

Investigação e Práticas em Educação em Ciências, Matemática e Tecnologia

Research and Practices in Science, Mathematics and Technology Education

Section 4: Books and more: critical reviews and suggestions for integrating teaching resources Secção 4: Livros e companhia: recensões críticas e sugestões de integração de recursos didáticos

# CRITICAL REVIEW OF "BECOMING SCIENTIFIC – DEVELOPING SCIENCE ACROSS THE LIFE-COURSE" (2020) FROM SAIMA SALEHJEE & MIKE WATTS

RECENSÃO CRÍTICA DE "TORNAR-SE CIENTÍFICO – DESENVOLVER(-SE) ATRAVÉS DA CIÊNCIA AO LONGO DA VIDA" (2020) DE SAIMA SALEHJEE & MIKE WATTS

RESEÑA CRÍTICA DE "CONVERTIRSE EN CIENTÍFICO - DESARROLLAR LA CIENCIA A LO LARGO DE LA VIDA " (2020) DE SAIMA SALEHJEE & MIKE WATTS

### Betina da Silva Lopes

Research Centre on Didactics and Technology in the Education of Trainers (CIDTFF) Department of Education and Psychology, University of Aveiro, Portugal blopes@ua.pt



Figure 1 Capa do livro "Becoming scientific: developing science across the Life Course", Saima Salehjee & Mike Watts, 2020".



## **1. SUMMARY OF THE BOOK AND FEATURES**

"Do some people come 'sciencey-ready flavoured', or is it possible to 'science-marinate' them over time?" (Salehjee & Watts, 2020, p. 2).

This book addresses a long debate with a fresh approach. Why is science and science learning important? How can it be promoted? While the relevance and utility of scientific knowledge in people's life is commonly approached by focusing on competences and scientific literacy, the authors of this book engage in a wider perspective, embracing an ecological view of science identity, where the emotional dimension of each individual along the person's life-course is not dismissed. Based on their long experience as science educators, the authors introduce the reader to a complex but comprehensive framework that instigates the problematizing of science education and ultimately to reflect on their personal science learning stories.

The 11 chapters that comprise the book are sustained by an extensive literature review on key concepts such as science capital, science identity, science literacy and complex learning theory. All chapters together orbit around one main goal: to understand why science learning becomes a life-long project for some individuals but not for others.

Embracing the richness and complexity of science education involves recognising that there is no single strategy or recipe to develop science identities. There is, indeed, an infinite number of possibilities, waiting to be tasted.

## 2. POTENTIAL CONTRIBUTIONS TO SCIENCE, MATHEMATICS AND TECHNOLOGY EDUCATION

The argumentation between the chapters is deeply interconnected, however each chapter is worth reading on its own, making the book an excellent reference for educational purposes such as pre-service or in-service teacher courses.

The two main ingredients that merit acclaim for contributing to science education are:

(i) Comprehensive and involving structure: the specific content of each chapter is explored not just in words but also sustained with at least one explanatory scheme. The articulation of text and image as well as the 'chapter summary' assists the reader in structuring his/her own thoughts before moving on to the next challenge.

(ii) Humanistic dimension of science (learning): as previously claimed the focus on the importance of science education has been more on its relevance towards competence development and informed citizenship, less on the personal and emotional dimension of the persons that actually can, should or will develop those competences within the frame of his/her life-course. The main contribution of the book lies within the fact that the reader does not have access only to knowledge, but to people. More than 52 personal life-stories (including those by the authors) into or away of science are explored. This means that, on average, every fourth page you get the chance of 'meeting' a person and his or her love, hate or complicate relationship with science. These personal stories come from different sides of the globe (Africa, Asia and Europe) sustaining an international perspective of science education which is of crucial importance for each (future) science teacher around the world.

#### REFERENCES

Salehjee, S. & & WATTS, M. (2020). Becoming Scientific – Developing Science across the life-course: Stories and insights for the journey. Cambridge Scholars Publishing.

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