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Meta AI for High School Students: A Suitable Tool to Improve English Writing Skills

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ABSTRACT

In the current digital era, the integration of artificial intelligence (AI) into education has significantly reshaped how students access and engage with learning materials. Among various innovations, AI-powered tools such as Meta AI have gained attention for their potential to assist students in developing essential language skills, particularly in English writing. As writing remains a fundamental yet challenging aspect of language learning, it is important to understand how students perceive the role of AI tools in supporting their academic progress. This study investigates high school students' perceptions of Meta AI as an accessible and affordable platform for improving their English writing skills. Grounded in the context of the growing presence of AI in education, the study examines three core dimensions: accessibility, affordability, and perceived effectiveness in writing development. A quantitative descriptive method was used, employing a structured questionnaire administered to 78 vocational high school students in Samarinda, Indonesia. The findings indicate that most students find Meta AI easy to access and use, particularly across commonly used devices and in both school and home settings. Students also perceive the platform as cost-effective, reporting no need for financial investment or expensive equipment. In terms of writing support, students agree that Meta AI helps improve grammar, expand vocabulary, and organize ideas more clearly. However, some challenges were identified, such as limited functionality under slow internet conditions and mixed perceptions when comparing Meta AI to paid writing tools. This study suggests that Meta AI holds promise as a democratizing tool in English writing instruction, especially in resource-limited educational environments. The results underscore the importance of improving digital infrastructure and developing strategies to enhance user engagement for long-term learning benefits.

Key words: Meta AI; Writing Skills; Accessibility; Affordabilty

INTRODUCTION

In today's digital era, the integration of information and communication technology into education is not just a trend it is a necessity. Among these advancements, artificial intelligence (AI) has become a transformative force in education, enabling platforms that support more efficient and independent learning. One such platform is Meta AI, which holds growing potential in assisting English writing instruction, especially for high school students. However, many students especially in vocational or under-resourced schools still struggle with English writing due to limited access to effective tools, lack of support, and unequal access to technology. This presents a significant problem in English language education, where writing remains one of the most challenging skills to develop. While digital tools are widely promoted, their perceived accessibility and affordability from the students' perspective, particularly in developing regions, remains unclear.

Previous studies have highlighted the effectiveness of AI in language education. Khalil (2024) showed that using AI through platforms like WhatsApp improved grammar learning. Aljuaid (2024) demonstrated that AI tools enhance academic writing by offering instant feedback. Jr et al. (2024) found that Meta AI improved grammar and structure among ESL learners in the Philippines. These studies support the benefits of AI, but most focus on higher education settings or general ESL learners, leaving a gap in understanding how AI tools like Meta AI are perceived by vocational high school students in low-resource contexts. This study aims to fill that research gap by specifically investigating the perceptions of high school students toward Meta AI in terms of accessibility and affordability two factors that often determine whether technology can be meaningfully adopted in classrooms.

The novelty of this study lies in its focus on a specific user group vocational high school students in Indonesia who are often overlooked in AI-in-education research. The urgency stems from the growing reliance on digital tools in post-pandemic education, which demands inclusive, cost-effective, and easy-to-use platforms that can reach all students. Understanding how students perceive Meta AI's ease of use and cost-related barriers is crucial for educators, policymakers, and developers to make informed decisions about integrating AI tools into classrooms. It also contributes to the broader goal of bridging educational inequality through accessible technology.

LITERATURE REVIEW

The Role of Digital Platforms in Language Learning

Digital communication plays an important role in English language learning. Duraipandi & A Murugan, (2024) emphasize that the use of digital communication in English language education can increase motivation, provide customized

learning experiences, and enable the practice of language skills in real-life situations. However, they also note challenges such as differences in digital literacy and the need for effective teaching strategies to maximize the benefits of digital technologies. The integration of artificial intelligence (AI) in language learning platforms provides a more adaptive and personalized approach. Extension, (2024) explains that technology has an important role in modern language learning, especially in the context of English as a Second Language (ESL) and English for Specific Purposes (ESP). This study provides a historical overview of the development of technology in language education, from Computer-Assisted Language Learning (CALL) to current trends in technology-based language learning. Meta AI, as one of the AI-based platforms, has great potential in improving students' writing skills. With the ability to generate text and correct grammar, Meta AI can help students in developing ideas, expanding vocabulary, and understanding good writing structures. Utilizing Meta AI as a writing tool can provide instant feedback and support more independent and effective learning.

