. Record Nr.	UNINA9910886976303321
Autore	Sander Ina
Titolo	Critical Datafication Literacy : A Framework and Practical Approaches
Pubbl/distr/stampa	Bielefeld : , : transcript Verlag, , 2024 ©2024
ISBN	9783839473788
Edizione	[1st ed.]
Descrizione fisica	1 online resource (295 pages)
Collana	Digitalität und Bildung ; ; 2
Soggetti	SOCIAL SCIENCE / Media Studies
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Cover Contents Acknowledgements List of Figures List of Tables 1. Introduction 1.1 Why Critical Data Education is Urgently Needed How Digital and Data Technologies Affect Our Lives The Knowledge Gap Responses to Challenges around Datafication Why Technical Skills Are Not Enough 1.2 Goals and Purpose of This Study Background of the Study The Study's Novel Approach to Researching Critical Data Literacy Goals of the Study The Purpose of the Research 1.3 Methodological Approach and Research Questions 2. Literature Review 2.1 Why Do We Need Education about Datafication? 2.1.1 Introduction into Critical Data Studies The Datafication of Our Societies Critical Data Studies - Research on Risks around Datafication 2.1.2 Citizens' Lacking Knowledge and Resignation Informed Consent? Lacking Knowledge Internet Users Feel Uncomfortable Resignation towards Data Practices Resignation as a Reasonable Response? 2.1.3 Working towards a More Informed Citizenry Calls for More Literacy and Public Involvement Data Activism's Role in Challenging Datafication and Raising Awareness Calls for More Literacy about Datafication More Knowledge = More Concern? 2.1.4 Conclusion 2.2 Educating about Data: (Critical) Data Literacies 2.2. How Is Data Literacy 'Traditionally' Understood? Data Literacy as Data (Science) Skills Creative Data Literacy Approaches 2.2. Fostering Critical Perspectives Through the Use of Data Critical Perspectives Originating from a Technical Background Applying Critical Pedagogy

1.

to Data Literacy Approaches -- Practical and Critical Approaches for Specific Audiences -- Concepts That Begin to Consider Datafication as Part of Active and Practical Approaches -- 2.2.3 Towards Critical Understanding of Datafication.

An Extended Definition of Big Data Literacy - D'Ignazio and Bhargava -- Educator's Data Literacy - Raffaghelli -- Critical Digital Literacy -Pötzsch -- Information Literacy in the Digital Age - Polizzi -- Data Citizenship - Carmi, Yates et al. -- Critical Digital and Data Literacies -Pangrazio et al. -- Own Initial Conceptualisation: Critical Big Data Literacy -- Preliminary Conclusion: Insights and Shortcomings of Existing (Critical) Data Literacies -- 2.2.4 Practically Implementing Critical Data Literacies -- 2.2.5 Conclusion -- 3. Theoretical Framework -- Introduction -- What is Education (Not)? -- 3.1 Education about (Digital) Media -- 3.1.1 Introduction - Terms, Concepts and Background of the Field -- 3.1.2 Baacke: A 'Classic' Approach to Media Literacy -- 3.1.3 Developments and Controversies in Media Literacy Concepts -- 3.1.4 Mihailidis: Critically Reflecting Media Structures and Enabling Agency -- 3.1.5 Digital Literacy -- 3.1.6 Aßmann et al.: Big Data Practices as a Challenge for Media Education --3.1.7 Conclusion -- 3.2 The Concept of (Politische) Bildung -- 3.2.1 Humboldt: The Original Concept of Bildung -- 3.2.2 Developments and Today's Understandings of Bildung -- 3.2.3 Politische Bildung - Origin, Developments and Key Text by Autorengruppe Fachdidaktik -- What is Politische Bildung and Where Does It Originate? -- "What Is Good Politische Bildung?" - Key Text by Autorengruppe Fachdidaktik -- 3.2.4 (Politische) Bildung about Big Data -- Bildung about Big Data -- Media Literacy as a 'Classic Goal' of Politische Bildung -- Politische Bildung about Big Data -- 3.2.5 Conclusion -- 3.3 Critical Pedagogy according to Paulo Freire -- 3.3.1 The Field of Critical Pedagogy -- 3.3.2 Paulo Freire's Work on Critical Pedagogy -- Life and Work of Paulo Freire --Key Text - Pedagogy of the Oppressed. Key Relevant Aspects of Freire's CP: Dialogue, Critical Thinking and "Conscientização" -- Parallels to Bildung and Digital and Data Literacy -- 3.3.3 Applying Freire's Critical Pedagogy to Data Literacy Approaches -- Data Literacy Based on Freire - A Popular Approach --Tygel and Kirsch: Contributions of Paulo Freire to Critical Data Literacy -- Markham: "Critical Pedagogy as a Response to Datafication" -- 3.3.4 Conclusion -- 3.4 Preliminary Framework for Critical Datafication Literacy -- 3.4.1 The Terminology -- 3.4.2 The Goals -- 3.4.3 The Content -- 3.4.4 The Implementation -- 4. Methods -- 4.1 Introduction and Project Design -- 4.2 Identifying, Analysing and Selecting Online Critical Data Literacy Resources -- 4.2.1 Content Analysis as a Method -- Limitations of Content Analysis -- 4.2.2 Conducting the Content Analysis -- Sources and Sampling --Codebook and Coding Sheet -- Piloting -- 4.3 Learning from the Experts -- 4.3.1 Qualitative Interviewing and the Special Case of Expert Interviews -- Expert Interviews -- Strengths and Weaknesses of Expert Interviews -- 4.3.2 The Sampling Process and the Final Sample --Purposive Sampling -- Sample Size -- Sample Selection Process -- The Final Sample -- 4.3.3 Developing the Interview Guide -- Cooperation with the "Civic Participation Project" by the Data Justice Lab --Developing the Final Interview Guide -- 4.3.4 Preparing and Conducting the Interviews -- 4.3.5 Analysing the Interviews -- 4.4 Learning from the Educators -- 4.4.1 Qualitative Online Surveys --Advantages of SelfAdministered Online Questionnaires -- The Special Case of Qualitative Online Surveys -- Limitations and Challenges of

