

Hi graduate friends,

Nowadays, the word multitasking is used quite often. Employers use it in their job descriptions, and we add it to our resumes with pride. It's often considered a necessity in today's world.

However, in real life settings, we rarely do two tasks at the exact same time (called dual tasking). For example, you will rarely read an email and a book chapter at the same time. But you may constantly switch between these two tasks. Hence, usually when we say multitasking, we mean task switching, meaning you may be reading an article, responding to an email when it is received, then going back to reading when the email is answered.



Although your comprehension may not be impacted (Coens et al., 2010), there is a cost associated with this practice called switch cost. Switch cost is the delay that happens when you switch to a new task compared with continuing the previous one (Carrier et al., 2015). Our brains need time to process information so when it receives constant stimuli, there's going to be a traffic jam (Dux et al., 2006). This traffic jam creates the switch cost and the time you spend completing two tasks through task switching can end up more than the time it would take to complete them separately!

This is surely a complex topic and the types of tasks you have at hand, how many times you've done them before, and how quickly you are switching from one to another may all make your situation unique. However, research shows that typically when it comes to learning, multitasking negatively impacts academic performance (Burak, 2012). Even the newer generation that has had more multitasking practice e.g., with different multimedia, is not any better at dual-task performance (Alzahabi & Becker, 2013).

Remember <u>last month's newsletter</u> on how cellphone notifications can slow you down? It's clear now how the switch costs can be causing it. Take some time to reflect on what tasks you are doing at the same time or switching between. Try focusing on one thing at a time if possible. Treat important tasks the same way you'd treat a meeting. E.g., block time off in your calendar, turn off notifications, let others know you're not available, etc. Some students even set a whole day or week on one single task if it requires a lot of brain power. The thought that you have to be able to do a bit of everything every day is a myth I hear a lot from graduate students. There is no right way for everyone, meet your individual needs.

Best,



Najmeh Keyhani (she/her/hers), PhD, from your Learning Development & Success team!

## Reference:

Alzahabi, R., & Becker, M. W. (2013). The association between media multitasking, task-switching, and dual-task performance. *Journal of Experimental Psychology: Human Perception and Performance, 39*(5), 1485.

Burak, L. J. (2012). Multitasking in the university classroom. International Journal for the Scholarship of Teaching and Learning.

Carrier, L. M., Rosen, L. D., Cheever, N. A., & Lim, A. F. (2015). Causes, effects, and practicalities of everyday multitasking. *Developmental Review*, 35, 64–78.

Coens, J., Reynvoet, B., & Clarebout, G. (2010). Can students really multitask? The case of mobile Learning. EdMedia+ Innovate Learning, 3732–3737.

Dux, P. E., Ivanoff, J., Asplund, C. L., & Marois, R. (2006). Isolation of a central bottleneck of information processing with time-resolved fMRI. *Neuron*, *52*(6), 1109–1120.

-----

GRADUpdATE is a monthly e-newsletter dedicated to helping students succeed in graduate school. This information is provided by Learning Development & Success. To unsubscribe/subscribe, e-mail <u>gradupdate-request@uwo.ca</u>, type 'unsubscribe' or 'subscribe' as the subject & click send. To view previous newsletters, visit the <u>GRADUpdATE Archive</u>.