Meta as a Learning Tool

The significant role of artificial intelligence (AI) in education, especially in the development of English writing skills, is becoming increasingly apparent. Meta AI, an AI platform developed by Meta Platforms, Inc. provides various useful features such as automatic grammar correction, sentence structure suggestions, and vocabulary enrichment. Research conducted by Khotimah, Rusijono,(2024) showed that the use of Meta AI in learning academic writing for ESL (English as a Second Language) students in the Philippines has significantly improved their writing clarity, accuracy, and speed. This shows that Meta AI can be an effective tool in strengthening students' writing skills through self-directed learning and instant feedback.

In addition to technical improvement in writing, Meta AI also supports students' metacognitive development and creativity through a meta-learning approach. Khotimah, Rusijono, (2024) found that AI-supported personalized learning strategies enabled students to manage their own learning process more consciously and reflectively. With Meta AI's ability to customize responses to individual needs, students are encouraged to evaluate and improve their writing independently, thus forming sustainable learning habits. This finding confirms the role of Meta AI not only as a technical tool, but also as a facilitator in shaping the character of independent learners.

Writing Skill Development in High School Students

Improving writing skills among secondary school students is a very important aspect of English language learning. This ability not only impacts on academic achievement, but also on students' critical thinking and self-expression skills. One method that has proven effective is the use of reflective journals. Research

conducted by Miftahul Jannah et al., (2020) showed that students who used reflective journals experienced significant improvement in their writing skills. Through a regular reflection process, students can identify weaknesses and strengths in their own writing, which has an impact on improving structure, content, and grammar. This research emphasizes the importance of reflection in the writing learning process. Problem-based learning (PBL) approach has also been proven effective in improving students' writing skills. Miftahul Jannah et al., (2020) found that the application of PBL in teaching descriptive text can significantly improve students' writing scores. Through the process of problem identification, group discussion, and drafting solutions in writing, students not only improve their writing skills but also learn to work together and think critically. PBL allows students to write in a context that is more relevant to everyday life.

METHOD

Design and Samples

This study employed a quantitative descriptive research design to investigate the extent to which high school students perceive Meta AI as an accessible and affordable platform for enhancing their English writing skills. The descriptive method utilized to provide an accurate portrayal of students' perceptions, attitudes, and experiences related to the use of Meta AI in the context of English language learning. The population of this study consisted of all students' grade X majoring in Accounting at SMK Negeri 15 Samarinda, which located in Samarinda, Indonesia. The researcher used total sampling as participants who have had some exposure to digital or AI-based tools in their learning activities, particularly in English meanwhile the total sampling were 78 students. The purpose of the study will be explained to the respondents, and informed consent will be obtained before they complete the questionnaire. The questionnaire will be provided in an online format, depending on students' preferences and classroom conditions. The researcher will present during the administration to assist with any questions and to ensure accurate completion of the forms.

Since this study uses a descriptive quantitative approach, the research adopted snap-shot design. The term snapshot refers to data or information that is collected at a single point in time to capture the current state of a phenomenon, population, or variable. It is commonly used in cross-sectional studies to describe how such designs provide a one-time overview rather than tracking changes over time. A snapshot in research refers to a cross-sectional study that captures information about a population or phenomenon at one specific point in time, helping researchers understand the status or relationships between variables without any follow-up. Therefore, data collection will ask approval from the school administration and English teachers.

Instrument and Procedure

The research instrument structured questionnaire developed by the researcher to measure three key aspects: perceived accessibility, perceived affordability, and the perceived impact of Meta AI on English writing skills. However, the sources of the questionnaire are adapted based on several previous researchers. The variable has three item namely perceived accessibility, perceived affordability, and perceived affectiveness The questionnaire contained 24 items, each using a 4-point Likert scale ranging from "Strongly Disagree" (1) to "Strongly Agree" (4). The accessibility section included items focusing on ease of use, availability, and interface navigation. The affordability section address internet data usage, cost-effectiveness, and device compatibility. The effectiveness section assessed how Meta AI may support grammar correction, vocabulary enrichment, and idea generation in students' English writing.

