Scripting Computer-Supported Collaborative Learning
The Computer-Supported Collaborative Learning Book Series is for people working in the CSCL field. The scope of the series extends to “collaborative learning” in its broadest sense; the term is used for situations ranging from two individuals performing a task together, during a short period of time, to groups of 200 students following the same course and interacting via electronic mail. This variety also concerns the computational tools used in learning: elaborated graphical whiteboards support peer interaction, while more rudimentary text-based discussion forums are used for large group interaction. The series will integrate issues related to CSCL such as collaborative problem solving, collaborative learning without computers, negotiation patterns outside collaborative tasks, and many other relevant topics. It will also cover computational issues such as models, algorithms or architectures which support innovative functions relevant to CSCL systems.

The edited volumes and monographs to be published in this series offer authors who have carried out interesting research work the opportunity to integrate various pieces of their recent work into a larger framework.

The titles published in this series are listed at the end of this volume.
CONTENTS

CONTRIBUTING AUTHORS

PREFACE

CHAPTER 1 – Introduction
Fischer, F., Kollar, I., Haake, J. M., & Mandl, H.

PERSPECTIVES ON COLLABORATION SCRIPTS

References

PART I
Cognitive Perspectives

CHAPTER 2
King, A.

SCRIPTING COLLABORATIVE LEARNING PROCESSES:
A COGNITIVE PERSPECTIVE

1. Scripts and scripting
   1.1 Scripts in cognitive psychology
   1.2 Scripts and scripting in educational contexts

2. Cognitive, metacognitive, and socio-cognitive aspects of learning through interaction
   2.1 Effective learning activities
   2.2 The need for structuring interaction
CHAPTER 3

Rummel, N., & Spada, H.

CAN PEOPLE LEARN COMPUTER-MEDIATED COLLABORATION BY FOLLOWING A SCRIPT? .................................................................39

1. Background ..................................................................................39

2. Script approaches relevant to the learning-from-script hypothesis .................................................................40
   2.1 Collaboration scripts in traditional collaboration research ........41
   2.2 Collaboration scripts in CSCL research ..................42

3. A script for learning to collaborate ..............................................43
   3.1 Testing the learning-from-script hypothesis: The experimental framework of our collaboration script ..............................44
   3.2 Testing the learning-from-script hypothesis: A script to teach collaboration ......................................................46

4. Results in support of the learning-from-script hypothesis from an empirical study .................................................48
   4.1 Method ..................................................................................48
   4.2 Results ..................................................................................50

5. Conclusions: Can people learn computer-mediated collaboration by following a script? ..............................................51

References .....................................................................................53
CHAPTER 4
Runde, A., Bromme, R., & Jucks, R.

SCRIPTING IN NET-BASED MEDICAL CONSULTATION:
THE IMPACT OF EXTERNAL REPRESENTATIONS ON GIVING
ADVICE AND EXPLANATIONS ........................................57

1. Background ..................................................................57
2. Three concepts of scripting: Social roles, explicit scripts,
and implicit scripts .........................................................61
   2.1 Social roles as determinants of the structure of interaction 61
   2.2 Cooperation scripts as explicit instructions ..................62
   2.3 External representations as implicit scripts ...............63
3. Research questions ....................................................66
4. Main findings ..................................................................67
5. Conclusions ...............................................................69
Acknowledgements ..........................................................70
References .......................................................................70

CHAPTER 5
Nückles, M., Ertelt, A., Wittwer, J., & Renkl, A.

SCRIPTING LAYPERSONS' PROBLEM DESCRIPTIONS IN
INTERNET-BASED COMMUNICATION WITH EXPERTS ........73

1. Introduction ..............................................................73
2. Unfavorable features of laypersons' problem descriptions ....75
3. Supporting a layperson in providing problem descriptions ....76
4. The problem formulation script ..................................77
5. Testing the problem formulation script experimentally ....79
   5.1 Research questions ...............................................79
   5.2 Participants and research design .............................80
   5.3 Materials and procedure ......................................80
6. Main findings ...........................................................83
   6.1 Test of the extensiveness prediction .........................83
   6.2 Test of the representativeness prediction ..................84
   6.3 Test of the quality-of-reconstruction prediction .........84
7. Discussion ....................................................................85
CHAPTER 6 – Discussion

_Hesse, F. W._

BEING TOLD TO DO SOMETHING OR JUST BEING AWARE OF SOMETHING? AN ALTERNATIVE APPROACH TO SCRIPTING IN CSCL

References

PART II

COMPUTATIONAL PERSPECTIVES

CHAPTER 7

_Ayala, G._

SCRIPTING COLLABORATIVE LEARNING IN AGENT-BASED SYSTEMS

1. Introduction................................................................. 101
   1.1 Software agents and cooperation scripts.......................... 102
   1.2 Pedagogically and not pedagogically structured domains........ 103
   1.3 Organizational and detailed work processes........................ 103

2. Scripting organizational processes................................... 103
   2.1 Designing a cooperation script for the organizational processes ........................................ 104
   2.2 GRACILE and CASSIEL.................................................. 104
   2.3 Group configuration.................................................... 106
   2.4 Task assignment......................................................... 108

3. Agents supporting scripting detailed work processes............... 110
   3.1 Agents supporting the detailed work processes.................. 110
   3.2 The learners' coordination script.................................. 111
CHAPTER 8
Miao, Y., Harrer, A., Hoeksema, K., & Hoppe, H. U.

