ICO Dissertation Series

In the ICO Dissertation Series dissertations are published of graduate students from faculties and institutes on educational research within the ICO Partner Universities: Eindhoven University of Technology, Leiden University, Maastricht University, Open University of the Netherlands, University of Amsterdam, University of Twente, Utrecht University, VU University Amsterdam, and Wageningen University, and formerly University of Groningen (until 2006), Radboud University Nijmegen (until 2004), and Tilburg University (until 2002). The University of Groningen, University of Antwerp, University of Ghent, and the Erasmus University Rotterdam have been ‘ICO ‘Network partner’ in 2010 and 2011. From 2012 onwards, these ICO Network partners are full ICO partners, and from that period their dissertations will be added to this dissertation series.

The most recent ones are listed below (List update February, 2017)


301. Leenaars, F.A.J. (10-12-2014). Drawing gears and chains of reasoning. Enschede: University of Twente.

302. Huizinga, T. (12-12-2014). Developing curriculum design expertise through teacher design teams. Enschede: University of Twente.


335. Vrugte, J. ter (16-06-2016). Serious support for serious gaming. Enschede: University of Twente.
342. Reijners, P.B.G. (02-09-2016). Retrieval as a cognitive and metacognitive study technique to learn from expository text. Heerlen: Open University of the Netherlands.
343. Hubers, M.D. (08-09-2016). Capacity building by data team members to sustain schools’ data use. Enschede: University of Twente.
345. Scheer, E.A. (23-09-2016). Data-based decision making put to the test. Enschede: University of Twente.
Small group teaching seems effective when the interactions with peers and faculty facilitate students’ ability to achieve their social or academic goals. Peer relationships represent an important form of social capital that can help students achieve better results. However, the extent to which students build their own social capital may depend on their cognitions or beliefs, as well as their prior achievement.

This thesis therefore investigates how students’ cognitions and prior achievement relate to students’ social capital and peer networks in small group teaching, along with the effects on study success. This study of small group teaching features three different settings: learning communities, mentor groups, and seminars. With a longitudinal, empirical design, the analyses of survey data and complete social network data from the Netherlands and Germany reveal some insights into mechanisms of small group teaching.

In particular, the research finds that interactions with peers and faculty contribute to self-efficacy and thereby to study success. Not all students may benefit equally from the option for building social capital in small group teaching though. For example, achievement segregation emerges in peer networks; high achievers seem to benefit the most. When students believe that their intellectual abilities can change, they are more popular in academic support networks. This outcome also occurs when students are highly self-efficacious and perceive themselves as more popular.

Jasperina Brouwer studied educational sciences and psychology and completed her research masters’ degrees in these fields at the University of Groningen, the Netherlands. She is a member of the Inter-university Center for Educational Sciences (ICO). She conducted her research as a PhD student at the Teacher Education department, Faculty of Behavioural and Social Sciences, University of Groningen.