The instrument validated through a pilot test with a small group of students outside the main sample. Validity refers to how accurately a method measures something. If the same result can be consistently achieved by using the same methods under the same circumstances, the measurement is considered valid (Middleton, 2019). Meanwhile, Reliability in research is the measure of the stability or accuracy of the methods and results of an analysis. It means obtaining identical results after repeating the same procedures several times. (Team, 2025). Further, Revisions will be made based on feedback to improve clarity and reliability.

Data Analysis

To analyze the data, the responses was coded and entered into Microsoft Excel, and then analyzed using the Statistical Package for the Social Sciences (SPSS). Descriptive statistical tools were chosen for counting the percentages, means, and standard deviations to interpret the data. These results helped to identify general trends in students' perceptions of Meta AI in terms of accessibility, affordability, and its potential impact on writing improvement. The findings has been presented in tables and graphs to provide a clear and comprehensive understanding of the data.

RESULT AND DISCUSSION

The survey results reveal a generally positive perception of Meta AI among users, particularly in terms of accessibility, affordability, and effectiveness in improving English writing skills. These findings align with broader trends in educational technology, where AI tools are increasingly recognized for their potential to enhance learning experiences (Zawacki-richter et al., 2019).

Perceived Accessibility

From the data, it was reported high satisfaction with Meta AI's accessibility, with 74.4% agreeing that they could easily access the platform whenever needed. The

ease of use without prior training was also notable, as 71.8% of respondents found the tool intuitive. However, challenges arose with internet connectivity, as only 44.9% agreed that Meta AI performed well with slow connections. This finding underscores the importance of optimizing AI tools for low-bandwidth environments, especially in regions with unreliable internet infrastructure (Selwyn, 2019). The variability in responses (SD = 0.81) highlights the need for further technical improvements to ensure equitable access. The table below show the result of the likert scale from the perceived accessibility

Table 1. Perceived Accessibility

No	Question	Scale (%)				SD
		Strongly Disagree	Disagree	Agree	Strongly Agree	
1	easy access	2,6	9	74,4	14,1	0,58
2	Easy to use	1,3	7,7	71,8	19,2	0,56
3	Do not have any technical problems	3,8	19,2	66,7	10,3	0,65
4	Available on the devices I usually use	0	5,1	67,9	26,9	0,52
5	Can be used at school/home	1,3	3,8	64,1	30,8	0,58
6	Easy to understand and use	3,8	12,8	70,5	12,8	0,63
7	Can be used with slow internet.	10,3	34,6	44,9	10,3	0,81

The chart below show the mean of the variable from the perceived accessibility. The chart below shows the average scores for perceived accessibility when using Meta AI. Most users agree that Meta AI is easy to use, available on their devices, and can be used at school or home. The highest ratings were for ease of use and device compatibility. The lowest rating was for using Meta AI with a slow internet connection, though it was still above the midpoint, indicating overall positive accessibility.

