

# TIM VAN DER ZEE

## PhD Candidate

Leiden University Graduate School of Teaching  
Kolffpad 1, 2333 AL Leiden

Phone: +31617589731  
Email: [t.van.der.zee@iclon.leidenuniv.nl](mailto:t.van.der.zee@iclon.leidenuniv.nl)  
Personal website: [www.timvanderzee.com](http://www.timvanderzee.com) & [Google Scholar profile](#)  
Twitter: [@Research\\_Tim](#) & [@RegReports](#)

## RESEARCH INTERESTS

- Educational and Cognitive Psychology
- Effective Learning Strategies in Online Education / MOOCs
- Increasing the Instructional Quality of Educational Videos
- Research Methodology, Reproducibility, Open Science, Registered Reports

## EDUCATION & TRAINING

**PhD Candidate**  
May 2015 – July 2019

*Leiden University, Netherlands*  
Focus: Learning analytics in open online education

### Supervisors:

Prof. Wilfried Admiraal (Leiden University)  
Prof. Fred Paas (Erasmus University Rotterdam, University of Wollongong)  
Dr. Nadira Saab (Leiden University)  
Dr. Bas Giesbers (Erasmus University Rotterdam)

### Additional Training:

Bayesian Analysis in the Social Sciences (Essex University, UK)  
Statistical Programming with R (Utrecht Summer School, Netherlands)  
Multilevel Models (Interuniversity Center for Educational Research, Netherlands)  
Theory and Practice with Bayesian Hypothesis Testing (JASP, Netherlands)  
Practical Primer on Frequentist & Bayesian Statistics (Eindhoven University of Technology, Netherlands)  
Bayesian, Fiducial and Frequentist Workshop (Harvard University)

<b>Masters in Psychology</b> 2013 - 2015	<i>Erasmus University Rotterdam, Netherlands</i> Graduated Cum Laude Specialization: Human Learning and Performance
<u>Additional Training:</u>	
Advanced Research Program (A two-year long selective trainee program on research methodology, at the Erasmus University)	
<b>Bachelor in Psychology</b> 2009 - 2013	<i>Erasmus University Rotterdam, Netherlands</i>
<b>Bachelor in Philosophy of Science</b> 2010 - 2012	<i>Erasmus University Rotterdam, Netherlands</i> Unfinished, followed out of interests.
<b>Teacher Training</b> 2009 - 2010	<i>Christian University of Applied Sciences, Netherlands</i> Finished a one year degree

## CURRENT AND FORMER POSITIONS

<b>Scientific Consultant</b> <i>March 2017 - Ongoing</i>	<i>CBE Group</i> Analyzing the evidential value of scientific research
<b>Visiting Scholar</b> <i>Jan 2017 - Aug 2017</i>	Visiting Scholar at two host institutions: <ul style="list-style-type: none"> <li>• Massachusetts Institute of Technology, USA</li> <li>• University of Massachusetts Lowell, USA</li> </ul> Financed by: MIT, UMass Lowell, Leiden University, and Leiden University Fund
<b>Research Assistant</b> <i>June 2013 - May 2015</i>	Responsibilities included designing experiments, literature review, co-writing manuscripts, data collection, and data analyses. Contracts were at the following institutes: <ul style="list-style-type: none"> <li>• Erasmus University Rotterdam, Netherlands</li> <li>• Knowledge-Centre Healthcare Innovation, Rotterdam Higher Education, Netherlands</li> <li>• Saint Francis Guest Hospital, Rotterdam, Netherlands</li> <li>• Institute for Medical Education Research, Erasmus Medical Centre Rotterdam, Netherlands</li> </ul>
<b>Teaching Assistant</b> <i>Sept 2014 - May 2015</i>	<i>Erasmus University Rotterdam, Netherlands</i> Supervising statistics labs and grading assignments
<b>Developmental Researcher</b> <i>Dec 2012 - March 2013</i>	<i>Primeros Pasos, Quetzaltenango, Guatemala</i> Data collection, data analysis, and writing research reports.

