IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

The Role Of Teacher's Multitasking On Their Teaching Effectiveness: A Literature Review

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Abstract - Multitasking is an integral part of the teaching profession. Teachers want to manage simultaneous responsibilities, such as delivering engaging lessons, addressing student inquiries and completing administrative tasks, all while fostering a supportive learning environment. Despite its importance, limited research has explored how teachers experience and navigate multitasking in their daily professional lives. Teachers often face the challenge of balancing multiple tasks simultaneously in their classrooms. This literature review explores the role of multitasking in teaching effectiveness, drawing on various studies that analyse its implications for pedagogy, student outcomes, and teacher well-being. While multitasking is often unavoidable in educational settings, its effects can vary significantly depending on task complexity, teacher proficiency, and contextual factors. This paper synthesizes existing research review, see the multitasking effect on teaching effectiveness and suggests strategies to optimize its benefits while mitigating its drawbacks.

Keywords – Multitasking, Teaching, Teaching Effectiveness.

Introduction - In the dynamic environment of a classroom, teachers are constantly required to manage multiple responsibilities. Teachers usually navigate complex, multitasking demands that require balancing instruction, classroom management, administrative duties, and emotional support for students. Teachers often face the challenge of balancing multiple tasks simultaneously in their classrooms. From delivering instructional content and addressing individual student needs to managing classroom behaviour and completing administrative tasks, the demands on teachers are both diverse and simultaneous. This phenomenon, commonly referred to as multitasking, is an intrinsic part of the teaching profession. While multitasking enables teachers to respond to the complexities of their roles, it also raises questions about its impact on their effectiveness. Does multitasking enhance a teacher's ability to manage their classroom, or does it dilute their focus and reduce the quality of instruction?

Understanding the role of multitasking in teaching effectiveness is critical for educators, policymakers, and researchers alike. By exploring the cognitive demands and contextual factors associated with multitasking, this paper aims to illuminate the potential benefits and drawbacks of multitasking in educational settings. This literature review explores the role of multitasking in teaching effectiveness, drawing on various studies that analyse its implications for pedagogy, student outcomes, and teacher well-being. While multitasking is often unavoidable in educational settings, its effects can vary significantly depending on task complexity, teacher proficiency, and contextual factors. This review is particularly

relevant in today's education landscape, where technological advancements and evolving teaching methodologies have added new layers of complexity to the teaching process.

Multitasking is an integral part of the teaching profession. Teachers must manage simultaneous responsibilities, such as delivering engaging lessons, addressing student inquiries, and completing administrative tasks, all while fostering a supportive learning environment. Teachers frequently juggle tasks such as delivering lessons, managing classroom behaviour, assessing student work, and communicating with colleagues and parents. While multitasking can enable teachers to address diverse responsibilities, it may also strain their cognitive resources, potentially affecting teaching quality and student learning outcomes. Despite its importance, limited research has explored how teachers experience and navigate multitasking in their daily professional lives.

Reviews of study related to multitasking and teaching effectiveness –

Research consistently indicates that multitasking in educational settings detracts from both teaching effectiveness and student learning outcomes. Here's an overview of key findings from recent studies –