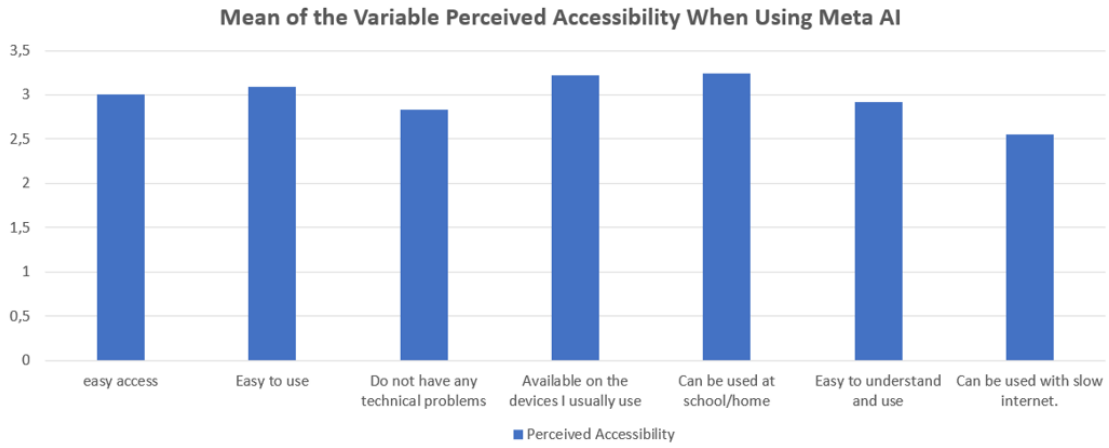

Figure 1. Perceived Accessibility

Perceived Affordability

Meta AI was perceived as a cost-effective solution, with 60.3% of users agreeing that it required no financial expenditure. This aligns with the growing demand for free or low-cost educational resources, particularly among students (Weller, 2020). However, opinions were divided when comparing Meta AI to paid platforms, as only 55.1% preferred it for writing improvement. This suggests that while Meta AI is valued for its affordability, its perceived efficacy relative to premium tools may vary. The high standard deviation (SD = 0.81) for this item indicates diverse user expectations, possibly influenced by prior experiences with other platforms (Molina-Azorin, Jose and Fetters, 2020). The table below shows the likert scale of the perceived affordability.

Table 2. Perceived Affordability

No	Question	Scale				SD
		Strongly Disagree	Disagree	Agree	Strongly Agree	
1	Free to use	0	6,4	60,3	33,3	0,57
2	doesn't use much data	2,6	14,1	64,1	19,2	0,66
3	Not expensive devices	1,3	5,1	69,2	24,4	0,56
4	Costs less than tutoring or paid tools	7,7	15,4	69,2	7,7	0,7
5	does not cause financial strain	0	11,5	74,4	14,1	0,5
6	Better for improving my writing.	7,7	19,2	55,1	17,9	0,81
7	Cheap way to practice English	1,3	11,5	62,8	24,4	0,63

While the chart below shows the average of the perceived affordability from the respondents. Moreover, the chart shows that users generally find Meta AI affordable. The highest ratings were for being free to use, not needing expensive devices, and being a cheap way to practice English. Although slightly lower, users also agree that it doesn't cause financial strain and uses little data. Overall, Meta AI is seen as a cost-effective option for improving writing skills.

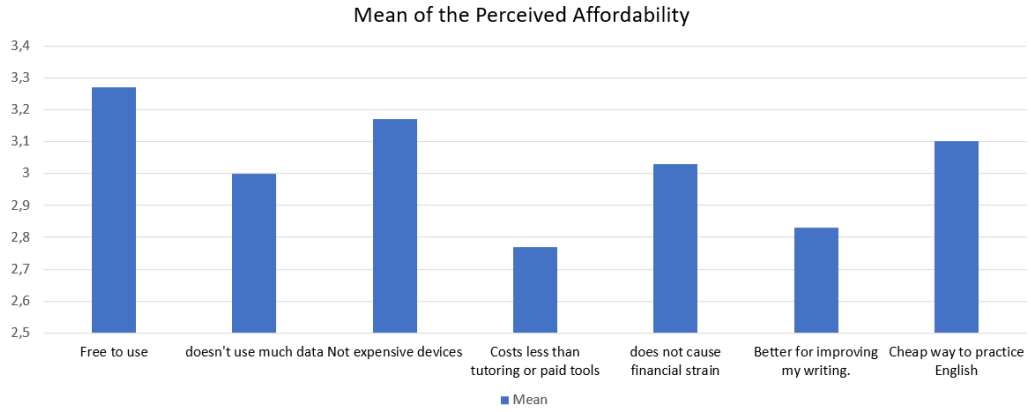

Figure 2. Perceived Affordability

Perceived Effectiveness in Writing Skills

The majority of respondents (75.6%) agreed that Meta AI helped improve their grammar, and 70.5% found writing in English easier with the tool. These results are consistent with research demonstrating the role of AI in scaffolding language learning (Luckin & Holmes, 2016). However, motivation to practice writing showed greater variability (SD = 0.71), suggesting that while Meta AI is effective for skill development, its ability to sustain long-term engagement may depend on individual learner preferences. The willingness of 67.9% of users to recommend Meta AI to peers further supports its perceived value as a learning aid (Zhou, Y., Chen, J., & Wang, 2022).

Overall, Meta AI is viewed as an accessible, affordable, and effective tool for enhancing English writing skills. However, addressing technical limitations, such as performance under slow internet, and further validating its efficacy compared to paid alternatives could strengthen its adoption. These insights contribute to the broader discourse on AI in education, emphasizing the need for inclusive design and continuous improvement to meet diverse user needs. The table 3 below showed the likert scale result and standard deviation of the questionnaire.