MODELING CSCL SCRIPTS – A REFLECTION ON LEARNING DESIGN APPROACHES

1. Introduction 117
2. Potential uses and system support of CSCL scripts 119
   2.1 Design time uses 119
   2.2 Runtime uses 120
3. Investigating the capacity of IMS LD for formalising collaborative learning scripts 121
4. An approach to represent CSCL scripts 123
   4.1 A conceptual basis for CSCL scripting 124
   4.2 Solutions 126
5. Modeling a collaboration script with IMS LD and the CSCL scripting language 128
   5.1 How to model the script by using IMS LD 129
   5.2 How to model the script by using the scripting language 130
   5.3 Comparison of the two approaches 133
6. Conclusions 133
References 134

CHAPTER 9
Lauer, T. & Trahasch, S.

SCRIPTED ANCHORED DISCUSSION OF MULTIMEDIA LECTURE RECORDINGS

1. Introduction 137
2. Structuring and sequencing of online discussion 140
   2.1 Artifact-centered discussion as exchange of digital annotations 140
   2.2 Representation of discussion notes 142
   2.3 Systems for anchored discussion of lecture recordings 142
3. Scripted anchored discussion of lecture recordings 145
4. Scripts as resources
References

PART III
EDUCATIONAL PERSPECTIVES

CHAPTER 12
Weinberger, A., Stegmann, K., Fischer, F., & Mandl, H.

SCRIPTING ARGUMENTATIVE KNOWLEDGE CONSTRUCTION IN COMPUTER-SUPPORTED LEARNING ENVIRONMENTS

1. Argumentative knowledge construction
2. Script components for argumentative knowledge construction
3. Goals of the empirical studies
4. Method
  4.1 Sample and setting
  4.2 Learning task
  4.3 Computer-supported learning environment
  4.4 Procedure
  4.5 Instruments
  4.6 Treatments
5. Results
6. Conclusions
7. Future research
Acknowledgements
References
CHAPTER 13
Ertl, B., Kopp, B., & Mandl, H.

SUPPORTING COLLABORATIVE LEARNING IN VIDEOCONFERENCING USING COLLABORATION SCRIPTS AND CONTENT SCHEMES

1. Collaborative learning
2. Fostering collaborative learning in videoconferencing
   2.1 Collaboration scripts
   2.2 Content schemes
3. Research questions
4. Study 1
   4.1 Method of study 1
      4.1.1 Collaboration script for collaborative teaching
      4.1.2 Content scheme for collaborative teaching
      4.1.3 Instruments
   4.2 Results of study 1
   4.3 Discussion of study 1
5. Study 2
   5.1 Method of study 2
      5.1.1 Collaboration script for collaborative problem solving
      5.1.2 Content scheme for collaborative problem solving
      5.1.3 Instruments
   5.2 Results of study 2
   5.3 Discussion of study 2
6. General discussion
7. Conclusions
Acknowledgements
References
CHAPTER 14
Kolodner, J.

THE ROLES OF SCRIPTS IN PROMOTING COLLABORATIVE DISCOURSE IN LEARNING BY DESIGN ........................................ 237

1. Conceptual background on scripts ........................................ 241
   1.1 Scripts as cognitive structures that promote productive participation ........................................ 241
   1.2 Scripts as classroom practices ........................................ 243
2. Setting the context: More on learning by design ....................... 245
3. Design of scripted activity structures (classroom scripts) and their sequencing to promote collaboration and discourse in LBD .... 248
4. Promoting script learning in LBD – instructional strategies .......... 253
   4.1 Repeated deliberative scaffolded practice of scripted activity structures (classroom scripts) ................ 253
   4.2 Launcher Units for introducing scripted activity structures ........ 255
5. Discourse, collaboration, and learning .................................... 257
6. Concluding thoughts ......................................................... 260
References ............................................................................ 261

CHAPTER 15 – Discussion
Häkkinen, P., & Mäkitalo-Siegl, K.

EDUCATIONAL PERSPECTIVES ON SCRIPTING CSCL ....................... 263

1. Introduction ........................................................................ 263
2. Different notions of scripting ................................................. 264
3. Methodological challenges .................................................. 267
4. Design issues and pedagogical challenges ............................... 267
5. Conclusions ....................................................................... 269
References ............................................................................ 270
PART IV
INTERDISCIPLINARY
PERSPECTIVES

CHAPTER 16
Dillenbourg, P., & Jermann, P.

