

Taking notes contributes to student learning: Research findings

Substantial research has been conducted on positive relationships between note-taking and student learning for over 80 years. Indeed, in the words of one researcher: “Note taking is one of the first and most established cognitive technolog[ies]” (Dror, 2007).

Some findings from the research:

- Note-taking contributes to recall of noted information and improves performance on exams related to that information (Crawford, 1925).
- Students who take notes and non-note-taking students recall the same amount of lecture content. However, note-takers exhibit better recall of more important points (Kiewra, 1984).
- Note-taking “enhances organizational processing of lecture information” (Einstein, Morris & Smith, 1985).
- "*Interactive handouts* contain skeletal notes and diagrams that the students have to complete during the lecture." The reason these handouts are preferable is that "note-taking and reviewing notes improves recall" (Brown & Manogue, 2001).
- "Note-takers not only need to comprehend and write down personally flavoured information but, before that, they also need to acquire and filter the incoming sources, organise and restructure existing knowledge structures and, most importantly, they must store and integrate the freshly processed material" (Makany, Kemp, & Dror, 2009).

Resources:

Crawford, C. C. (1925). The correlation between lecture notes and quiz papers. *Journal of Educational Research*, 12, 379-386.

Brown, G., & Manogue, M. (2001). Refreshing lecturing: a guide for lecturers. *Medical Teacher*, 23(3), 231-244.

Dror, I. E. (2007). Land mines and gold mines in cognitive technologies. In I. E. Dror (Ed.), *Cognitive technologies and the pragmatics of cognition* (pp. 1–7). Amsterdam: John Benjamin Press.

Einstein, G.O., Morris, J., & Smith, S. (1985). Note-taking, individual differences, and memory for lecture information. *Journal of Educational Psychology*, 77, 522-532.

Kiewra, K. A. (1984). Acquiring effective *notetaking* skills: An alternative to professional *notetaking*. *Journal of Reading*, 90, 299 -301.

Makany, T., Kemp, J., & Dror, I. E. (2009). Optimising the use of note-taking as an external cognitive aid for increasing learning. *British Journal of Educational Technology*, 40(4), 619-635.