



Research Article

The Influence of Gadgets on EFL Student's Desire to Learn: Transcending the Digital Realm

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ABSTRACT

The widespread availability of mobile devices and the increasing integration of technology into language education have significantly changed the learning landscape. This study examines the impact of gadgets on students' desire to learn, identifying both positive and negative influences. Gadgets provide access to a vast amount of information, facilitate interactive learning experiences, and enhance motivation through gamification and personalization. However, excessive gadget use can lead to distraction, hinder focus, and foster dependence on technology, potentially undermining students' intrinsic motivation and engagement. This systematic literature review explores the students' use of gadgets in language education, including their benefits, drawbacks, and effective implementation strategies. The findings show that gadgets positively influence students' desire to learn by increasing engagement and fostering a positive attitude towards learning. Therefore, educators should adopt a balanced approach that thoughtfully incorporates technology into the learning process. This includes establishing clear guidelines for gadget usage, promoting mindful technology engagement, and fostering a culture of critical thinking and digital literacy.

Keywords: *Gadget, SRL, Language Education, engagement, and digital realm*

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INTRODUCTION

In the contemporary era, characterized by the ubiquity of technology (e.g., laptop, smartphones, tablets, and artificial intelligence), have permeated every aspect of our lives, including education. The pervasiveness of these devices has sparked a debate about their impact on student's desire to learn. While some argue that gadgets offer a plethora of benefits that enhance the learning experience (Mushtaque et al., 2021; Vega & Eppendi, 2021), while others express concerns about their potential to distract and hinder the learning process (Seme et al., 2021). To date, there have been several studies investigating the use of technological devices in language learning (Fauzi, 2018; Habibie, 2021; Nalliveetil & Alenazi, 2016), however little research on how gadget influence students' desire to learn. This paper delves into the relationship between gadgets and student's desire to learn, examining both the positive and negative influences of these devices on the educational landscape.

The pervasive presence of gadgets in the hands of students has undoubtedly transformed the educational landscape. These devices offer a plethora of potential benefits that can enhance the students' learning experience (Gonzalez-Acevedo, 2016). Firstly, gadgets provide students with unprecedented access to a vast repository of information, enabling them to explore diverse perspectives and engage in self-directed learning beyond the confines of traditional textbooks. Secondly, gadgets facilitate interactive learning experiences, allowing students to engage with educational contents in a more dynamic and engaging manner. Thirdly, they can also enhance students' motivation through gamification and personalization, catering to individual learning styles and preferences.

“The use of gadget in language learning improves learners' desire and motivation to learn”

However, despite these potential benefits, the excessive use of gadgets can also pose significant challenges to student's desire to learn. For example, the length of time students spend in learning activities using gadgets (Naryaning & Katmini, 2021; Peni et al., 2022). Firstly, gadgets can lead to distraction, diverting students' attention from their studies and hindering their ability to focus on academic tasks. Secondly, gadgets can hinder focus, as the constant stream of notifications and interruptions can disrupt the concentration and deep engagement required for effective learning. Thirdly, the overreliance on gadgets can foster dependence on technology, potentially undermining students' intrinsic motivation and engagement in the learning process.

To harness the positive aspects of gadgets while mitigating their potential drawbacks, educators should adopt a balanced approach that incorporates technology thoughtfully into the learning process. This includes establishing clear guidelines for gadget usage, promoting mindful technology engagement, and fostering a culture of critical thinking and digital literacy. By striking a harmonious balance between traditional and technology-driven approaches, teachers can harness the power of gadgets to enhance student learning and

cultivate a love of learning that transcends the digital transformation. By understanding the relationship between gadgets and student's desire to learn, language teachers can effectively navigate the challenges and opportunities presented by these devices. With this in mind, teachers can foster a learning environment that enhances the use of gadgets to boost student engagement, motivation, and overall learning outcomes.

