

1. Record Nr.	UNINA9910743215903321
Titolo	Applications of Research in Technology Education : Helping Teachers Develop Research-Informed Practice / / edited by P. John Williams, Belinda von Mengersen
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2022
ISBN	9789811678851 9811678855 9789811678844 9811678847
Edizione	[1st ed. 2022.]
Descrizione fisica	1 online resource (277 pages)
Collana	Contemporary Issues in Technology Education, , 2510-0335
Disciplina	379
Soggetti	Educational technology Technical education Science - Study and teaching Education - Curricula Education and state Digital Education and Educational Technology Engineering and Technology Education Science Education Curriculum Studies Educational Policy and Politics Ensenyament tècnic Política educativa Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	1. Introduction -- 2. An exploration of the perceptions of Design and Technology subject leaders on their practices in sustaining and developing the subject within the secondary school curriculum -- 3. Assessment for learning in design and technology: An ethnographic study in Mauritius state secondary schools -- 4. The potential for a

future-focused curriculum in New Zealand: The perceptions and practice of six secondary school technology teachers -- 5. The formation of Science, Technology, Engineering and Mathematics Teacher Identities: Pre-service teacher's perceptions -- 6 -- A phenomenological study of pre-service teachers' subject knowledge in secondary design and technology -- 7. The Impact of the Design Process on Student Self-Efficacy and Content Knowledge -- 8. Enhancing Elementary Teacher Practice Through Technological/Engineering Design Based Learning -- 9. Investigation of Problem Solving Skills Among 12th Grade Engineering Students -- 10. Teaching and learning science through designactivities - A revision of design-based learning -- 11. Investigating the role of spatial ability as a factor of human intelligence in technology education: Towards a causal theory of the relationship between spatial ability and STEM education -- 12. A human-centered design approach to fashion design education -- 13. Developing a framework for integrating competences, skills and knowledge in design and technology in secondary schools -- 14. How children solve engineering design problems: a study of design process patterns using sequential analysis -- 15. Enacting technology education: Investigating the relationship between goals for teaching technology and enacted practices.

---

#### Sommario/riassunto

This book brings together significant international research in technology education through a focus on contemporary Ph.D. theses. It highlights the conceptual underpinnings and methodology of each research project and elaborates on how the findings are relevant for practitioners. This book addresses the common disjunction between research conducted and an awareness of that research by practitioners. It examines the extent to which the research aligns with different justifications for teaching technology in schools in economic, utilitarian, democratic, cultural, and other such contexts.

---