- Deng, Zhou, and Broadbent (2024) studied on **distraction, Multitasking, and Self-Regulation inside University Classroom**. Investigates how digital distractions lead to multitasking in university classrooms and the role of self-regulation strategies in mitigating these effects. The researchers developed a framework to explore both internal and external distractions contributing to distractive multitasking and identified self-regulation strategies students employ to manage these distractions during class. By understanding the sources of distractions and the strategies students employ to manage them, educators can develop more effective interventions to enhance student focus and academic performance.
- Doolittle, Wojdak, Watson, Adam, and Mariano (2024) studied in **technology-Focused Multitasking Self-Efficacy and Performance: Whether You Think You Can or Think You Can't – You Can't**. This study see the relationship between college students' perceptions of technology-based multitasking, their self-efficacy beliefs, and actual performance. The study concludes that despite students' awareness of the cognitive demands of multitasking and their confidence in their abilities, multitasking negatively impacts performance.
- Joseph Pepito, Venus Pepito, and Roberto Suson (2024) studied in **impact of Multitasking on Teachers' Performance in Public Elementary Schools**. This research investigates how multitasking affects the teaching performance of public elementary school teachers in the Philippines. This study evaluates the impact of teachers' multitasking on their performance in public elementary schools, revealing that multitasking negatively affects teaching effectiveness. The study found that teachers' engagement in multitasking—such as handling administrative duties, classroom management, and instructional tasks simultaneously—negatively affects their overall teaching performance.
- Zhou and Deng (2022) studied **A Systematic Review of Media Multitasking in Educational Contexts: Trends, Gaps, and Antecedents**, published in Interactive Learning Environments, synthesizes findings from 88 studies to examine the prevalence, impacts, and underlying factors of media multitasking in educational settings. The study concludes that engaging in media multitasking negatively affects attention, working memory, and academic performance. Students who frequently multitask report lower grades and reduced comprehension.
- Alvarez-Risco, A., Estrada-Merino, A., Anderson-Seminario, M.d.l.M., Mlodzianowska, S., García-Ibarra, V., Villagomez-Buele, C., & Carvache-Franco, M. (2021) studied **Multitasking behaviour in online classrooms and academic performance: case of university students in Ecuador during COVID-19 outbreak.** The study aimed to investigate how multitasking behaviour during online classes affected university students' academic performance in Ecuador during the COVID-19 pandemic. This study investigates the impact of multitasking behaviours during online classes on university students' academic performance, highlighting a negative correlation between multitasking and self-efficacy. This research emphasizes the importance of supporting student self-efficacy and reducing multitasking to enhance academic success in online classrooms.
- Bilyalova, A. A., Lyubova, T. V., & Valeeva, A. R. (2021) studied **Digital multitasking problem in modern universities educational process – review.** This review article examines the multifaceted

issue of digital multitasking in higher education, focusing on its implications for teaching and learning processes. The authors argue that the integration of digital technologies in educational settings has transformed traditional roles and dynamics between teachers and students, necessitating a revaluation of pedagogical approaches. By adopting new theoretical perspectives and pedagogical strategies, educational institutions can better navigate the challenges posed by digital multitasking, ultimately fostering more effective teaching and learning environments.

- Tassone, A., Liu, J. J. W., Reed, M. J., & Vickers, K. (2020) studied **Multitasking in the classroom: Testing an educational intervention as a method of reducing multitasking.** This study aimed to evaluate the effectiveness of an educational intervention designed to reduce multitasking behaviours among university students during lectures. This research tests an intervention aimed at reducing multitasking in the classroom, assessing its effectiveness in improving student focus and academic performance. This study suggests that simply informing students about the negative effects of multitasking may not be sufficient to alter their behaviour. It highlights the need for more engaging and interactive interventions that actively involve students in recognizing and addressing their multitasking habits.
- Lee, J., Cho, M., Kim, S., & Noh, H. (2018) studied **Efficient, helpful, or distracting? A literature review of media multitasking in relation to academic performance.** This literature review explores the effects of media multitasking on academic performance, emphasizing the negative impact on metacognition and self-regulation. It highlights the necessity for educational institutions to address this issue by fostering self-regulation skills and creating environments that minimize distractions, thereby enhancing students' learning experiences and outcomes.
- Janice Serenio Alquizar's (2018) studied **Multitasking of Teachers in the Contemporary Settings: Boon or Bane?** Employed a phenomenological approach to explore how teachers experience multitasking in the workplace. Through in-depth interviews and focus group discussions with 15 teachers, the research revealed that multitasking is prevalent among educators and impacts various aspects of their professional and personal lives. This research provides valuable insights into the multifaceted experiences of teachers engaged in multitasking, highlighting both the challenges and potential benefits associated with this practice.
- Reynol Junco's (2012) studied **In-class multitasking and academic performance**. This research investigates the impact of class multitasking on college students' academic performance. The study surveyed 1,839 students to assess the frequency of multitasking behaviour and their correlation with Grade Point Average (GPA). The study suggests that multitasking with social technologies during class may interfere with cognitive processing, thereby hindering deeper learning and academic performance. These findings highlight the potential detrimental effects of in-class multitasking, especially involving social media and text messaging, on students' academic success.

