This is an outstanding book in STEM education. It is written to develop an understanding of the nature of STEM knowledge for students, lecturers, and researchers. This book explores critical questions in STEM education.

In the preface, declare that this book is appropriate for doctoral students and the authors’ team. It was beginning from a graduate seminar in science education where the authors explored the natures of the individual STEM disciplines (science, technology, engineering, and mathematics) and research in STEM education alongside their students. The intention was to find overlaps among the characteristics of science, technology, engineering, and mathematics knowledge and develop an idea about the nature of STEM from those overlapping ideas.

From this book, the reader will learn about the fundamental understanding of each part of STEM, in nature of scientific knowledge, nature of technology, nature of engineering, and nature of mathematics and its impact. Subsequently, the reader will learn about critique questions in STEM and teaching STEM. From both parts, the reader will know more about the positive and negative sides of implementing STEM education.

Cause of this book is an editorial book, so each chapter has a different author. It provides several terms that add to our insight into the meaning and usage of these terms. In the first part, the authors clearly display the basic and historical definitions of STEM disciplines. Moreover, the authors provide how to teach and conduct the research in each part of STEM education. The second part gives readers a glimpse of the critical questions asked by science teachers and researchers about STEM teaching and learning and how they explore these questions. This section reflects STEM as a compilation of the four disciplines, through which interdisciplinary connections are made.

The third part explores and discusses the overall applied constructs of STEM education, such as public perceptions of STEM education, phenomenological case studies on STEM experiences, and content analyses of STEM education documents and texts. Furthermore, this section reported the importance of STEM that has been recognized by different stakeholders.

The more interesting is in the last section of this book, there are reflections of each part, who provide reviews from other authors and other points of view. In addition, it gives statements and questions that allow multiple interpretations. Furthermore, it provides questions that invite readers to be more interested in researching and having a deeper discussion about STEM education.

This is a good book, which is written systematically and in detail with evidences and its implementations.