DESIGNING INTEGRATIVE SCRIPTS .................................................275
1. Introduction ..............................................................................275
2. Examples of CSCL scripts ......................................................276
   2.1 The “Concept Grid” script ...................................................276
   2.2 The “ArgueGraph” script ....................................................278
   2.3 The “UniverSanté” script .....................................................279
   2.4 The “Studio” script ..........................................................281
3. The diversity of scripts ..........................................................281
   3.1 Role: Why playing a script? .................................................282
   3.2 Congruence: Do they play the script? .................................283
   3.3 Granularity: Macro versus micro-scripting .........................285
   3.4 Integrated learning ..........................................................285
4. Benefits and risks in computerized scripts .............................287
5. The structure of scripts ..........................................................289
6. The SWISH model ...............................................................291
7. Generalizing scripts ...............................................................293
   7.1 Descriptive model ............................................................293
   7.2 Script schemata ...............................................................294
   7.3 Generalization hierarchy ....................................................295
   7.4 Executable model ............................................................297
8. Synthesis .................................................................................298
Acknowledgements ....................................................................299
References ...............................................................................300
CHAPTER 17
Carmien, S., Kollar, I., Fischer, G., & Fischer, F.

THE INTERPLAY OF INTERNAL AND EXTERNAL SCRIPTS ..........303

1. Introduction ........................................................................303
2. Scripts from a distributed cognition perspective .................305
   2.1 Scripts residing in the person-solo: Internal scripts ..........306
   2.2 Scripts residing in an individual's surround: External scripts ....308
   2.3 Scripts in the person-plus-surround system: Interaction between internal and external scripts .........................309
3. Analyzing scripts from a distributed cognition perspective ....310
4. Examples for an interplay of internal and external scripts ..........312
   4.1 Memory aiding prompting system (MAPS): A tool for living .................................................................312
   4.2 Collaborative argumentation script: A tool for learning ....315
5. Internal and external scripts in a tool for living and a tool for learning scenario ..............................................318
6. Conclusions .........................................................................321
Acknowledgements ..................................................................324
References ............................................................................324

CHAPTER 18 – Discussion
Stahl, G.

SCRIPTING GROUP COGNITION ..................................................327

1. Introduction .........................................................................327
2. Scripts as cognitive models ..................................................328
3. Scripts as social resources ....................................................329
4. Scripts as computer-based resources ......................................330
5. Scripting group cognition .....................................................332
6. Scripts for framing collaborative interactions .........................333
7. Scripts for learning and for life ..............................................334
References ............................................................................335

INDEX ..................................................................................337
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Preface

Research on Computer-Supported Collaborative Learning (CSCL) is a multidisciplinary field that can be located at the intersection of cognitive psychology, computer science, and education. Yet, the different epistemological and theoretical backgrounds of these disciplines often make fruitful exchange between them difficult. To put it in other words, CSCL urgently needs to develop and use boundary concepts that can bring psychology, computer science, and education closer together to improve cumulative research and development of computer-supported learning environments. This book focuses on one term we believe has the potential to become a real boundary concept in CSCL – "scripting". However, the term script has different connotations and traditions in the different disciplines: For cognitive psychology, scripts are individual memory structures that guide us in understanding and acting in particular situations. In computer science, scripts are used by designers to create and adapt system behaviour and to guide learners through complex work or learning processes. In education, scripts are instructional scaffolds that structure the learning processes within groups of learners. From these different connotations, it becomes clear that efforts have to be taken among researchers in the three disciplines to more precisely describe their specific notions of what scripts are (and what they are not) and to more systematically relate theory and research on scripts between the three disciplines.

It is our belief that this book represents the state of the art of research on scripting computer-supported collaborative learning and that it provides a starting point for the development of a common understanding of scripting in CSCL. As such, we intend it to be a valuable resource for research, development and teaching.
The making of the book was facilitated by a variety of international research networks. We would therefore like to thank the European Network of Excellence Kaleidoscope within the 6th Framework Programme of the EU for providing the opportunity for authors of the book to communicate and exchange their ideas and findings. Likewise, the German-American Network in the Field of Technology-Supported Education (collaboratively funded by the German DFG and the U.S. NSF) made it possible that researchers from the U.S. and Germany came together several times to explore potential synergies with respect to research on technology-enhanced learning. Also, the DFG-funded Priority Program “Net-based Knowledge Communication in Groups” was helpful in bringing researchers with different perspectives about scripts together and thus facilitated interdisciplinary discourse on scripting CSCL. Concerning the preparation of the manuscript, Silvia Früh and Thomas Klebes shall be thanked for their precise and engaged work. Also, we would like to thank Marie Sheldon and Mary Panarelli at Springer for supporting the publication process in such a goal-oriented and yet flexible and supportive way. Finally, we would like to thank an anonymous reviewer for providing us with helpful comments concerning the structure and the content of the book.

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