

## Publicaties en congresbijdragen dr. Dave van Breukelen

Kenniskring lectoraat IOBC Fontys Lerarenopleiding Sittard

[d.vanbreukelen@fontys.nl](mailto:d.vanbreukelen@fontys.nl)

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- <https://www.linkedin.com/in/davevanbreukelen/>
- [https://www.researchgate.net/profile/Dave\\_Van\\_Breukelen](https://www.researchgate.net/profile/Dave_Van_Breukelen)

### Publicaties

2020

- Van Breukelen, D. (in press). Teaching science through design activities. In J. Williams, D. Barlex, & B. von Mengersen (Eds.), *Contemporary Research in Technology Education (Vol. 3)*. Singapore: Springer Nature, Contemporary Issues in Technology Education.
- Van Breukelen, D. (in press). *Design-based concept learning in physics education*. In M.J. de Vries, & I. Henze-Rietveld (Eds.), *Design-based concept learning in science and technology education*. Leiden: Sense/Brill, International Technology Education Studies.

2017

- Van Breukelen, D. (2017). Ontwerpen. In K. Kortland, A. H. Mooldijk, & H. Poorthuis (Eds.), *Handboek natuurkundedidactiek* (pp. 294-306). Amsterdam: Epsilon Uitgaven.
- Van Breukelen, D. (2017). *Teaching and learning science through design activities. A revision of design-based learning*. (Doctoral dissertation), Science Education & Communication, Delft University of Technology, Delft (NL). doi: 10.4233/uuid:c7dedc60-45e1-4c58-86da-418b9b389ad4
- Van Breukelen, D., Van Meel, A., & De Vries, M. (2017). Teaching strategies to promote concept learning by design challenges. *Research in Science & Technological Education*, 35(3), 368-390. doi:10.1080/02635143.2017.1336707
- Van Breukelen, D. H. J., De Vries, M. J., & Schure, F. A. (2017). Concept learning by direct current design challenges in secondary education. *International Journal of Technology and Design Education*, 27(3), 407-430. doi:10.1007/s10798-016-9357-0

2016

- Van Breukelen, D., Michels, K., Schure, F., & De Vries, M. (2016). The FITS model: An improved Learning by Design approach. *Australasian Journal of Technology Education*, 3, 1-16. doi:10.15663/ajte.v3i1.37
- Van Breukelen, D., Smeets, M., & De Vries, M. (2016). Explicit teaching and scaffolding to enhance concept learning by design challenges. *Journal of Research in STEM Education*, 1(2), 87-105.

### Congresbijdragen

2019

- Van Breukelen, D., & Smeets, M. (2019). *The FITS model: Learning science by design challenges*. Poster presented at the Annual Conference of the European Science Education Research Association (ESERA), Bologna (IT).
- Van Breukelen, D. (2019a). *Onze plek in het heeal: schepping of toeval?* Lecture as part of the 40th anniversary of Fontys University of Applied Sciences for Teacher Education Sittard, Sittard (NL).
- Van Breukelen, D. (2019). *The FITS model: learning through design and inquiry*. Keynote lecture at the Big Bang Conference, Odense (DK).

2018

- Michels, K., & Van Breukelen, D. (2018). *Dutch experience with science and technology education for students and teachers*. Symposium session at the Faculty of Mathematics and Natural Sciences – University of Cologne, Cologne (DE).
- Van Breukelen, D. (2018). *De M-factor in STEM*. Keynote lecture at the FLOS mathematics symposium, Sittard.
- Van Breukelen, D., & Smeets, M. (2018). *Interdisciplinair bètaonderwijs: didactische strategieën en implicaties*. Paper presented at the VELON Congres, Roermond.

#### 2017

- Van Breukelen, D., & Schure, F. (2017). *The FITS model: integrated science and technology education through design-based learning*. Poster presented at the Annual Conference of the European Science Education Research Association, Dublin (IE).
- Van Breukelen, D., & Smeets, M. (2017). *Interdisciplinair bètaonderwijs: didactische strategieën*. Paper presented at the WND conference, Noordwijkerhout.
- Van Breukelen, D., & Smeets, M. (2017). *Een nieuwe lerarenopleiding Science & Technology*. Paper presented at the ECENT/ELWleR conference, Utrecht (NL).
- Van Breukelen, D., & Schure, F. (2017a). *The FITS model: a pedagogical strategy for design-based learning*. Paper presented at the Annual Conference of the National Science Teachers Association (NSTA), Los Angeles (CA).
- Van Breukelen, D., & Smeets, M. (2017c). *Interdisciplinair onderwijs: Science & Technology*. Paper presented at the SOML onderwijsdag, Echt (NL).

#### 2016

- Van Breukelen, D., & Schure, F. (2016). *Learning science by design challenges*. Paper presented at the Annual Conference of the Association for Science Education, Birmingham (UK).
- Van Breukelen, D., & Schure, F. (2016). *Concept learning by design challenges*. Paper presented at the Annual Conference of the International Technology and Engineering Educators Association, Washington D.C.
- Van Breukelen, D. (2016). *Conceptueel leren door ontwerptaken*. Paper presented at the Onderwijs en Research Dagen (ORD), Rotterdam (NL).