Research on "Multitasking"

The resources here include an article from the primary literature on multitasking as well as student-friendly resources in a variety of media.

Cognitive Control in Media Multitaskers http://www.pnas.org/content/106/37/15583.full

The widely discussed study on multitasking by Ophir, Nass and Wagner appeared in 2009 in *Proceedings of the National Academy of Sciences.* Here's the abstract:

"Chronic media multitasking is quickly becoming ubiquitous, although processing multiple incoming streams of information is considered a challenge for human cognition. A series of experiments addressed whether there are systematic differences in information processing styles between chronically heavy and light media multitaskers. A trait media multitasking index was developed to identify groups of heavy and light media multitaskers. These two groups were then compared along established cognitive control dimensions. Results showed that heavy media multitaskers are more susceptible to interference from irrelevant environmental stimuli and from irrelevant representations in memory. This led to the surprising result that heavy media multitaskers performed worse on a test of task-switching ability, likely due to reduced ability to filter out interference from the irrelevant task set. These results demonstrate that media multitasking, a rapidly growing societal trend, is associated with a distinct approach to fundamental information processing."

Are you Multitasking Your Life Away? https://www.youtube.com/watch?v=PriSFBu5CLs

In a 16-minute TEDx talk—addressing university students—Clifford Nass discusses the cognitive costs, and even more the emotional costs, of multi-tasking.

The Myth of Multitasking http://www.npr.org/2013/05/10/182861382/the-myth-of-multitasking

This 18-minute interview on multitasking with Clifford Nass is witty and disarming, yet covers many of the perils recent research identifies in multitasking.

The Myth of Multitasking Test (Redux) http://davecrenshaw.com/myth-of-multitasking-exercise/

The site includes a short, downloadable activity in which people to compare their performance when they do tasks one at a time and when they try to multitask.

Multitasking Damages your Brain and Career, a New Study Suggests
http://www.forbes.com/sites/travisbradberry/2014/10/08/multitasking-damages-your-brain-and-career-new-studies-suggest/#253ba3712c16
A short, student-friendly summary of "Cognitive Control in Media Multitaskers."

Multitasking Doesn't Work https://workplacepsychology.net/2011/04/04/multitasking-doesnt-work/
A short article documenting losses in workplace productivity attributed to multi-tasking; it's full of statistics from the business world.

Red Cups: A Test in Multitasking Ability https://www.youtube.com/watch?v=OvW3gw6HWNE
This interactive video—about three minutes long--demonstrates the importance of attention to a task.

Stanford Professor Explains the Mental Cost of Multi-Tasking

https://www.washingtonpost.com/posttv/business/technology/stanford-professor-explains-the-mental-cost-of-media-multitasking/2014/09/29/c2f24772-4817-11e4-a4bf-794ab74e90f0_video.html

In this very short video Clifford Nass explains how the 2009 study "Cognitive Control in Media Multitaskers" was inspired by the student behavior he observed at Stanford. The conclusion: "Multi-taskers are lousy at multi-tasking."