

Anexo I. Registro del Título del Trabajo Fin de Grado (TFG)

NOMBRE DEL ALUMNO: María Vara Ruiz

PROGRAMA: E-3

GRUPO: C

FECHA: 21/10/2024

Director Asignado: Bada Olaran, María del Carmen

Título provisional del TFG:

Efectos del uso de dispositivos electrónicos en el aprendizaje de los alumnos

Firma del estudiante:



Fecha: 21/10/2024

Índice

1. Introducción
2. Marco teórico
3. Estudio empírico
4. Análisis de los resultados
5. Conclusiones
6. Referencias

Objetivo

Analizar el impacto que tiene en el rendimiento académico de los alumnos los diferentes estilos a la hora de tomar apuntes: tomar apuntes a mano vs tomar apuntes con dispositivos electrónicos.

Metodología

Estudio cuantitativo con una muestra de alumnos de los primeros años de sus carreras de empresariales en una universidad privada española.

A través de encuestas detectaremos el modo en el que toman apuntes los alumnos y con técnicas estadísticas veremos el impacto que tiene sobre sus notas, realizando una comparación por disciplinas.

Referencias

Albaker, A. B. (2021). Digital versus longhand note-taking effect on students' knowledge, satisfaction, and academic performance among medical students in Majmaah University. *Pakistan Journal of Medical and Health Sciences*, 15(4), 1509-1513.

Allen, M., LeFebvre, L., LeFebvre, L., & Bourhis, J. (2020). Is the pencil mightier than the keyboard? A meta-analysis comparing the method of notetaking outcomes. *Southern Communication Journal*, 85(3), 143-154. <https://doi.org/10.1080/1041794X.2020.1764613>

Aragón-Mendizábal, E., Delgado-Casas, C., Menacho-Jiménez, I., & Romero-Oliva, M. F. (2016). Análisis comparativo entre escritura manual y electrónica en la toma de apuntes de estudiantes universitarios. *Comunicar: Revista Científica de Comunicación y Educación*, 24(48), 101-107. <https://doi.org/10.3916/C48-2016-10>

Artz, B., Johnson, M., Robson, D., & Taengnoi, S. (2020). Taking notes in the digital age: Evidence from classroom random control trials. *The Journal of economic education*, 51(2), 103-115. <https://doi.org/10.1080/00220485.2020.1731386>

Cojean, S., & Grand, M. (2024). Note-taking by university students on paper or a computer: Strategies during initial note-taking and revision. *British Journal of Educational Psychology*, 94(2), 557-570. <https://doi.org/10.1111/bjep.12663>

Crumb, R. M., Hildebrandt, R., & Sutton, T. M. (2022). The value of handwritten notes: A failure to find state-dependent effects when using a laptop to take notes and complete a quiz. *Teaching of Psychology, 49*(1), 7-13. <https://doi.org/10.1177/0098628320979895>

Flanigan, A. E., Kiewra, K. A., Lu, J., & Dzhuraev, D. (2023). Computer versus longhand note taking: Influence of revision. *Instructional Science, 51*(2), 251-284. <https://doi.org/10.1007/s11251-022-09605-5>

Flanigan, A. E., & Titsworth, S. (2020). The impact of digital distraction on lecture note taking and student learning. *Instructional Science, 48*(5), 495-524. <https://doi.org/10.1007/s11251-020-09517-2>

Flanigan, A. E., Wheeler, J., Colliot, T., Lu, J., & Kiewra, K. A. (2024). Typed Versus Handwritten Lecture Notes and College Student Achievement: A Meta-Analysis. *Educational Psychology Review, 36*(3), 78. <https://doi.org/10.1007/s10648-024-09914-w>

Horbury, S. R., & Edmonds, C. J. (2021). Taking class notes by hand compared to typing: Effects on children's recall and understanding. *Journal of research in childhood education, 35*(1), 55-67. <https://doi.org/10.1080/02568543.2020.1781307>

Luo, L., Kiewra, K. A., Flanigan, A. E., & Peteranetz, M. S. (2018). Laptop versus longhand note taking: effects on lecture notes and achievement. *Instructional Science, 46*, 947-971. <https://doi.org/10.1007/s11251-018-9458-0>

Morehead, K., Dunlosky, J., & Rawson, K. A. (2019a). How much mightier is the pen than the keyboard for note-taking? A replication and extension of Mueller and Oppenheimer (2014). *Educational Psychology Review, 31*, 753-780. <https://doi.org/10.1007/s10648-019-09468-2>