## PEER-REVIEWED PUBLICATIONS

A list of my peer-reviewed publications. Because of my interdisciplinary work I have published in journals as well as in conference proceedings. In these research fields publications in journals and proceedings are both equally accepted and are subject to the same peer-review process.

### 2017

**Van der Zee, T.**, Anaya, J., & Brown, N. J. L. (2017). Statistical heartburn: An attempt to digest four pizza publications from the Cornell Food and Brand Lab. *BMC Nutrition*, 3(54), 1-22. <https://doi.org/10.1186/s40795-017-0167-x>

Weinstein, Y., De Lima, H. J., & **van der Zee, T.** (2017). Are you mind-wandering, or is your mind on task? The effect of probe framing on mind-wandering reports. *Psychonomic Bulletin & Review*, 1-7. <https://doi.org/10.3758/s13423-017-1322-8>

Van der Sluis, F., **van der Zee, T.**, & Ginn, J. (2017). Learning about Learning at Scale: Methodological Challenges and Recommendations. In *Proceedings of the Fourth (2017) ACM Conference on Learning@Scale* (pp. 131-140). ACM. <https://doi.org/10.1145/3051457.3051461>

**Van der Zee, T.**, Admiraal, W., Paas, F., Saab, N., & Giesbers, B. (2017). Effects of subtitles, complexity, and language proficiency on learning from online education videos. *Journal of Media Psychology*, 29(1), 18-30. <https://doi.org/10.1027/1864-1105/a000208>

### 2016

Davis, D., Chen, G., **van der Zee, T.**, Hauff, C., & Houben, G. J. (2016). Retrieval practice and study planning in MOOCs: Exploring classroom-based self-regulated learning strategies at scale. In *European Conference on Technology Enhanced Learning* (pp. 57-71). Springer International Publishing. [https://doi.org/10.1007/978-3-319-45153-4\\_5](https://doi.org/10.1007/978-3-319-45153-4_5)

Van der Sluis, F., Ginn, J., & **van der Zee, T.** (2016). Explaining Student Behavior at Scale: The influence of video complexity on student dwelling time. In *Proceedings of the Third (2016) ACM Conference on Learning@Scale* (pp. 51-60). ACM. <https://doi.org/10.1145/2876034.2876051>

Schmidt, H.G., van Gog, T., Schuit, S.C., Van den Berge, K., Van Daele, P.L., Bueving, H., **van der Zee, T.**, Van den Broek, W.W., Van Saase, J.L., & Mamede, S. (2017). Do patients' disruptive behaviours influence the accuracy of a doctor's diagnosis? A randomised experiment. *BMJ Quality & Safety*, 26(1), 19-23.

<https://doi.org/10.1136/bmjqs-2015-004109>

Mamede, S., Van Gog, T., Schuit, S.C., Van den Berge, K., Van Daele, P.L., Bueving, H., **van der Zee, T.**, Van den Broek, W.W., Van Saase, J.L., & Schmidt, H.G. (2016). Why patients' disruptive behaviours impair diagnostic reasoning: a randomised experiment. *BMJ Quality & Safety*, 26(1), 13-18.

<http://dx.doi.org/10.1136/bmjqs-2015-005065>

## UNDER REVISION / REVIEW

A list of manuscripts that are currently being reviewed (not just submitted) as well as pre-prints.

**Van der Zee, T.**, Davis, D., Saab, N., Giesbers, B., Ginn, J., van der Sluis, F., Paas, F., & Admiraal, W. (under review). Evaluation Retrieval Practice in MOOCs: How writing and reading summaries of videos affects student learning. Manuscript under review at *Proceedings of the Seventh International Conference on Learning Analytics and Knowledge*.

**Van der Zee, T.**, Weinstein, Y., Saab, N., Giesbers, B., F., Paas, F., & Admiraal, W. (under review). Distractingly complex or boringly simple? Effects of video complexity on mind-wandering and learning. Manuscript under review at *Experimental Psychology*.

