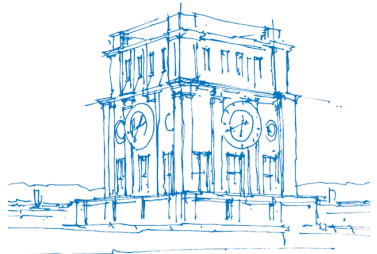


Notebook (+ WiFi) in Courses?

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TUM Uhrenturm

Notebook (+ WiFi) in Courses?

Aspects:

- In this discussion: notebook $\hat{=}$ tablet $\hat{=}$ smartphone $\hat{=}$...
- Difference: normal vs. in course usage?
- Multitasking: possible? efficient?

Note:

Slides based on survey paper *Laptop und Internet im Hörsaal? - Wirkungen und Wirkungsmechanismen für evidenzbasierte Lehre* by Manfred Spitzer (Editorial of *Nervenheilkunde* 11/2013).

Multitasking in Courses - Study 1

additional activity during course	n	%
Facebook		
Text message (SMS)		
Instant message (chat)		
e-mail		
Listen to music		
Work on other classes		
Talk on the phone		
Eat		
Drink		

Students **frequently or very frequently** engaging in multitasking behaviour while being in the classroom.

Data taken from study [1]. Total number of participants: N=774.

[1] L. Burak, Multitasking in the university classroom, International Journal for the Scholarship of Teaching and Learning, 6(2), 2012

Multitasking in Courses - Study 1

additional activity during course	n	%
Facebook	111	24.7
Text message (SMS)	392	50.6
Instant message (chat)	102	13.2
e-mail	116	15.0
Listen to music	51	6.5
Work on other classes	136	17.6
Talk on the phone	25	3.2
Eat	202	26.1
Drink	440	56.8

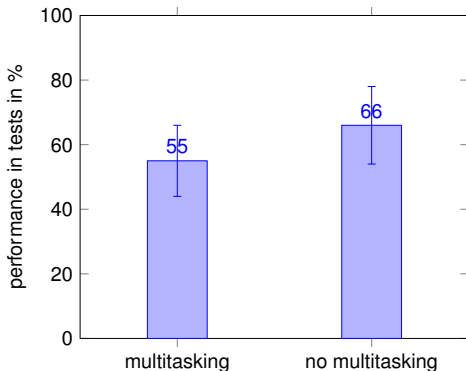
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Multitasking in Courses - Study 2

Does multitasking affect results in examinations?



Data taken from study [2]. Total number of participants: N=40.

[2] F. Sana, T. Weston, N.J. Cepeda, *Laptop multitasking hinders classroom learning for both users and nearby peers*, Computers & Education, 62, 2013

Discussion

- Aspect “**but multitasking works elsewhere**”

singing + dancing, eating + breathing, walking + talking, . . .

Discussion

- Aspect “**but multitasking works elsewhere**”

singing + dancing, eating + breathing, walking + talking, ...

⇔ really? brain vs. spinal cord

Discussion

- Aspect “**but multitasking works elsewhere**”

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⇔ really? brain vs. spinal cord

- Aspect “**peace of conscience**”

comprehensible ...

but inverse long-term effects & false security

Discussion

- Aspect “**but multitasking works elsewhere**”

singing + dancing, eating + breathing, walking + talking, ...

⇔ really? brain vs. spinal cord

- Aspect “**peace of conscience**”

comprehensible ...

but inverse long-term effects & false security

- Aspect “**but I can really do multitasking!**”

⇔ distraction effect for peers (see next slide)

Distraction Effect for Peers

Experiment: different views



VS.

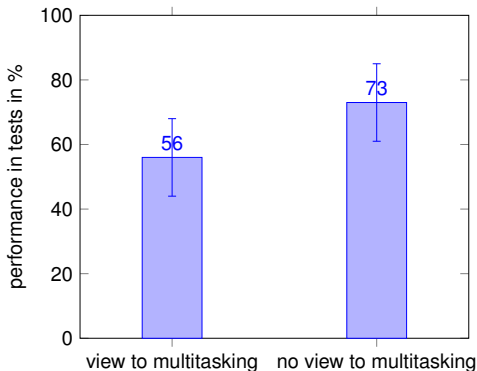


Pictures taken from [3].

[3] M. Spitzer, *Laptop und Internet im Hörsaal? - Wirkungen und Wirkungsmechanismen für evidenzbasierte Lehre*, Editorial of *Nervenheilkunde* 11/2013

Distraction Effect for Peers - Results

Experiment:



Data taken from study [2]. Total number of participants: N=38.

- [2] F. Sana, T. Weston, N.J. Cepeda, *Laptop multitasking hinders classroom learning for both users and nearby peers*, Computers & Education, 62, 2013

Summary

- Notebook + WiFi in courses: tools with pros & cons
- Be aware of the effects!
- Use only where really appropriate!
- If needed: consider last row \Rightarrow avoid distracting others!

Also interesting:

[4] Cal Newport, *Deep Work*, Piatkus, 2016