Based on the above studies, it can be said that while multitasking may seem like an efficient approach, evidence suggests that it can undermine both teaching effectiveness and student learning. Adopting strategies that promote focused attention and structured use of technology can lead to more effective educational experiences.

1. Defining Multitasking in the Teaching Context – In the teaching context, multitasking refers to a teacher's ability to manage and perform multiple tasks simultaneously or in rapid succession during instructional time. This includes balancing instructional delivery, classroom management, responding to student needs, utilizing educational technology, assessing student understanding, and handling administrative duties. Effective multitasking in teaching goes beyond simply doing many things at once; it involves prioritizing tasks, switching attention efficiently, and maintaining focus on educational goals while adapting to the dynamic classroom environment. It is a critical skill for ensuring smooth classroom operations, maintaining student engagement, and fostering a productive learning atmosphere.

Multitasking in teaching refers to performing two or more tasks simultaneously or switching between tasks rapidly. Examples include monitoring student behaviour while instructing, responding to emails during planning time, or providing individual assistance while overseeing group activities. Unlike other professions, multitasking in teaching often involves dynamic, unpredictable interactions that demand high levels of cognitive and emotional engagement. Cognitive psychology suggests that multitasking can lead to reduced efficiency due to cognitive overload and increased error rates (Salvucci & Taatgen, 2010). Teachers routinely juggle diverse activities such as monitoring student behavior, responding to questions, adjusting lesson plans,

managing technology, and documenting progress (van Tartwijk et al., 2009). These tasks demand constant attention shifts and efficient time management.

2. Cognitive Load and Its Implications for Multitasking - Understanding cognitive load helps teachers recognize their own limits and structure their multitasking more effectively, ultimately promoting better teaching and learning outcomes. The cognitive load theory provides a framework for understanding the limitations of human working memory when handling multiple tasks. Sweller (1988) posits that excessive cognitive load can hinder information processing and decision-making. For teachers, high cognitive demands associated with multitasking may reduce their ability to focus on core instructional tasks, leading to diminished teaching effectiveness (Kirschner et al., 2006).

3. Effects on Teaching Effectiveness –

3.1 **Positive Effects** - Some studies suggest that skilled multitasking can enhance teaching effectiveness by enabling teachers to address diverse classroom needs efficiently. For instance, multitasking can facilitate real-time adaptations to lesson plans, prompt responses to student inquiries, and effective classroom management (Evertson & Weinstein, 2013). Effective multitaskers can enhance classroom fluidity and responsiveness, fostering better student engagement and learning outcomes (Grissom et al., 2015). Experienced teachers develop routines that automate certain tasks, freeing cognitive resources for instruction.

3.2 **Negative Effects** - Conversely, multitasking may lead to cognitive overload, task fragmentation, and decreased attention to detail, potentially compromising instructional quality. Studies highlight that multitasking may compromise the quality of lesson delivery, reduce attentiveness to individual student needs, and lead to increased stress levels (Mark, Gudith, & Klocke, 2008). Research by Mark et al. (2008) highlights the risks of task-switching, including time lost in reorienting to tasks and increased errors. Excessive multitasking especially involving cognitively demanding or conflicting tasks can lead to fragmented instruction, teacher burnout, and reduced instructional quality (Becker, 2013). Novice teachers may particularly struggle with multitasking due to lack of classroom experience.

4. Factors Influencing Multitasking Efficacy –

4.1 **Teacher Experience and Expertise** Training in time management, digital tools, and classroom management enhances multitasking ability. Experienced teachers often demonstrate greater proficiency in multitasking due to well-developed routines and automaticity in handling recurring tasks (Berliner, 2001). Novice teachers, however, may struggle to balance competing demands, leading to higher stress levels and reduced effectiveness.