**Van der Zee, T.**, & Weinstein, Y. (Eds.). (under review). *Skeptical Scientist*. Cambridge, MA: MIT Press.

Wong, J., Davis, D., **van der Zee, T.**, Baars, M., Paas, F., & Houben, G.J. (under review). Supporting Self-Regulated Learning in Online Environments and MOOCs: A Systematic Review. Manuscript under review at *International Journal of Human-Computer Interaction*.

De Bruijn-Smolters, M., Timmers, C.F., Gawke, J., **van der Zee, T.**, Schoonman, W., & Born, M.Ph. (under review). Self-regulatory processes and student retention in higher education. Manuscript under review at *Research in Higher Education*.

Anaya, J., **van der Zee, T.**, & Brown, N. J. L. (2017). Statistical infarction: A postmortem of the Cornell Food and Brand Lab pizza publications. *PeerJ Preprints*, No. e3025v1. <https://peerj.com/preprints/3025/>

## **PEER-REVIEWED CONFERENCE PRESENTATIONS & WORKSHOPS**

A list of conference presentations and workshops that were peer-reviewed.

### **2017**

**Van der Zee, T.**, Van der Sluis, F., & Ginn, J. (2017, March). *Learning about Learning at Scale: Methodological Challenges and Recommendations*. Talk presented at the Coursera Partner Conference, Boulder, CO.

**Van der Zee, T.**, Admiraal, W., Paas, F., Saab, N., & Giesbers, B. (2017, March). *Learning from videos – the effects of complexity, subtitles, and language proficiency*. Talk presented at the Coursera Partner Conference, Boulder, CO.

**Van der Zee, T.** (2017, March). *Why most research findings are false – and how we can do better*. Workshop presented at the Coursera Partner Conference, Boulder, CO.

**Van der Zee, T.**, Admiraal, W., Paas, F., Saab, N., & Giesbers, B. (2017, May). *Learning from videos – the effects of complexity, subtitles, and language proficiency*. Poster presented at the 29th annual meeting of the Association for Psychological Science, Boston, MA.

### **2016**

**Van der Zee, T.**, Van der Sluis, F., & Ginn, J. (2016, March). *Instructional Design Guidelines for Multimedia Materials*. Poster presented at the Coursera Partner Conference, The Hague, The Netherlands.

**Van der Zee, T.**, Van der Sluis, F., & Ginn, J. (2016, March). *Increasing long-term learning in MOOCs through evidence-based learning strategies*. Talk presented at the Coursera Partner Conference, The Hague, The Netherlands.

### **Forthcoming**

**Van der Zee, T.**, & Verkoeijen, P. (2018, March). *Why most research findings are false, and how we can do better*. Workshop to be presented at the ICO International Spring School, Kerkrade, The Netherlands.

## INVITED CONFERENCE PRESENTATIONS & WORKSHOPS

A list of talks and workshops that I was invited to give at conferences. Note that some of these were also peer-reviewed.

### 2017

**Van der Zee, T.** (2017, Aug). *Applying cognitive psychology to the classroom*. Talk presented at the Colorado Learning and Teaching with Technology conference, Boulder, CO. [Peer-reviewed]

**Van der Zee, T., & Wahls, N.** (2017, Aug). *Instructional design for educational videos*. Talk presented at the Colorado Learning and Teaching with Technology conference, Boulder, CO. [Peer-reviewed]

### Forthcoming

**Van der Zee, T., Van der Sluis, F., & Ginn, J.** (2017, Dec). *Learning Analytics*. Panel discussion to be held at the Symposium on Best Practices in Digital and Blended Learning, The Hague, The Netherlands.

**Van der Zee, T., Admiraal, W., Paas, F., Saab, N., & Giesbers, B.** (2018, May). *The science of educational videos*. Talk to be presented at the 30<sup>th</sup> annual meeting of the Association for Psychological Science, San Francisco, CA.

