstruktivisme dalam pembelajaran bahasa asing. *Foundasia, 9*(1), 1–9.
- Putra Gotama, P. A. (2023, July 1). Strategi pembelajaran Bahasa Indonesia bagi penutur asing. *Lampuhyang, 14*(2), 104–120.
- Riana, D. R. (2020). Pendekatan imersi dalam pembelajaran Bahasa Indonesia bagi penutur asing (BIPA) (penerapan program imersi di Australia). *Jurnal Bahasa Indonesia bagi Penutur Asing (JBIPA)*, 2(1), 36–45.
- Rohayati, D. (2018). Analisis strategi pembelajaran bahasa dalam pembelajaran Bahasa Inggris sebagai bahasa asing. *Mimbar Agribisnis: Jurnal Pemikiran Masyarakat Ilmiah Berwawasan Agribisnis, 1*(3), 269–275.
- Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology, 25*(1), 54–67. <https://doi.org/10.1006/ceps.1999.1020>
- Sahrihatin, M. (2020). Pengaruh media pembelajaran dan motivasi belajar terhadap hasil belajar menyimak Bahasa Indonesia. *Diskursus: Jurnal Pendidikan Bahasa Indonesia, 2*(3), 235–245.
- Saro, D. (2022). The influence of information technology in the learning process during the COVID-19 pandemic. *Engineering and Technology International Journal, 4*(2), 80–84.
- Seo, J., Zhang, N., & Rong, C. (2023). *Flexible and secure code deployment in federated learning using large language models*. IEEE. <https://ieeexplore.ieee.org/document/10475813>
- Shaheen, M., Farooq, M. S., Umer, T., & Kim, B. S. (2022). *Applications of federated learning: Taxonomy, challenges, and research trends*. *Electronics, 11*(4), 670. <https://www.mdpi.com/2079-9292/11/4/670>
- Syanuridin, S., & Hakim, M. (2023). Internasionalisasi Bahasa Indonesia. *Lateralisasi, 11*(1), 26–31.
- Siemens, G. (2004). Connectivism: A learning theory for the digital age. *International Journal of Instructional Technology and Distance Learning, 2*(1), 1–8.
- Teeter, J. (2017). Improving motivation to learn English in Japan with a self-study shadowing application. *Languages, 2*(4), 19.\* <https://doi.org/10.3390/languages2040019>
- Umami, M. R. (2023). Pengaruh motivasi belajar dan kemandirian belajar terhadap prestasi belajar matematika siswa. *Geomath, 3*(2), 63–72.
- Xu, D., Li, T., Li, Y., Su, X., Tarkoma, S., & Jiang, T. (2020). *Edge Intelligence: Architectures, Challenges, and Applications*. arXiv:2003.12172. <https://arxiv.org/abs/2003.12172>
- Ye, R., Ge, R., Yuchi, F., Chai, J., & Wang, Y. (2024). *Leveraging unstructured text data for federated instruction tuning of large language models*. In *Federated Learning*, Springer. [https://link.springer.com/chapter/10.1007/978-3-031-82240-7\\_9](https://link.springer.com/chapter/10.1007/978-3-031-82240-7_9)