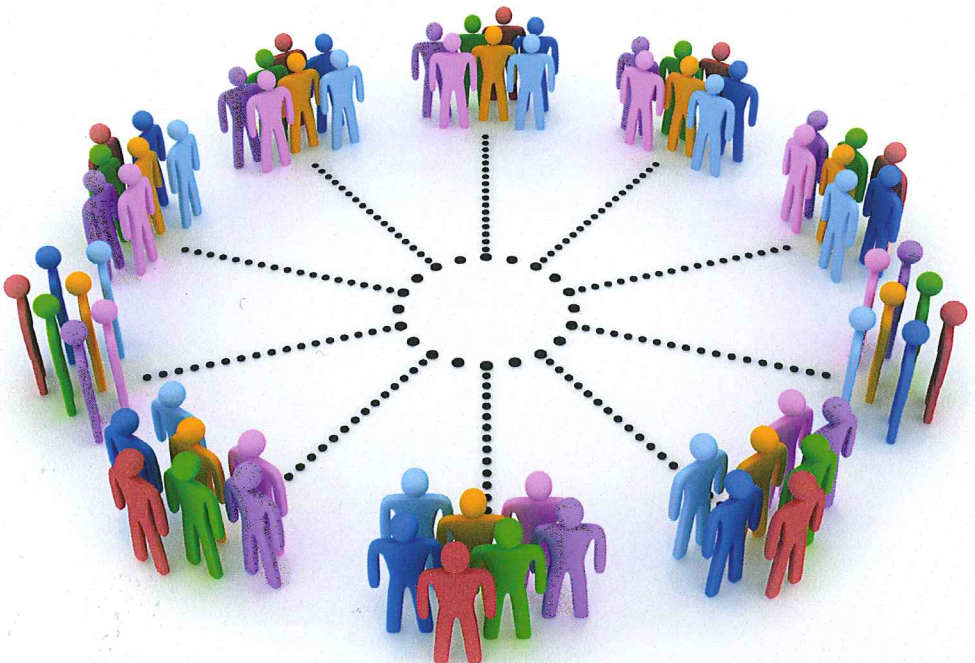


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# Networked Collaborative Learning: Social interaction and active learning

Guglielmo Trentin



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Chandos Publishing is an imprint of Woodhead Publishing Limited

Woodhead Publishing Limited  
Abington Hall  
Granta Park  
Great Abington  
Cambridge CB21 6AH  
UK  
www.woodheadpublishing.com

First published in 2010

ISBN: 978 1 84334 501 5

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British Library Cataloguing-in-Publication Data.

A catalogue record for this book is available from the British Library.

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Typeset in the UK by Concerto.  
Printed in the UK and USA.

Printed in the UK by 4edge Limited - www.4edge.co.uk

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ODL	open and distance learning
PCT	peaked conventional test
PLE	personal learning environment
RCT	rectangular conventional test
ROI	return on investment
SNA	social network analysis
TEL	technology-enhanced learning
VTL	virtual learning environment
ZPD	zone of proximal development

## Preface

For some time now, the sustainability of technology-enhanced learning (TEL) has largely been regarded in economic and organisational terms. However, the achievement of high quality in TEL depends on attention being focused first and foremost on pedagogical considerations. Whenever these remain in the background, the result is almost invariably the same: passive, individual study of educational materials. Such content-driven approaches are widely held to be cheaper, and are therefore commonly adopted. But they almost always lead to limited-quality learning since they deprive the process of its other crucial dimension, namely *social interaction*.

The social dimension is particularly vital in university teaching, where there is a strong need for direct teacher-learner contact and the teacher has ample scope for adopting a variety of strategies, especially interactive ones, to support learning. However, the same could also be said of any context in which education is not merely a 'coaching' process but rather one designed to foster the acquisition of high-level knowledge and professional competencies. Here, learning must encompass both vertical interaction with domain experts and horizontal interaction with the group of peer learners engaged in the course. This facilitates professional development based on the exchange of experiences and good practices.

Fostering the social dimension of learning in TEL means treating the network not merely as a way of distributing learning materials but more generally as a resource that facilitates distance interaction between learner and teacher and among students within online learning groups.

Such approaches rarely result in cost reductions for course organisers, and in some cases actually demand higher investment. This poses the question as to why TEL should be adopted in university education: to enhance the social dimension of learning and thus *improve instructional quality* or to streamline organisation logistics and thus reduce costs?

Undoubtedly, TEL offers strong potential in either case, but this book argues that the pedagogical sustainability of TEL is proportional to the quality of learning it can deliver. And high quality levels can be reached mainly by enacting active and collaborative learning processes, especially if these hinge on intense social interaction between learners, teachers, tutors and domain experts.

Such social interaction is often hampered by logistical and organisational problems, especially at university level. Consequently there has been a tendency to see network technology as a possible means for strengthening this dimension. This potential has fuelled interest in exploring new approaches to TEL based on the kind of active and collaborative student-centred learning that distinguishes *networked collaborative learning* (NCL).

This book will seek to further our understanding of the factors, motives and results that can lead a teacher to adopt NCL-based strategies. It will examine the added value they offer for enhancing learning processes and the implications they have for course design, management and evaluation.

A number of case studies will be examined that exemplify the organisational and communicational modes entailed in NCL. These will help to shed light on the various roles that the teacher assumes when adopting different teaching strategies for reaching expected learning outcomes.

Through these case studies, we will also take a special look at evaluation, an issue widely held to be one of the most problematic aspects in applying NCL effectively. We will see how coordinated design of learning and assessment activities can ensure that each is in tune with the other. When appropriate methodologies are applied, technologies offer enormous opportunities for evaluating the learning of content, the individual's contribution to group work and the level of cooperation that each group applies to the tasks it is set.

While NCL is certainly not the only option open to a teacher looking to adopt TEL, it nonetheless offers enormous potential for innovating teaching approaches. One way it does this is by leveraging the technologies and forms of communication that students are now accustomed to using in their daily lives.

That said, NCL is undeniably a double-edged sword. On the one hand it can yield high-quality learning and enhanced satisfaction on the part of learners and teachers alike. On the other, however, it calls for careful planning and can only be introduced with suitable preparation

and training, especially in the design and management of online learning activities.

This points to the wider issue of professional development for academic staff – something that plays a critical role in the pedagogical sustainability of NCL. The role of the e-teacher is not one that can be improvised; it must form an integral part of the teacher's overall professional growth. This does not simply mean acquiring sufficient know-how to introduce technology in support of habitual teaching practices. Rather, it means totally rethinking and revising those practices.

So after this lengthy premise, we can now set off on our journey of exploration. The hope is that it will lead to a clearer understanding of NCL, whether or not the reader agrees with the arguments presented.

Enjoy!

*Guglielmo Trentin*