**Van der Zee, T., Weinstein, Y., Saab, N., Giesbers, B., F., Paas, F., & Admiraal, W.** (2019, June). *Distractingly complex or boringly simple? Effects of video complexity on mind-wandering and learning*. Talk to be presented at the 13<sup>th</sup> biennial conference of the Society for Applied Research in Memory and Cognition, Cape Cod, MA.

## INVITED TALKS & WORKSHOPS

A list of talks and workshops that I was invited to give at conferences, research meetings (other than in my department), lecture series, and at companies.

### 2017

**Van der Zee, T.** (2017, May). *Videos and online education*. Talk presented at edX, Cambridge, MA.

**Van der Zee, T.** (2017, April). *Learning from videos in online education*. Talk presented at MIT Office of Digital Learning, Cambridge, MA.

**Van der Zee, T.** (2017, Jan). *Measuring the success of educational video with learning analytics*. Webinar presented at the Media and Learning Association.

### 2016

**Van der Zee, T.** (2016, Sept). *Thinking about evidence – beyond statistics*. Talk presented at the Leiden University Medical Center, Leiden, The Netherlands.

**Van der Zee, T.** (2016, March). *Instructional design guidelines for multimedia materials*. Talk presented at the Centre for Education and Learning, Rotterdam, The Netherlands.

**Van der Zee, T.** (2016, March). *Increasing long-term learning in MOOCs through evidence-based learning strategies*. Talk presented at the Centre for Education and Learning, Rotterdam, The Netherlands.

**Van der Zee, T.** (2016, March). *Thinking about evidence*. Talk presented at the Leiden University Medical Center, Leiden, The Netherlands.

### Forthcoming

**Van der Zee, T.** (2017, Nov). *Thinking about evidence in computer science*. Talk to be presented at Institute of Advanced Computer Science, Leiden, The Netherlands.

**Van der Zee, T.** (2018, Feb). *Experimental education research in MOOCs*. Talk to be presented at booking.com headquarters, Amsterdam, The Netherlands.

## GRANTS & AWARDS

A list of grants, awards, and other sources of funding that I have been awarded. Marked with PI if I was the primary investigator, marked with Co-PI if I was not.

### 2017

**SARMAC Student Caucus Research Grant** (Nov, 2017). *Society for Applied Research on Memory and Cognition*. \$525 (PI)

**CEL Travel Grant** (May, 2017). *Centre for Education and Learning*. \$1,500 (PI).

### 2016

**LUF Travel Trip Grant** (Nov, 2016). *Leids Universiteit Fonds*. \$1,700 (PI).

*Note:* In addition to this grant, three more institutes provided funding for my visiting scholarship:

- 1) the ICLON department of Leiden University contributed \$2,800,
- 2) the Psychology department of UMass Lowell contributed \$1,500, and
- 3) the Teaching Systems Lab of MIT contributed \$700.

**Best Student Paper Award** (Sept, 2016). *11<sup>th</sup> European Conference on Technology Enhanced Learning*. \$500 (Co-PI)

Regarding the article: "Davis, D., Chen, G., van der Zee, T., Hauff, C., & Houben, G. J. (2016). *Retrieval practice and study planning in MOOCs: Exploring classroom-based self-regulated learning strategies at scale.*"

**Conference Funding: "High quality PhD Research: Reproducibility, Credibility and Validity"** (Jan, 2016). *Centre for Education and Learning*. \$2,600 (PI)



## TEACHING

A list of guest lectures and courses that I have taught or am teaching.

<b>Action research in education</b> <i>Jan 2016 – Ongoing</i>	<i>Leiden University</i> Teaching and supervision, focused specifically on research methodology.
<b>Digital Environments in education</b> <i>Dec 2017</i>	<i>Leiden University</i> Invited guest lecture for Masters students
<b>Methodological Challenges in Online Education Research</b> <i>Nov 2017</i>	<i>Leiden University</i> Invited guest lectures for Masters students
<b>Advanced Cognition</b> <i>March &amp; April 2017</i>	<i>University of Massachusetts Lowell</i> Taught two classes of (under)graduate students
<b>Online Education: The Cognitive Perspective</b> <i>March 2016 and 2017</i>	<i>Leiden University</i> Invited guest lectures for Masters students
<b>Presentation Skills</b> <i>Sept 2015 and 2016</i>	<i>Leiden University</i> Teaching a full two-week course on presentation skills
<b>Methodology and Statistics</b> <i>Sept 2013 – Feb 2014</i>	<i>Erasmus University Rotterdam</i> Teaching Assistant (undergraduate level)

