

New Publication

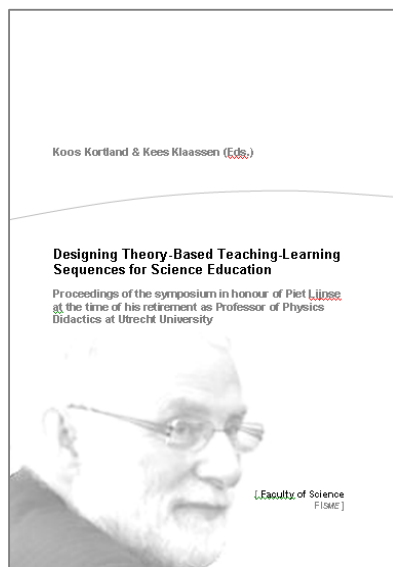
Koos Kortland & Kees Klaassen (Eds.)

Designing Theory-Based Teaching-Learning Sequences for Science Education – Proceedings of the symposium in honour of Piet Lijnse at the time of his retirement as Professor of Physics Didactics at Utrecht University

Utrecht: Fisme, 2010. ISBN: 978-90-73346-70-3

On Friday, October 9, 2009 a symposium was held on the occasion of the retirement, and thus in honour, of Piet Lijnse – now Emeritus Professor of Physics Didactics at the Freudenthal Institute for Science and Mathematics Education, Utrecht University, The Netherlands and former Treasurer of ESERA.

The topic of this symposium, as outlined in the box below, clearly relates to much of the work Piet has been doing for decades. And the symposium can be seen not only as an event to honour him for his contribution to science education research, but also as a stimulus for continuing work of this sort. The proceedings of this symposium have now become available through the above mentioned publication.



Symposium

Designing Theory-Based Teaching-Learning Sequences for Science Education

The systematic study of design and evaluation of educational interventions – such as teaching-learning sequences – not only aims to provide solutions to complex problems in educational practice, but also to advance our knowledge about the characteristics of these interventions and the process of designing, implementing and evaluating them. Part of this knowledge reflects a local didactical theory: a didactical structure – an empirically based description and justification of the interrelated processes of teaching and learning – for teaching-learning processes for a certain topic (Lijnse, 1995). Beyond simply creating designs that are effective, a local didactical theory explains why designs work and suggests how they might be adapted to new topics and/or new circumstances.

The symposium will focus on the issue of designing theory-based teaching-learning sequences for science education: what can be considered a local didactical theory and how does such a theory inform the design of teaching-learning sequences?

Reference

Lijnse, P.L. (1995), "Developmental research" as a way to an empirically based "didactical structure" of science. *Science Education* 79 (2), 189-199.

Free copy available

If you are interested in receiving a free copy of the symposium proceedings, send an e-mail to Koos Kortland: j.kortland@uu.nl. Please make sure to include your postal address. And note that the number of copies available is limited.

Contents

The first section of this book presents the contributions to the symposium: the lectures given by John Leach (also on behalf of Jaume Ametller and Phil Scott), Laurence Viennot, Robin Millar, and, of course, Piet Lijnse himself. Due to family circumstances and much to his regret, Jon Ogborn was not able to attend the symposium, but his intended contribution is also included. The second section of this book offers reprints of a number of key

publications by Piet Lijnse, often referred to in the symposium contributions. The table of contents of the book is reproduced in the box below.

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- 3 Using research to improve practice in science education: Where should we begin, and what should we aim to produce? – Robin Millar
- 4 Curriculum development as practical activity – Jon Ogborn
- 5 Lessons I have learned – Piet Lijnse

Section II: Key publications

- 6 'Developmental research' as a way to an empirically based 'didactical structure' of science – Piet Lijnse
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- 8 Didactics of science: The forgotten dimension in science education research? – Piet Lijnse
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