Table 3. Perceived Affectiveness

No	Question	Scale				SD
		Strongly Disagree	Disagree	Agree	Strongly Agree	

1	Helps write better grammar	2,6	10,3	75,6	11,5	0,56
2	Helps expand my English vocabulary	3,8	14,1	65,4	16,7	0,68
3	Gives useful suggestions for my writing tasks	2,6	15,4	69,2	12,8	0,61
4	Helps organize my ideas more clearly	1,3	7,7	66,7	24,4	0,59
5	Encourages to write more in English	3,8	24,4	64,1	7,7	0,64
6	Understand writing mistakes better with Meta AI.	3,8	15,4	67,9	12,8	0,65
7	Makes writing in English easier	1,3	14,1	70,5	14,1	0,58
8	Motivates to keep practicing my writing skills	3,8	19,2	60,3	16,7	0,71
9	My English writing has improved since using Meta AI	3,8	24,4	61,5	10,3	0,67
10	Tell other students to use Meta AI to improve their writing	1,3	16,7	67,9	14,1	0,6

Further, the chart below explained the average of the perceived of effectiveness from the respondents related to the Meta AI.

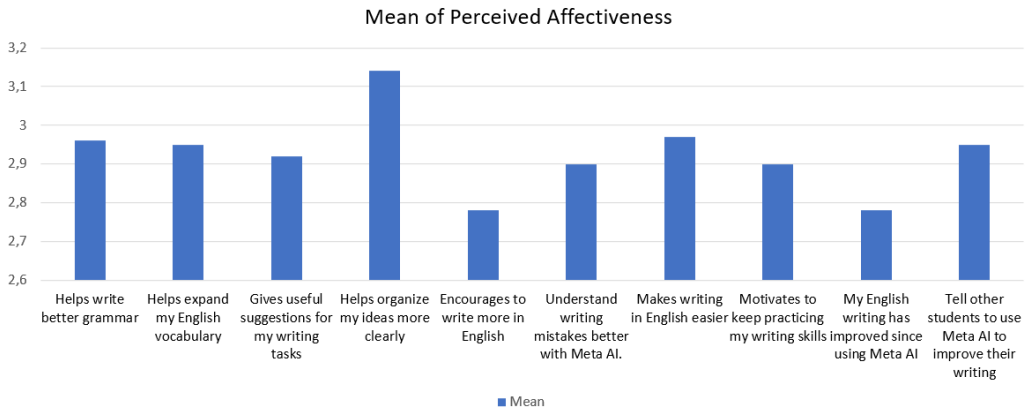

Figure 3. Perceived Effectiveness

The figure above explained that the chart illustrates users' perceptions of Meta AI's effectiveness in supporting their English writing. The highest-rated item is that Meta AI helps users organize their ideas more clearly, followed by making writing in English easier. Users also agree that it helps them expand vocabulary, write better

grammar, and understand their writing mistakes. Lower-rated items include encouragement to write more in English and perceived improvement in writing skills, though they still show a generally positive view. Overall, the data suggests that Meta AI is seen as an effective tool for enhancing different aspects of English writing.

The survey results reveal a generally positive perception of Meta AI among users, particularly in terms of accessibility, affordability, and effectiveness in improving English writing skills. These findings align with broader trends in educational technology, where AI tools are increasingly recognized for their potential to enhance learning experiences (Zawacki-richter et al., 2019). It was reported that high satisfaction with Meta AI's accessibility, with 74.4% agreeing that they could easily access the platform whenever needed. The ease of use without prior training was also notable, as 71.8% of respondents found the tool intuitive. However, challenges arose with internet connectivity, as only 44.9% agreed that Meta AI performed well with slow connections. This finding underscores the importance of optimizing AI tools for low-bandwidth environments, especially in regions with unreliable internet (Selwyn, 2019). The variability in responses (SD = 0.81) highlights the need for further technical improvements to ensure equitable access.

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Teachers and schools can consider using Meta AI to support students in writing tasks. The results also suggest that developers should make AI tools that work well even with slow internet so that more students can benefit from them. This research

has some limitations. It only involved students from one school, so the results may not apply to all students. The data was also based on students' opinions, not on actual writing performance. In addition, the study did not compare Meta AI with other tools. Future research could look at how Meta AI performs over time and compared to other writing platforms. Also, internet access and students' digital skills were not studied in depth and should be explored further.