## COMMITTEES AND SERVICE POSITIONS

<b>Research Ethics Committee</b> <i>June 2016 – ongoing</i>	<i>Leiden University – ICLON department</i> Reviewing the ethical soundness of all research of my department.
<b>Search Committee for a Full Professor</b> <i>Sept 2016 – ongoing</i>	<i>Delft University of Technology</i> Invited (twice) to be a member to find and select someone for a full professorship.
<b>Editorial Board Member</b> <i>Nov 2017 - ongoing</i>	<i>Leiden University</i> A website about study success in higher education: <a href="http://www.lde-studentsuccess.com">www.lde-studentsuccess.com</a> about translating research on education for students, teachers, and policy makers.
<b>Conference Organizer</b> <i>Jan 2016</i>	<i>Centre for Education and Learning</i> I initiated the idea to organize a symposium on “High quality PhD Research: Reproducibility, Credibility and Validity”, obtained funding, created a committee of organizers, invited speakers, and chaired the day.

## PEER-REVIEWING

A list of journals for which I have reviewed submissions, including peer-reviewed journals and conference proceedings.

- Comprehensive Results in Social Psychology
- Archives of Scientific Psychology
- Educational Technology Research and Development
- ACM Conference on Learning@Scale

## CORRECTIONS AND RETRACTIONS (TRIGGERED BY MY INVESTIGATIVE WORK)

A key value of science is that it is self-correcting, but this does not happen by itself. As such I have actively invested in methods to identify and correct statistical errors in the published literature. This section contains a list of articles which have been corrected or retracted as a direct result of my work.

Just, D. R., Sigirci, O., & Wansink, B. (2014). Lower buffet prices lead to less taste satisfaction. *Journal of Sensory Studies*, 29(5), 362–370.

<http://dx.doi.org/10.1111/joss.12117> [Corrected:  
<https://doi.org/10.1111/joss.12279>]

Just, D. R., Sigirci, O., & Wansink, B. (2015). Peak-end pizza: prices delay evaluations of quality. *Journal of Product & Brand Management*, 24(7), 770-778.

<http://dx.doi.org/10.1108/JPBM-01-2015-0802> [Corrected:  
<https://doi.org/10.1108/JPBM-07-2017-999>]

Kniffin, K. M., Sigirci, O., & Wansink, B. (2016). Eating heavily: men eat more in the company of women. *Evolutionary Psychological Science*, 2(1), 38-46.

<http://dx.doi.org/10.1007/s40806-017-0099-3> [Editorial note:  
<https://link.springer.com/article/10.1007%2Fs40806-017-0099-3>]

Siğirci, Ö., & Wansink, B. (2015). Low prices and high regret: how pricing influences regret at all-you-can-eat buffets. *BMC Nutrition*, 1(1), 36.

<https://doi.org/10.1186/s40795-015-0030-x> [Retraction notice:  
<http://dx.doi.org/10.1186/s40795-017-0195-6>]

## POPULAR MEDIA & SCIENCE COMMUNICATION

A non-exhaustive list of interviews, (news) articles which feature my work, and other (popular) media publications. Also includes a selection of my blog posts. Note that while APA 6<sup>th</sup> edition requires a link to the home page of an online article I have, for your convenience, listed the direct link to article itself.

