

Contents

Acknowledgements	7
List of Figures	9
List of Tables	11
1. Introduction	13
1.1 Why Critical Data Education is Urgently Needed	13
1.2 Goals and Purpose of This Study	17
1.3 Methodological Approach and Research Questions	20
2. Literature Review	23
2.1 Why Do We Need Education about Datafication?	23
2.2 Educating about Data: (Critical) Data Literacies	36
3. Theoretical Framework	59
Introduction	59
3.1 Education about (Digital) Media	62
3.2 The Concept of (Politische) Bildung	70
3.3 Critical Pedagogy according to Paulo Freire	80
3.4 Preliminary Framework for Critical Datafication Literacy	90
4. Methods	97
4.1 Introduction and Project Design	97
4.2 Identifying, Analysing and Selecting Online Critical Data Literacy Resources	100
4.3 Learning from the Experts	105
4.4 Learning from the Educators	114
4.5 Knowledge Mobilisation: Developing the “Teaching about Data” Resource	124
4.6 Conclusion	126

5. Findings and Analysis	129
5.1 Online Critical Data Literacy Resources	129
5.2 Goals, Strategies and Challenges of Critical Data Literacy Resource Creators	144
5.3 Teaching about Data – Educators’ Perspectives, Experiences and Needs	172
6. Discussion	205
6.1 Goals for Understanding Data and Taking Action	205
6.2 Findings on Resources and Contexts of Teaching	214
6.3 New Insights on Strategies for Teaching about Datafication	217
6.4 Insights for an Extended Framework for Critical Datafication Literacy	221
7. Conclusion	225
7.1 A Theoretically and Empirically Grounded Framework for Critical Datafication Literacy	225
7.2 Key Theoretical and Empirical Insights	227
7.3 Contributions of the Study, Limitations and Future Research	233
References	239

Appendix

Appendix I: Methodology Annotations	267
Appendix II: Content Analysis Sample	287
Appendices III – IX	293