4.2 **Classroom Environment** Class size, student behaviour, and access to resources significantly influence multitasking demands. Large or unruly classrooms may exacerbate the challenges of multitasking, while supportive environments with adequate resources can mitigate its adverse effects (Blatchford et al., 2011). Automating classroom procedures can reduce the cognitive load of repeated tasks (Emmer & Evertson, 2016).

4.3 **Technology Integration** The integration of technology in classrooms has transformed multitasking dynamics. Tools such as learning management systems and interactive whiteboards can streamline tasks, but excessive reliance on technology may introduce new distractions (Zheng et al., 2016).

5. Strategies to Enhance Multitasking Effectiveness –

- **Prioritization and Time Management**: Effective prioritization of tasks and structured time management can help teachers focus on high-impact activities.
- **Professional Development**: Training programs can equip teachers with strategies to handle multitasking efficiently, such as stress management and adaptive teaching techniques.
- **Collaborative Practices**: Delegating responsibilities and fostering teamwork among staff can distribute multitasking demands, reducing individual burden.
- **Technological Support**: Leveraging technology to automate routine tasks, such as grading and attendance tracking, can free up cognitive resources for instructional activities.

Drawbacks of Teacher Multitasking on Teaching Effectiveness

1. **Reduced Attention to Students**
   When teachers multitask (e.g., managing administrative tasks while teaching), their attention is divided, making it harder to notice students' needs, misunderstandings, or behavioral cues.
2. **Lower Quality of Instruction**
   Multitasking can lead to shallow engagement with the teaching material, resulting in less clear explanations, missed opportunities for deeper discussions, and a general decline in instructional quality.
3. **Increased Cognitive Load and Stress**
   handling multiple tasks simultaneously increases mental strain and fatigue, which may reduce a teacher's patience, creativity, and ability to respond flexibly during lessons.
4. **Decreased Responsiveness to Students**
   when distracted, teachers may fail to provide timely feedback or effectively manage classroom dynamics, hindering student learning and engagement.
5. **Potential for Errors**
   Multitasking increases the chance of mistakes, whether in delivering content, grading, or managing classroom logistics, which can negatively affect student outcomes and trust.
6. **Modeling Poor Focus for Students**
   Teachers who multitask might unintentionally demonstrate divided attention as acceptable behavior, which could influence students' own habits and attitudes toward learning.
7. **Reduced Emotional Connection**
   Being split between tasks may limit the teacher's ability to build strong rapport and emotional connections with students, which are crucial for motivation and a positive classroom environment.

6. Conclusion – On the basis of research review Multitasking is both a necessity and a challenge in teaching. While effective multitasking can enhance classroom management, engagement, and instructional delivery, excessive or poorly managed multitasking can lead to cognitive overload, reduced attention, and decreased teaching effectiveness. The ability to balance administrative duties, student interactions, and instructional tasks is crucial for maintaining a productive learning environment. By understanding the factors that influence multitasking skill and adopting targeted strategies, educators and policymakers can optimize its benefits. Research suggests that teachers who strategically prioritize tasks and employ time-management techniques can harness the benefits of multitasking without compromising teaching quality. Professional development programs focused on multitasking strategies and cognitive load management could further enhance teachers' effectiveness. Future research should explore longitudinal impacts of multitasking on teacher performance and student outcomes to provide deeper insights into this critical aspect of teaching practice. However, more empirical studies are needed to explore the long-term impacts of multitasking on teaching performance and student outcomes.

Overall, understanding the nuanced role of multitasking in education can help educators, administrators, and policymakers create supportive environments that optimize teaching effectiveness while minimizing potential drawbacks.