CONCLUSION

This study concludes that Meta AI is perceived positively by students as an accessible, affordable, and helpful tool for improving English writing skills. It supports learners by offering features that enhance grammar, vocabulary, and idea organization, making it a viable solution for resource-limited educational settings. However, technical issues particularly related to internet speed and comparisons with paid platforms reveal areas for improvement. To address these, future development should focus on optimizing Meta AI for low-bandwidth environments, possibly through offline functionality or lighter versions. Further research is encouraged to compare Meta AI with other writing tools over time, using longitudinal methods to assess sustained learning outcomes. Enhancing user engagement through gamified features or personalized feedback could also increase motivation and consistent use.To ensure inclusivity, integrating localized content and broader language support is vital. Additionally, educators should be involved in exploring how Meta AI can be embedded into classroom practices to complement formal instruction. By tackling these aspects, Meta AI can evolve into a more robust, inclusive, and pedagogically integrated writing support tool in diverse educational contexts.

REFERENCES

Crompton, H. (2024). AI and English language teaching: Affordances and challenges. *British Journal of Educational Technology*, 134–150. https://doi.org/10.1111/bjet.13345%0A%0A

Duraipandi, O., & A Murugan, A. A. (2024). Role of Digital Communication in Learning the English language. *Recent Research Reviews Journal*, *3*(1), 258–273. https://doi.org/10.36548/rrrj.2024.1.017

Extension, K. P. (2024). *The Role of Technology in Language Learning : Tools and Techniques The Role of Technology in Language Learning : Tools and Techniques*. *August*.

Khotimah, Khusnul; Rusijono, A. M. (2024). Enhancing Metacognitive and Creativity Skills through AI-Driven Meta-Learning Strategies. *EBSCO*, *18*(18). https://doi.org/10.3991/ijim.v18i05.47705

Kukulska-Hulme, A., Lee, H., & Norris, L. (2021). Mobile-assisted language learning: A review of recent applications. *Language Learning & Technology*, *25*, 1–18. https://doi.org/http://dx.doi.org/10.125/llt.25.3.1

Luckin, R., & Holmes, W. (2016). Intelligence Unleashed: An argument for AI in

Education. In *UCL Knowledge Lab: London, UK.* . https://www.pearson.com/content/dam/corporate/global/pearson-dot-com/files/innovation/Intelligence-Unleashed-Publication.pdf

Middleton, F. (2019). *Reliability vs. Validity in Research | Difference, Types and Examples*. 3 July. https://www.scribbr.com/methodology/reliability-vs-validity/

Miftahul Jannah, D., Usman, B., Daud, B., Muslem, A., & Abdul Samad, I. (2020). Improving Students' Writing Skill Through Reflective Journal: a Study At a Senior High School in Aceh. *Humanities & Social Sciences Reviews*, *8*(3), 221–230. https://doi.org/10.18510/hssr.2020.8323

Molina-Azorin, Jose and Fetters, M. (2020). In This Issue: Mixed Methods and Interventional Evaluations, Multilevel Mixed Methods Designs, Full Integration in Case Study Research, Mixed Methods-Grounded Theory, Mixed Methods Evaluation Through Cost-Effectiveness Analysis, and Action Research in Mix. *Journal of Mixed Methods Research*, *14*, 127–130. https://doi.org/10.1177/1558689820912852

Selwyn, N. (2019). Should Robots Replace Teachers? *Polity*.

Team, I. E. (2025). *Reliability in research (definition, types and examples)*. 5 March. https://uk.indeed.com/career-advice/career-development/reliability-in-research

Weller, M. (2020). *25 Years of Ed Tech*. https://doi.org/10.15215/aupress/9781771993050.01

Zawacki-richter, O., Marín, V. I., & Bond, M. (2019). *Systematic review of research on artificial intelligence applications in higher education – where are the educators ?*

Zhou, Y., Chen, J., & Wang, M. (2022). A meta-analytic review on incorporating virtual and augmented reality in museum learning. Educational Research Review. *Educational Research Review*, *36*. https://www.sciencedirect.com/science/article/abs/pii/S1747938X22000239?via%3Dihub