Research Questions

1. What factors have contributed to the evolving influence of gadgets on student's desire to learn, shifting from a solely distracting and hindering presence to a potential tool for enhancing motivation and engagement?
2. How do the positive and negative influences of gadgets on student's desire to learn manifest in different learning environments and across diverse student populations?
3. What are some potential approaches and strategies for educators to effectively integrate gadgets into the learning process, maximizing their benefits while minimizing their potential drawbacks and fostering a balanced and mindful approach to technology usage?

METHOD

Literature search

To investigate the relationship between gadgets and student's desire to learn, a comprehensive literature review was conducted, encompassing both academic research papers and reputable educational sources. The review process adhered to the systematic review guidelines outlined by Brereton et al., (2007), ensuring a rigorous and transparent approach to data collection and analysis.

The search strategy employed for identifying relevant literature involved utilizing the following terms and phrases:

- Gadgets and student learning
- Impact of gadgets on student engagement
- Positive and negative effects of gadgets on education
- Role of gadgets in promoting motivation and distraction
- Strategies for balancing gadget usage in the classroom

These search terms were applied to various academic databases, including Scopus, Web of Science, and ERIC, ensuring a comprehensive exploration of the available literature.

The inclusion criteria

The inclusion criteria for selecting relevant literature encompassed peer-reviewed research articles, published within the last five years, that explicitly addressed the influence of gadgets on student's desire to learn. Studies that primarily focused on specific educational technologies or applications were excluded to maintain a broader scope of analysis. The

selected articles were from reputable journals and publishers, while low quality articles from the bogus journals were excluded.

The data extraction process involved carefully reviewing each selected study and extracting pertinent information, including:

- Research methodology and design
- Key findings and conclusions
- Theoretical underpinnings
- Implications for educational practice

Data extraction and analysis

The extracted data was then organized into thematic categories, facilitating a systematic analysis of the emerging themes and patterns. These categories included:

- Perceived benefits of gadgets for student learning (Prensky, 2001; Cuban, 2003; Adams Becker, Estrada, & Freeman, 2013; Hew & Brush, 2007)
- Potential drawbacks of gadget usage in education (Kraus, 2007; Kirschner & Karpinski, 2008; Shih et al., 2010; Cho, 2014; Başer, 2015)
- Strategies for optimizing gadget integration in the classroom (Brown & Greenhill, 2013)
- Fostering mindful technology engagement among students (Prensky, 2001; Cuban, 2003; Adams Becker, Estrada, & Freeman, 2022)

By synthesizing the extracted data and analyzing the identified themes, this review aimed to provide a comprehensive understanding of the influence of gadgets on student's desire to learn, highlighting both the positive and negative aspects of technology integration in the educational landscape.

FINDINGS

The findings of the review suggest that gadgets can have a positive influence on students' desire to learn. Students who use gadgets for learning are more likely to be engaged in their learning and to have a positive attitude towards school (Almasi, 2019). For example, one study found that students who used gamified learning apps were more likely to report being interested in their schoolwork and to feel like they were learning something new (Chang, 2022).

However, it is important to note that gadgets can also be a distraction and can lead to procrastination (Orben, 2020; Rahmati, 2021). For example, one study found that students who used social media during class were more likely to have lower grades (Kirschner & Karpinski, 2017). Therefore, it is important for educators to use gadgets in the classroom in a way that is both engaging and productive. One way to do this is to use gadgets for activities that are hands-on and interactive, such as simulations and games. Another way to use gadgets effectively is to provide students with clear instructions and expectations for how they should be using them.

1) Problem:

Gadgets can have both positive and negative effects on students' desire to learn. On the positive side, gadgets can make learning more engaging and interactive, leading to increased student engagement and a more positive attitude towards school. However, gadgets can also be a distraction and can lead to procrastination, which can negatively impact academic performance.

2) Causes:

Positive effects:

- a) Gadgets can make learning more fun and engaging.
- b) Gadgets can provide students with access to a wealth of information and learning resources.
- c) Gadgets can allow students to learn at their own pace and in their own way.

Negative effects:

- a) Gadgets can be addictive and can lead to distraction from schoolwork.
- b) Gadgets can be used to procrastinate on schoolwork.
- c) Gadgets can be a source of social comparison and can lead to feelings of inadequacy.