References

- Alquizar, J. S. (2018). *Multitasking of teachers in the contemporary settings: Boon or bane?* Doctoral dissertation, University of the Philippines. ERIC. https://eric.ed.gov/?id=ED590561
- Álvarez-Risco, A., Estrada-Merino, A., Anderson-Seminario, M. de las M., Mlodzianowska, S., García-Ibarra, V., Villagómez-Buele, C., & Carvache-Franco, M. (2021). Multitasking behavior in online classrooms and academic performance: Case of university students in Ecuador during the COVID-19 outbreak. *Interactive Technology and Smart Education, 18*(3), 422–434. https://doi.org/10.1108/ITSE-08-2020-0160
- Becker, H. (2013). *Teacher workload and multitasking: A review*. Educational Studies, 39(1), 19-36.
- Berliner, D. C. (2001). Learning about and learning from expert teachers. *International Journal of Educational Research*, 35(5), 463-482.
- Bilyalova, A. A., Lyubova, T. V., & Valeeva, A. R. (2021). Digital multitasking problem in modern universities educational process – review. *SHS Web of Conferences, 97*, 01011. https://doi.org/10.1051/shsconf/20219701011
- Blatchford, P., Bassett, P., & Brown, P. (2011). Examining the effects of class size on classroom engagement and teacher-pupil interaction. *Learning and Instruction*, 21(6), 715-730.
- Deng, L., Zhou, Y., & Broadbent, J. (2024). Distraction, multitasking and self-regulation inside university classroom. *Education and Information Technologies, 29*(18), 23957–23979. https://doi.org/10.1007/s10639-024-12786-w
- Doolittle, P. E., Wojdak, K. P., Watson, C. E., Adam, D. N., & Mariano, G. (2024). Technology-focused multitasking self-efficacy and performance: Whether you think you can or think you can't – you can't. *Journal of the Scholarship of Teaching and Learning, 24*(2), 33–45. https://doi.org/10.14434/josotl.v24i2.34811
- Emmer, E. T., & Evertson, C. M. (2016). *Classroom Management for Middle and High School Teachers*. Pearson.
- Evertson, C. M., & Weinstein, C. S. (2013). Handbook of Classroom Management: Research, Practice, and Contemporary Issues. Routledge.
- Grissom, J. A., Loeb, S., & Master, B. (2015). *Effective Instructional Time Use for School Leaders*. Educational Researcher, 44(9), 433-444.
- Junco, R. (2012). In-class multitasking and academic performance. *Computers in Human Behavior*, *28*(6), 2236–2243. https://doi.org/10.1016/j.chb.2012.06.031
- Kirschner, P. A., Sweller, J., & Clark, R. E. (2006). Why minimal guidance during instruction does not work. *Educational Psychologist*, 41(2), 75-86.
- Lee, J., Cho, M., Kim, S., & Noh, H. (2018). Efficient, helpful, or distracting? A literature review of media multitasking in relation to academic performance. *International Journal of Educational Technology in Higher Education, 15*(13). https://doi.org/10.1186/s41239-018-0096-z
- Mark, G., Gonzalez, V. M., & Harris, J. (2008). No task left behind? Examining the nature of fragmented work. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, 321-330.
- Pepito, J., Pepito, V., & Suson, R. (2024). Impact of multitasking on teachers' performance in public elementary schools. *International Journal of Education and Practice,* 12(1), 38–53. https://doi.org/10.18488/61.v12i1.3587
- Salvucci, D. D., & Taatgen, N. A. (2010). *The Multitasking Mind*. Oxford University Press.
- Sweller, J. (1988). Cognitive load during problem solving: Effects on learning. *Cognitive Science*, 12(2), 257-285.
- Tassone, A., Liu, J. J. W., Reed, M. J., & Vickers, K. (2020). Multitasking in the classroom: Testing an educational intervention as a method of reducing multitasking. *Active Learning in Higher Education, 21*(2), 128–141. https://doi.org/10.1177/1469787417740772
- Zheng, B., Warschauer, M., & Farkas, G. (2016). Digital learning environments and student academic achievement. *British Journal of Educational Technology*, 47(6), 970-988.
- Zhou, Y., & Deng, L. (2022). A systematic review of media multitasking in educational contexts: Trends, gaps, and antecedents. *Interactive Learning Environments, 31*(10), 6279–6294. https://doi.org/10.1080/10494820.2022.2032760