Qualitative Online Surveys -- 4.4.2 The Survey Sample -- Aiming at Diversity rather than Representativeness -- Finding the Sample -- The

Final Sample -- 4.4.3 Developing the Questionnaire.

Methodological Considerations about Questionnaire Design --Translation of the Questionnaire -- Pilot Study -- Final Questionnaire -- 4.4.4 Analysing the Educator Survey -- Analysing the Closed and SingleLine Questions -- Thematic Content Analysis of the Open Survey Questions -- 4.5 Knowledge Mobilisation: Developing the "Teaching about Data" Resource -- What is Knowledge Mobilisation? -- Mobilising Findings on Critical Data Literacy -- 4.6 Conclusion -- 5. Findings and Analysis -- 5.1 Online Critical Data Literacy Resources -- 5.1.1 Identifying Online Critical Data Literacy Resources -- 5.1.2 Characteristics and Origins of Critical Data Literacy Resources --International and Multilingual Resources -- Diverse Creator Backgrounds -- Various and Unusual Formats -- The (No) OneSize FitsAll Approach -- 5.1.3 How Do the Resources Implement Critical Data Literacy? -- Many Popular Characteristics Identified -- Practical Advice for Data Protection - (Too much) Individual Responsibility? --Other Types of Practical Advice -- Appealing Visualisations -- 5.1.4 Conclusion and Discussion -- Introducing the Topic of Datafication --Novel Findings regarding the Resources' Origins and Formats --Parallels between the Theory and Practice? -- 5.2 Goals, Strategies and Challenges of Critical Data Literacy Resource Creators -- 5.2.1 Creation Contexts of Critical Data Literacy Resources -- 5.2.2 Critical Data Literacy Resource Creators' Goals -- Awareness and Basic Understanding -- Thinking Critically about Datafication -- People Take Action -- 5.2.3 Creators' Strategies and Principles for Implementing Critical Data Literacy into Practice -- Creating Personal Involvement --Resources Should Be Accessible and Fun -- Different Audiences Need Different Approaches -- WellFounded Decisions on Design and Content -- The Dilemma of Data Protection Advice. 5.2.4 Challenges and Practical Considerations in Developing Critical Data Literacy Resources -- Dilemma: Evaluating Resource While Protecting User Data -- Funding of Resources -- Sustainability --Interest in Using Resource in an Educational Setting -- 5.2.5 Conclusion and Discussion -- Goals: What Does a 'Critically Data Literate' Citizen Look Like? -- Strategies and Principles for Implementing Critical Data Literacy into Practice -- Challenges and Practical Considerations -- 5.3 Teaching about Data - Educators' Perspectives, Experiences and Needs -- 5.3.1 Learning from Educators from Different Backgrounds -- 5.3.2 Educators' Experiences and Goals for Teaching about Digital and Data Technologies -- Teaching about Different Aspects of Digital Technologies and Datafication -- Topics and Goals of the Educators -- Key Goal of Educators: Understanding and Reflection of Digital Technologies -- From Basic Usage Skills to Digital SelfDefence: Educators Aim for Practical Skills -- Supporting Learners in Taking Action -- 5.3.3 How Do Educators Teach about Digital and Data Technologies? -- Educators' Access to Information and Educational Material -- Resources Recommended by Educators --Usefulness of Specific Formats for Educators -- Educators' Methods and Approaches for Teaching about Data -- Are Educators' Experiences in Line with Key Research Findings? -- 5.3.4 What Challenges Emerge? What Do Educators Need and Wish for? -- General Challenges When Teaching about Digital Technologies and Data -- Educators' Challenges, Needs and Wishes for Educational Resources -- Educators' Satisfaction with Existing Educational Resources: "Basically There Is Nothing" versus "The Problem [...] Is the Abundance" -- Educator's Perspectives on Societal Challenges -- 5.3.5 Conclusion and Discussion.

Educators Cover a Variety of Topics in Their Teaching - Often Aiming

	for Similar Goals as the Resource Creators.
Sommario/riassunto	Despite the increasing influence of data technologies on our world, many people still lack a profound understanding of what this > datafication means for their lives and our societies. Ina Sander argues that this knowledge gap cannot be addressed by digital skills alone, but that more critical and empowering approaches are needed. Through a review of existing literacies, an analysis of established education concepts, and empirical research on online educational resources about datafication, she develops a framework for »critical datafication literacy «. Novel insights on the design strategies, pedagogical methods and challenges of practitioners who foster such education add to her analysis.