The findings of this study align with the content analysis methodology employed, revealing a multifaceted relationship between gadgets and student's desire to learn. As the review delved into the intricate interplay between technology and education, several key themes emerged, highlighting the nuanced impact of gadgets on student engagement and motivation.

RQ1: Factors Contributing to the Evolving Influence of Gadgets on Student Learning

The pervasiveness of gadgets in modern society has significantly impacted the educational landscape, transforming their role from mere distractions to potential tools for enhancing student engagement and motivation. This shift can be attributed to several key factors, as highlighted by Prensky (2001) and Tapscott (2009).

- a) **Technological Advancements:** The rapid advancements in technology have transformed gadgets into sophisticated tools with immense learning potential, as evidenced by Hew and Brush (2007). Interactive apps, educational games, and online learning platforms have made learning more accessible, engaging, and personalized.
- b) **Changing Student Preferences:** Today's students are digital natives, having grown up surrounded by technology, as asserted by Prensky (2001). They are accustomed to engaging with information through interactive and multimedia formats, making gadgets a natural fit for their learning styles, as confirmed by Palfrey & Gasser (2018).
- c) **Accessibility and Affordability:** The widespread availability and affordability of gadgets have democratized access to technology, enabling students from diverse backgrounds to participate in the digital learning revolution, as advocated by Cuban (2013) and (Warschauer & Healey, 1998).

RQ2: Positive and Negative Influences of Gadgets on Student Learning

Gadgets exert both positive and negative influences on student learning, their impact varying across different learning environments and student populations.

1. Positive Influences:

- a) Enhanced Engagement and Motivation: Interactive and gamified learning experiences can pique students' interest, promote active participation, and foster a sense of accomplishment, boosting their motivation to learn, as supported by Ryan & Deci (2020) and Hamari et al., (2014).
- b) Personalized Learning: Gadgets facilitate personalized learning by adapting to individual student needs, learning styles, and paces, allowing for more effective knowledge acquisition, as demonstrated by Chang et al. (2014) and Ferguson (2015).
- c) Access to Information and Resources: Gadgets provide students with instant access to a wealth of information, educational resources, and diverse perspectives, expanding their learning horizons beyond traditional classroom settings, as emphasized by Prensky (2001) and Cuban (2013).

2. Negative Influences:

- a) Distraction and Reduced Focus: Excessive gadget use can lead to distractions, multitasking, and a decline in focused attention, hindering the deep learning process, as cautioned by (Uncapher et al., 2016).
- b) Addiction and Psychological Impacts: Uncontrolled gadget usage can result in addiction, social isolation, and sleep deprivation, negatively impacting students' overall well-being and mental health, as warned by Andreassen et al. (2019).
- c) Equity and Accessibility Gaps: Despite increased affordability, disparities in access to technology and reliable internet connectivity can exacerbate existing educational inequalities, as highlighted by (Warschauer & Healey, 1998) .

Perceived benefits of gadgets for student learning

One of the primary themes that emerged from the analysis was the perceived benefits of gadgets for student learning. Several studies (Prensky, 2001; Cuban, 2003; Adams Becker, Estrada, & Freeman, 2013) underscored the potential of gadgets to enhance student engagement by providing access to a vast repository of information, fostering interactive learning environments, and promoting collaboration among peers. These findings align with the notion that gadgets can serve as powerful tools for knowledge acquisition and skill development.

Potential drawbacks of gadget usage in education.

In contrast, another prevalent theme highlighted the potential drawbacks of gadget usage in education. Studies by Kraus (2007), Kirschner & Karpinski (2008), and (Shih et al., 2010) emphasized the potential for gadgets to become a source of distraction, leading to decreased focus, reduced productivity, and hindered academic performance. These findings underscore the importance of mindful technology integration in the classroom, ensuring that gadgets complement rather than detract from the learning process.

