



## **Group-projects in a problem-oriented setting**

Dahl, Anders; Dich, Trine; Hansen, Tina; Olsen, Vagn

*Publication date:*  
2012

*Document version*  
Publisher's PDF, also known as Version of record

*Citation for published version (APA):*  
Dahl, A., Dich, T., Hansen, T., & Olsen, V. (2012). *Group-projects in a problem-oriented setting*. Biofolia.

**GROUP-PROJECTS IN A PROBLEM-ORIENTED SETTING** is a general introduction to the process in which students are involved when they work with problem-oriented projects in groups. It is also an introduction to the products which must be generated and developed throughout the project. How does one get from the initial idea phase to the formulation of the problem and the aim of the project, and onwards to implementation? How can one initiate and strengthen the writing process? How can the group strengthen their collaboration, and how might they handle conflicts? How should a literature search be conducted, how do you make correct references and how can the sources be managed critically? What is important in communication both written and oral, including giving a good presentation? And finally, how do we ensure optimal and sustained learning from the process?

The book offers numerous suggestions and answers to these questions. One of the aims of the book is to illustrate and emphasize the differences and connections between process and product, which in turn strengthens the planning, development and implementation of project work.

The mix of qualified advice and general guidelines in addition to highlighting the more formal academic requirements makes **GROUP-PROJECTS IN A PROBLEM-ORIENTED SETTING** a useful handbook. It can function as both a source of inspiration as well as a tool for students who are either starting a project or who are already experiencing difficulties.

The book's target group is students in both bachelor and master programmes. While the examples in the book are taken from natural and life sciences, it can still be useful for students in other fields.

ANDERS DAHL  
TRINE DICH  
TINA HANSEN  
VAGN OLSEN

# GROUP-PROJECTS IN A PROBLEM- ORIENTED SETTING



Biofolia

ISBN 978-87-91319-53-2



9 788791 319532

Anders Dahl, Trine Dich, Tina Hansen and Vagn Olsen

## **Group-projects in a Problem-oriented Setting**

*Biofolia*

Group-projects in a Problem-oriented Setting  
Anders Dahl, Trine Dich, Tina Hansen and Vagn Olsen

© Biofolia, 2012

Printed in Denmark by Narayana Press, Gylling

Typeset: SL grafik

Cover design by Klahr | Graphic Design

1<sup>st</sup> edition 2012

ISBN 978-87-91319-53-2

Translated by Charles Woollen from the Danish second edition title:  
Styrk projektarbejdet – En redskabsbog til problemorienteret projektarbejde  
(ISBN: 978-87-91319-50-1)

Additional proofreading by Elizabeth Xiao-an Li

Distribution:

*Europe*

Gazelle Book Services

White Cross Mills

Hightown, Lancaster

Lancashire LA1 4XS, United Kingdom

Tel +44 (0) 1524 68765

Fax +44 (0) 1524 63232

Email: sales@gazellebooks.co.uk

*North America*

International Specialized Book Services

920 NE 58th Street, Suite 300

Portland, OR 97213-3786

Tel +1 800 944 6190

Fax +1 503 280 8832

Email: orders@isbs.com

*Rest of the world*

DBK, Milnersvej 4

DK-4600 Køge, Denmark

Tel +45 3269 7788

Fax +45 3269 7789

# Table of Contents

## Preface 9

1. Introduction 11  
Problem-oriented project work 11  
The process versus the product 12  
How this book is organised 14

## Part I Collaboration

2. Group Work 21  
Preconditions 22  
The phases of collaboration 29  
Group dynamics 33  
Communication 36  
Decision-making processes 37  
Roles 38
3. Supervision 43  
Types of supervision 43
4. Tools for Group Work 49  
The agreement of collaboration – ground rules 49  
The supervisor agreement 55  
Basic features of a meeting 56  
Round table dialogue 57  
Active listening 58

## Part II The Idea & Problem Analysis Phases

5. The Start of the Project 63  
The idea phase 64  
Working on conceptualisation 66

All rights reserved. No part of this publication may be reproduced or used in any form or by any means – graphic, electronic or mechanical including photocopying, recording, taping or information storage or retrieval systems – without permission in writing from Biofolia at [www.biofolia.dk](http://www.biofolia.dk)

The project proposal 69  
Why make an analysis of the problem? 71  
How to analyse the problem 73  
How a problem is formulated and what the  
formulation should cover 84

#### 6. Tools for Project Work 89

Brainstorm 90  
Non-stop writing 95  
Mind-mapping 97  
The problem tree 101  
The principles behind the problem tree 102  
The log file 105  
The action plan 111

### Part III Dissemination, Communication & Evaluation

#### 7. Written Presentation 119

Making good use of the writing and working processes 121  
The writing process and the thought process 122  
How can writing skills be improved? 123  
How to get writing 124  
On collaborative writing in groups 125  
The message, the target group and the purpose 127  
Linguistic style 128

#### 8. Formal Requirements and the Structure of the Report 137

The cover 138  
The title page 139  
Abstract 140  
Preface 142  
Table of contents 142  
Introduction 143  
Main text 147  
Projects with experimental content 149  
Discussion 150  
Conclusion 151  
Perspectives 153

Reference systems 153

References in the text 155

The list of literature (or sources) 163

Appendices 171

Definition of concepts 172

Evaluation of the process 173

Postscript 177

#### 9. Presentation of project work 179

Preparation 180

Manuscript 182

Delivery 183

Nervousness 185

Visual aids 186

Feedback 189

#### 10. Literature Search and Critical Use of Source Material 195

Literature based studies 196

The critical use of information sourced on the

Internet 206

the message 127-128, 180  
the passive form 129  
the purpose 85, 128, 142, 180  
the speaker 37, 179, 183-185  
title page 137, 139  
titles 132  
typography 132, 134

**V**

video 189  
visual aids 179, 186

**W**

writer's block 96, 123, 125  
writing process 96, 121, 125