Record Nr. UNINA9910410011803321 Pedagogy for Technology Education in Secondary Schools: Research **Titolo** Informed Perspectives for Classroom Teachers / / edited by P. John Williams, David Barlex Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa **ISBN** 3-030-41548-1 Edizione [1st ed. 2020.] Descrizione fisica 1 online resource (348 pages) Contemporary Issues in Technology Education, , 2510-0327 Collana 607.1 Disciplina Soggetti Technical education Learning Instruction Educational technology Education—Research Engineering/Technology Education Learning & Instruction **Educational Technology** Research Methods in Education Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Nota di bibliografia Includes bibliographical references. Nota di contenuto An Introduction to Effective Pedagogies of Design and Technology Education: John Williams -- Technology Education: The Promise of Cultural-historical Theory for Advancing the field; Marilyn Fleer -- The case for Technology Habits of mind; Janet Hanson and Bill Lucas --Making the Invisible Visible: Pedagogies Related to Teaching and Learning about Technological Systems; Jonas Hallström and Claes Klasander -- Maker Education: Opportunities and Threats for Engineering and Technology Education; Gerald van Dijk, Elwin Savelsbergh, & Arjan van der Meij -- Signature Pedagogies for Designing: A Speculative Framework for Supporting Learning and Teaching in Design and Technology Education; Kay Stables --

Pedagogies for Enabling the use of Digital Technology; Deborah Winn -- Developing a Pedagogy of Critiquing as a key Dimension of Design

and Technology Education; Steve Keirl -- Question Think Learn: a Pedagogy for Understanding the Material World; B. von Mengersen, T. Wilkinson -- Pedagogy for Technical Understanding; Torben Steeg & David Hills-Taylor -- Capability, Quality and Judgement: Learners' Experiences of Assessment; Richard Kimbell -- Technology Education Pedagogy: Enhancing STEM Learning; John G. Wells, & Didier Van de Velde, Waiting a Picture from Didier -- Teaching Problem Solving in the Digital Era; Moshe Barak -- Pedagogical Approaches to Vocational Education; John Williams -- Teaching Technology in "poorly resourced" Contexts; Mishack T Gumbo -- Pedagogy Involving Social and Cognitive Interaction Between Teachers and Pupils; Niall Seery -- Philosophy of Technology for Children and Youth; S. Petrina -- Synoptic Review; David Barlex.

Sommario/riassunto

This book explores pedagogy appropriate for the secondary school technology education classroom. It covers the dimensions of pedagogy for technology with scholarly research, including information strongly related to practice. The book discusses the nature of technology courses in secondary schools across various jurisdictions and considers how they might be viewed with regard to different epistemological frameworks. The writing is informed by, but not limited to, research and strongly related to practice with acknowledged experts in the field of technology education contributing chapters supported by evidence from technology education research or other fields. The authors speculate on pedagogical possibilities in their areas of expertise in order to consider pedagogical possibilities and develop a view of where pedagogy for technology education should move and how teachers might respond in the way they develop their practice.