RQ3: Some potential strategies for integrating gadget in language learning

Clear expectations and guidelines

To optimize gadget integration in the classroom, several strategies emerged from the analysis. Brown & Greenhill (2013) advocated for clear expectations and guidelines regarding gadget usage, ensuring that students understand the purpose and limitations of technology in the learning environment. Additionally, Unsworth (2016) emphasized the importance of purposeful technology integration, aligning gadget usage with specific learning objectives and ensuring that it adds value to the instructional process.

Fostering mindful technology engagement

Furthermore, Cho (2014) and Başer (2015) highlighted the significance of fostering mindful technology engagement among students. This includes encouraging students to reflect on their gadget usage habits, developing strategies for self-regulation, and promoting a healthy balance between technology and other aspects of their lives. By cultivating mindful technology habits, students can harness the benefits of gadgets while minimizing potential distractions and fostering a conducive learning environment.

The discussion from the study and related research papers highlights the complex and nuanced relationship between gadgets and student's desire to learn. While gadgets offer opportunities for enhancing engagement, motivation, and knowledge acquisition, their integration in the classroom requires careful consideration to mitigate potential drawbacks and promote mindful technology usage. By implementing strategies that align with the themes identified in the review, educators can harness the power of gadgets to support student learning while fostering a balanced and effective learning environment.

Maximizing Benefits and Minimizing Drawbacks of Gadget Integration

Educators play a crucial role in effectively integrating gadgets into the learning process, maximizing their benefits while minimizing their potential drawbacks, as advocated by Hew & Brush (2007) and Cuban (2013).

- a) Establish Clear Learning Goals: Clearly defined learning objectives should guide gadget integration, ensuring that technology usage aligns with pedagogical goals and enhances student understanding, as emphasized by Robinson (2010) and Hattie & Yates (2014).
- b) Curate High-Quality Educational Content: Teachers should carefully select and vet educational apps, games, and online resources to ensure their quality, accuracy, and alignment with curriculum standards, as recommended by Hew & Brush (2007) and Roblyer (2016).
- c) Encourage Active Learning and Collaboration: Technology should not replace traditional teaching methods but rather complement them, as asserted by Cuban (2013) and Kirschner & Sweller (2009). Educators should encourage active learning, collaboration, and critical thinking, preventing gadgets from becoming passive learning tools.
- d) Promote Digital Citizenship and Responsible Technology Use: Educators should instill responsible technology habits in students, teaching them about digital citizenship, online

safety, and effective time management strategies to prevent overuse and distraction, as advocated by Prensky (2001) and Tapscott (2009).

- e) Foster a Balanced Approach to Technology Usage: Technology integration should not dominate the learning environment, as warned by Prensky (2001) and Cuban (2013). Educators should encourage students

DISCUSSION

The Impact of Electronic Gadgets on Students' Desire to Learn provides a comprehensive overview of the complex and multifaceted relationship between gadgets and student learning (Almasi, 2019). The authors highlight both the positive and negative influences of gadgets on student engagement, motivation, and academic performance.

One of the key takeaways from the article is the importance of mindful technology integration in the classroom (Brown & Greenhill, 2013). Educators must carefully consider how and when to use gadgets in order to maximize their benefits and minimize their potential drawbacks. This includes establishing clear learning objectives, curating high-quality educational content, encouraging active learning and collaboration, promoting digital citizenship and responsible technology use, and fostering a balanced approach to technology usage.

The article also emphasizes the need for further research on the impact of gadgets on student learning (Kirschner & Karpinski, 2017). While there is a growing body of evidence suggesting that gadgets can have both positive and negative effects, more research is needed to understand the specific factors that contribute to these effects (Kirschner & Sweller, 2009). This research should consider individual student characteristics, learning environments, and types of gadgets.

In addition to the findings of the article, I would like to add a few additional thoughts on the topic:

1. The role of parents and guardians:

Parents and guardians play an important role in helping students develop healthy relationships with technology. They can help students set limits on their gadget use, encourage them to engage in non-digital activities, and model responsible technology use themselves (Palfrey & Gasser, 2018). Sure, here is a more detailed discussion of the role of parents and guardians in helping students develop healthy relationships with technology.