**Van der Zee, T.** (2017, October 19). How (not) to interpret confidence intervals. *The Skeptical Scientist*. Retrieved from <http://www.timvanderzee.com/not-interpret-confidence-intervals>

Townshend, T. (2017, September 22). TES talks to... Tim van der Zee. *Times Educational Supplement*. Retrieved from <https://www.tes.com/news/tes-magazine/tes-magazine/tes-talks-tim-van-der-zee>

**Van der Zee, T.** (2017, July 27). What are long-term error rates and how do you control them?. *The Skeptical Scientist*. Retrieved from <http://www.timvanderzee.com/long-term-error-rates-control>

Moody, O. (2017, April 18). Psychologist in the soup over food claims. *The Times*. Retrieved from <https://www.thetimes.co.uk/article/psychologist-in-the-soup-over-food-claims-gg9pbt9s8>

**Van der Zee, T.** (2017, April 5). Why you should be a skeptical scientist. *Editage Insights*. Retrieved from <https://www.editage.com/insights/why-you-should-be-a-skeptical-scientist>

**Van der Zee, T.** (2017, March 21). The Wansink Dossier: An Overview. *The Skeptical Scientist*. Retrieved from <http://www.timvanderzee.com/the-wansink-dossier-an-overview>

Barlett, T. (2017, March 17). Spoiled Science - How a seemingly innocent blog post led to serious doubts about Cornell's famous food laboratory. *The Chronicle of Higher Education*. Retrieved from <http://www.chronicle.com/article/Spoiled-Science/239529>

Robinson, E. (2017, March 7). Do smaller plates make you eat less? No. *The Conversation*. Retrieved from <https://theconversation.com/do-smaller-plates-make-you-eat-less-no-74181>

- Singal, J. (2017, March 2). Cornell's Food and Brand Lab Appears to Be Melting Down. *New York Magazine*. Retrieved from <http://nymag.com/scienceofus/2017/03/cornell-food-brand-lab-problems.html>
- Chambers, C., & Etchells, P. (2017, March 2). Fresh concerns raised over academic conduct of major US nutrition and behaviour lab. *The Guardian*. Retrieved from <https://www.theguardian.com/science/head-quarters/2017/mar/02/fresh-concerns-raised-over-academic-conduct-of-major-us-nutrition-and-behaviour-lab>
- Singal, J. (2017, February 8). A Popular Diet-Science Lab Has Been Publishing Really Shoddy Research. *New York Magazine*. Retrieved from <http://nymag.com/scienceofus/2017/02/cornells-food-and-brand-lab-has-a-major-problem.html>
- Chawla, D. S. (2017, February 3). Do Men Eat More Pizza in Front of Women? The research that suggested so, along with other theories about our eating habits, seems to be flawed. *Slate*. Retrieved from [http://www.slate.com/articles/health\\_and\\_science/science/2017/02/stop\\_getting\\_diet\\_advice\\_from\\_the\\_news.html](http://www.slate.com/articles/health_and_science/science/2017/02/stop_getting_diet_advice_from_the_news.html)
- Van der Zee, T.** (2017, January 23). Open online education: research findings and methodological challenges. *Journal of European Psychology Students Bulletin*. Retrieved from <http://blog.efpsa.org/2017/01/23/open-online-education-research/#more-4836>
- Van der Zee, T.** (2016, October 11). Sequential sampling with Bayes Factors: effects on error rates and parameter bias. *The Skeptical Scientist*. Retrieved from <http://www.timvanderzee.com/sequential-sampling-with-bayes-factors-effects-on-error-rates-and-parameter-bias>
- Wynn, M. (2016, December 16). The Difficult Patient: Harder to Diagnose?. *MedpageToday*. Retrieved from <https://www.medpagetoday.com/PublicHealthPolicy/by-the-numbers/62120>
- Reddy, S. (2016, April 4). When Patients Are a Pain for Their Doctors. *The Wall Street Journal*. Retrieved from <https://www.wsj.com/articles/when-patients-drive-their-doctors-crazy-1459793860>
- Rice, S. (2016, March 14). 'Difficult' patients more likely to be misdiagnosed. *Modern Healthcare*. Retrieved from <http://www.modernhealthcare.com/article/20160314/BLOG/160319965>