Morehead, K., Dunlosky, J., Rawson, K. A., Blasiman, R., & Hollis, R. B. (2019b). Note-taking habits of 21st century college students: implications for student learning, memory, and achievement. *Memory, 27*(6), 807-819. <https://doi.org/10.1080/09658211.2019.1569694>

Mueller, P. A., & Oppenheimer, D. M. (2014). The pen is mightier than the keyboard: Advantages of longhand over laptop note taking. *Psychological Science, 25*(6), 1159-1168. <https://doi.org/10.1177/0956797614524581>

Potvin, M. C., Chabot, M. C., & Carr, K. (2022). Occupational Therapy Students' Perceptions of their own Notetaking. *Internet Journal of Allied Health Sciences and Practice, 20*(4), 20. <https://doi.org/10.46743/1540-580X/2022.2270>

Richardson, L., & Lacroix, G. (2024). Which modality results in superior recall for students: Handwriting, typing, or drawing? *Journal of Writing Research, 15*(3), 519-540. <https://doi.org/10.17239/jowr-2024.15.03.04>

Salame, I. I., Tuba, M., & Nujhat, M. (2024). Note-taking and its impact on learning, academic performance, and memory. *International Journal of Instruction, 17*(3), 599-616. <https://doi.org/10.29333/iji.2024.17333a>

Shi, Y., Yang, H., Yang, Z., Liu, W., Wu, D., & Yang, H. H. (2022). Examining the effects of note-taking styles on college students' learning achievement and cognitive load. *Australasian Journal of Educational Technology, 38*(5), 1-11. <https://doi.org/10.14742/ajet.6688>

Shi, Y., & Yu, Z. (2024). The Effect of Laptop Note-Taking on Students' Learning Performance, Strategies, and Satisfaction. *Electronic Journal of e-Learning*, 22(1), 78-91.

Sun, D., & Li, Y. (2019). Effectiveness of digital note-taking on students' performance in declarative, procedural and conditional knowledge learning. *International Journal of Emerging Technologies in Learning (Ijet)*, 14(18), 108-119. <https://doi.org/10.3991/ijet.v14i18.10825>

Urry, H. L., Crittle, C. S., Floerke, V. A., Leonard, M. Z., Perry III, C. S., Akdilek, N., ... & Zarrow, J. E. (2021). Don't ditch the laptop just yet: A direct replication of Mueller and Oppenheimer's (2014) study 1 plus mini meta-analyses across similar studies. *Psychological Science*, 32(3), 326-339. <https://doi.org/10.1177/0956797620965541>

Voyer, D., Ronis, S. T., & Byers, N. (2022). The effect of notetaking method on academic performance: A systematic review and meta-analysis. *Contemporary Educational Psychology*, 68, 102025. <https://doi.org/10.1016/j.cedpsych.2021.102025>

Wei, F. Y. F., Wang, Y. K., & Fass, W. (2014). An experimental study of online chatting and notetaking techniques on college students' cognitive learning from a lecture. *Computers in Human Behavior*, 34, 148-156. <https://doi.org/10.1016/j.chb.2014.01.019>

Wiechmann, W., Edwards, R., Low, C., Wray, A., Boysen-Osborn, M., & Toohey, S. (2022). No difference in factual or conceptual recall comprehension for tablet, laptop, and handwritten note-taking by medical students in the United States: a survey-based observational study. *Journal of Educational Evaluation for Health Professions*, 19. <https://doi.org/10.3352/jeehp.2022.19.8>

Wilson, J. T., Miller-Goldwater, H. E., Porter, B. M., & Bauer, P. J. (2023). Learning neuroscience: Investigating influences of notetaking materials and individual differences. *Learning and Individual Differences*, 101, 102243. <https://doi.org/10.1016/j.lindif.2022.102243>

Witherby, A. E., & Tauber, S. K. (2019). The current status of students' note-taking: Why and how do students take notes? *Journal of Applied Research in Memory and Cognition*, 8(2), 139-153. <https://doi.org/10.1016/j.jarmac.2019.04.002>

Wong, S. S. H., & Lim, S. W. H. (2023). Take notes, not photos: Mind-wandering mediates the impact of note-taking strategies on video-recorded lecture learning performance. *Journal of Experimental Psychology: Applied*, 29(1), 124. <https://doi.org/10.1037/xap0000375>