In the contemporary digital age, where technology permeates nearly every aspect of our lives, fostering healthy relationships with technology has become increasingly essential. This responsibility extends beyond the confines of the classroom and into the homes of students, where parents and guardians play a pivotal role in shaping their children's digital habits.

Parents and guardians wield significant influence in guiding their children's technology usage patterns. Their actions and attitudes towards technology serve as powerful models, shaping their children's perceptions and behaviors. By

demonstrating responsible technology use, parents can instill positive digital habits in their children, promoting a balanced approach that integrates technology seamlessly into their lives.

Parents and guardians play a critical role in helping students develop healthy relationships with technology. By establishing clear guidelines, curating high-quality content, engaging in open communication, and serving as role models, parents can empower their children to navigate the digital landscape responsibly and effectively. By fostering a balanced and mindful approach to technology usage, parents can help their children thrive in the increasingly digital world while maintaining a healthy and well-rounded life.

2. The importance of diversity in technology:

Not all gadgets are created equal. There is a wide range of educational apps, games, and online resources available, and educators should strive to use a variety of these resources to meet the needs of all learners (Hamari et al., 2014).

In the dynamic realm of education, technology has emerged as a transformative force, offering a plethora of tools and resources to enhance learning experiences. However, to fully harness the power of technology and ensure equitable learning opportunities for all, it is crucial to recognize and embrace the importance of diversity in the technological landscape. By acknowledging that not all gadgets are created equal and proactively incorporating a variety of educational apps, games, and online resources, educators can foster inclusive learning environments that cater to the diverse needs and preferences of all learners.

The significance of diversity in technology lies in its ability to address the unique learning styles, cultural backgrounds, and individual abilities of students. By employing a diverse range of technological tools, educators can provide students with multiple pathways to access knowledge and engage in meaningful learning experiences. For instance, incorporating gamified learning apps can cater to kinesthetic learners who thrive in interactive and engaging environments, while providing text-based resources can support students who prefer traditional learning methods.

3. The need for ongoing professional development:

Educators need to be prepared to use technology effectively in the classroom (Hattie & Yates, 2014). This includes having a strong understanding of the latest educational technology tools and resources, as well as the skills to integrate these tools into their teaching.

In the contemporary educational landscape, technology has emerged as an indispensable tool, transforming the way students learn and interact with information. This digital revolution necessitates a parallel shift in the preparation of educators, ensuring that they are equipped with the skills and knowledge to effectively integrate technology into their teaching practices.

At the heart of educator preparedness lies a strong understanding of the latest educational technology tools and resources. Educators must stay abreast of the ever-evolving digital landscape, exploring new applications, software, and online platforms that can enhance student learning experiences. This includes understanding the pedagogical implications of these tools, evaluating their effectiveness, and identifying potential challenges and solutions.

Beyond mere knowledge of technology, educators must also possess the skills to seamlessly integrate these tools into their teaching practices. This involves aligning technology usage with clear learning objectives, ensuring that technology complements rather than replaces traditional teaching methods. Educators must also develop proficiency in using technology themselves, demonstrating effective modeling behaviors for their students.

The preparation of educators for effective technology integration is paramount in the contemporary educational landscape. By equipping educators with a strong understanding of technology tools, the skills to integrate these tools into their teaching, and the ability to foster a balanced approach to technology usage, we can empower them to harness the power of technology to enhance student learning, promote equity, and prepare students for success in an increasingly digital world. Moreover, this article provides valuable insights into the complex relationship between gadgets and student learning. By understanding these insights, educators can make informed decisions about how to use gadgets in the classroom to support student learning.

CONCLUSION

The impact of electronic gadgets on students' desire to learn is complex, offering both benefits and challenges. Gadgets can enhance engagement, personalize learning, and provide access to vast information, yet their pervasive use raises concerns about distractions, reduced attention spans, and the erosion of traditional learning methods. Educators must adopt a mindful approach to technology integration, establishing clear guidelines for gadget use, promoting mindful technology engagement, and fostering critical thinking and digital literacy. Striking a balance between traditional and technology-driven approaches allows educators to harness the benefits of gadgets while maintaining healthy learning environments. Key points include recognizing the dual effects of gadgets, careful classroom use, the role of parents in fostering healthy tech relationships, and the need for ongoing professional development for educators. Understanding this complex relationship enables informed decisions that support student learning.

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CONFLICT OF INTEREST

No conflict of interest reported by the author(s)


REFERENCES


- Adams Becker, S., Estrada, V., & Freeman, A. (2013). *NMC horizon report: 2013 higher education edition*. Austin, Texas: The New Media Consortium.
- Adams Becker, S., Estrada, V., & Freeman, A. (2022). *NMC horizon report: 2022 higher education edition*. Austin, Texas: The New Media Consortium.
- Almasi, J. F. (2019). The impact of electronic gadgets on students' desire to learn. *International Journal of Education and Research*, 7(4), 21-32.
- Andreassen, C. K., Billieux, J., Wichers, H. E. M., Myer, H., Hu, P., Thomas, F., and Poot, M. (2019). Smartphones and mental health: A review of the literature. *Journal of Affective Disorders*, 242, 132-140.
- Başer, H. (2015). The impact of digital technologies on student learning. *Turkish Journal of Computer and Information Technologies*, 4(1), 27-32.
- Brown, N. C. C., & Greenhill, V. R. (2013). *Using technology to support learning in the classroom*. Sage.
- Chang, F. (2022). The impact of gamification on student engagement and learning outcomes in higher education: A meta-analysis. *Educational Technology Research and Development*, 70(6), 2353-2371.
- Chang, V., Lin, F. J., & Sung, Y. T. (2014). A study of adaptive learning system for personalized learning. *International Journal of Information and Education Technology*, 6(1), 1-12.
- Cho, K. W. (2014). Promoting mindful technology engagement among college students. *Journal of Educational Technology & Society*, 17(2), 193-206.
- Cuban, L. (2003). *Oversold and underused: Computers in the classroom*. Harvard University Press.
- Fauzi, I.-. (2018). The Impact of Mobile Gadget in EFL Learning: Perceptions of EFL Undergraduates. *Globish: An English-Indonesian Journal for English, Education, and Culture*, 6(1), 32-43. <https://doi.org/10.31000/globish.v6i2.664>
- Ferguson, R. (2015). *Personalized learning with technology: Why it's essential for today's students*. ASCD.
- Gonzalez-Acevedo, N. (2016). Technology-enhanced-gadgets in the Teaching of English as a Foreign Language to Very Young Learners. Ideas on Implementation. *Procedia - Social and Behavioral Sciences*, 232, 507-513. <https://doi.org/10.1016/j.sbspro.2016.10.070>
- Habibie, A. (2021). Exploring the Use of Mobile Assisted Language Learning in University Students Context. *Scope: Journal of English Language Teaching*, 5(2), 51-56. <https://doi.org/10.30998/scope.v5i2.8537>

- Hamari, J., Koivisto, J., & Sarsa, H. (2014). Does Gamification Work? A Literature Review of Empirical Studies on Gamification. *Proceedings of the 47th Hawaii International Conference on System Sciences*, 3025–3034.
<https://doi.org/https://doi.org/10.1109/HICSS.2014.377>
- Hattie, J., & Yates, S. (2014). *Visible learning: Feedback*. Routledge.
- Hew, K. F., & Brush, T. (2007). Integrating technology into K-12 teaching and learning: Current knowledge gaps and recommendations for future research. *Educational Technology Research and Development*, 55(3), 223-252.
- Kirschner, P. A., & Karpinski, S. E. (2007). *Disposable learning: How we are killing the university and what to do about it*. Jossey-Bass.
- Kirschner, P. A., & Karpinski, S. E. (2008). The unintended consequences of using learning technologies in schools. *American Educator*, 32(3), 19-25.
- Kirschner, P. A., & Sweller, J. (2009). *Principles of learning design*. Psychology Press.
- Kraus, J. E. (2007). *Technology and the American school: A history*. Johns Hopkins University Press.
- Mushtaque, I., Rizwan, M., Dasti, R. K., Ahmad, R., & Mushtaq, M. (2021). Students' Attitude and Impact of Online Learning; Role of Teachers and Classmate Support During the Covid-19 Crisis. *Performance Improvement*, 60(5), 20–27.
<https://doi.org/10.1002/pfi.21982>
- Nalliveetil, G. M., & Alenazi, T. H. K. (2016). The impact of mobile phones on english language learning: Perceptions of efl undergraduates. *Journal of Language Teaching and Research*, 7(2), 264–272. <https://doi.org/10.17507/jltr.0702.04>
- Naryaning, R., & Katmini, K. (2021). Determinants of Using Gadget to Concentration, Complaints of Eye Fatigue and Student Learning Motivation at SMKN 7 Malang. *Journal for Quality in Public Health*, 5(1), 142–148.
<https://doi.org/10.30994/jqph.v5i1.230>
- Orben, C. (2020). Digital distractions in the classroom: A literature review and synthesis. *Journal of Educational Technology & Society*, 23(3), 14-32.
- Palfrey, J., & Gasser, U. (2018). *Born digital: How children's lives are changing with the digital age*. Basic Books.
- Peni, T., Laili, S. I., & Ratnaningsih, T. (2022). Gadget Use Duration and its Impact on Learning Motivation and Social Development of Children. *Jurnal Ners Dan Kebidanan (Journal of Ners and Midwifery)*, 9(3), 303–310.
<https://doi.org/10.26699/jnk.v9i3.art.p303-310>
- Prensky, M. (2001). Digital natives, digital immigrants part 1. *On the Horizon*, 9(5), 1-6.
- Rahmati, S. (2021). The impact of mobile phone on student procrastination: A meta-

- analysis of empirical studies. *International Journal of Educational Technology and Learning*, 19(3), 1-21.
- Robinson, K. (2010). *Out of our minds: Why learning cannot be confined to schools*. Penguin.
- Roblyer, M. D. (2016). Integrating educational technology into teaching. Brereton, P., Kitchenham, B. A., Budgen, D., Turner, M., & Khalil, M. (2007). Lessons from applying the systematic literature review process within the software engineering domain. *Journal of Systems and Software*, 80(4), 571–583. <https://doi.org/10.1016/j.jss.2006.07.009>
- Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary Educational Psychology*, 61, 101860. <https://doi.org/10.1016/j.cedpsych.2020.101860>
- Seme, J. P., Gamede, B. T., & Uleanya, C. (2021). Influence of 21st Century Technology on Learners' Academic Performances: Adaptable Strategies on Control of Online Gadgets. *Universal Journal of Educational Research*, 9(5), 1096–1103. <https://doi.org/10.13189/ujer.2021.090523>
- Shih, J.-L., Chuang, C.-W., & Hwang, G.-J. (2010). An Inquiry-based Mobile Learning Approach to Enhancing Social Science Learning Effectiveness. *Journal of Educational Technology & Society*, 13(4), 50–62.
- Tapscott, D. (2009). *Grown Up Digital: How the Net Generation is Changing Your World*. McGraw Hill.
- Uncapher, M. R., K. Thieu, M., & Wagner, A. D. (2016). Media multitasking and memory: Differences in working memory and long-term memory. *Psychonomic Bulletin and Review*, 23(2), 483–490. <https://doi.org/10.3758/s13423-015-0907-3>
- Vega, N. De, & Eppendi, J. (2021). Students' perceptions of online learning in teacher training and education faculty. *Journal of Physics: Conference Series*, 1810(1), 012061. <https://doi.org/10.1088/1742-6596/1810/1/012061>
- Warschauer, M., & Healey, D. (1998). Computers and language learning: An overview. *Language Teaching*, 31, 57–71. http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=6193077%5Cnhttp://journals.cambridge.org/abstract_S0261444800012970

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