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| 1. Record Nr.           | UNINA9910380749003321                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Titolo                  | Encyclopedia of mathematics education / / edited by Stephen Lerman                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Pubbl/distr/stampa      | Cham, Switzerland : , : Springer, , 2020                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| ISBN                    | 9783030157890<br>303015789X                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Edizione                | [Second edition]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Descrizione fisica      | 1 online resource (937 pages) : illustrations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Collana                 | Springer Reference                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Disciplina              | 510.71                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Soggetti                | Mathematics - Study and teaching<br>International education<br>Comparative education<br>Education - Curricula<br>Mathematics Education<br>International and Comparative Education<br>Curriculum Studies                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Lingua di pubblicazione | Inglese                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Formato                 | Materiale a stampa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Livello bibliografico   | Monografia                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Nota di contenuto       | New ideas in the politics of mathematics education -- Working with minority students -- Mathematics and art -- Other cross-disciplinary studies -- Studies in emotions and mathematics -- New frameworks for analysis of mathematics classrooms -- Using simulations in mathematics teacher education. .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Sommario/riassunto      | The Encyclopedia of Mathematics Education is a comprehensive reference text, covering every topic in the field with entries ranging from short descriptions to much longer pieces where the topic warrants more elaboration. The entries provide access to theories and to research in the area and refer to the leading publications for further reading. The Encyclopedia is aimed at graduate students, researchers, curriculum developers, policy makers, and others with interests in the field of mathematics education. It is planned to be 700 pages in length in its hard copy form but the text will subsequently be up-dated and developed on-line in a way that retains the integrity of the ideas, the responsibility for which will be in the hands of the Editor-in-Chief and |

the Editorial Board. This second edition will include additional entries on: new ideas in the politics of mathematics education, working with minority students, mathematics and art, other cross-disciplinary studies, studies in emotions and mathematics, new frameworks for analysis of mathematics classrooms, and using simulations in mathematics teacher education. Existing entries will be revised and new entries written. Members of the international mathematics education research community will be invited to propose new entries. Editorial Board: Bharath Sriraman Melony Graven Yoshinori Shimizu Ruhama Even Michele Artigue Eva Jablonka Wish to Become an Author? Springer's Encyclopedia of Mathematics Education's first edition was published in 2014. The Encyclopedia is a "living" project and will continue to accept articles online as part of an eventual second edition. Articles will be peer-reviewed in a timely manner and, if found acceptable, will be immediately published online. Suggested articles are, of course, welcome. Feel encouraged to think about additional topics that we overlooked the first time around, and to suggest colleagues (including yourself!) who will want to write them. Interested new authors should contact the editor in chief, Stephen Lerman, at [lermans@lsbu.ac.uk](mailto:lermans@lsbu.ac.uk), for more specific instructions.

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| 2. Record Nr.           | UNINA9911104485403321                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Autore                  | Okereke Chima <1946->                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Titolo                  | Achieving successful and sustainable project delivery in Africa : how to implement effective and efficient project management practices and policies / / Dr. Okoro Chima Okereke                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
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| Descrizione fisica      | 1 online resource (xxii, 251 pages) : illustrations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Disciplina              | 363.60684                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Soggetti                | Project management - Africa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
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| Livello bibliografico   | Monografia                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Nota di contenuto       | Cover -- Half Title -- Title Page -- Copyright Page -- Table of Contents -- Preface -- Foreword -- Acknowledgements -- Chapter 1 Introduction -- Definition of Terms: Project Failure and Abandonment, Successful and Sustainable Project Delivery -- Main Objective of the Book -- References -- Section 1 Some Failed Projects and Project Deliverables -- Chapter 2 Examples of Failed Projects in Nigeria -- Failed Nigerian Steel Industry -- Initial Promising Start -- Causes of Failure -- Disagreement over Privatisation -- Reasons for the Privatisation -- Poor Return on Investment, Gross Inefficiency, and Source of Major Financial Drain on the Economy -- Zero Productivity with Regular Payments on Full Salaries -- Abandoned and Still to Be Reactivated Scientific Projects -- Why Was the Centre Not Completed? -- Going Forward: Road Map -- Observations and Comments -- Nigeria Is the Largest Importer of Petrol Because of Non-Functional Refineries [1] -- Comments -- Little or No Accountability and "White Elephant Projects" [2] -- Questionable and "White Elephant" Projects in Nigeria [2] and Other African Countries -- Causes of Failure -- Failure to Plan for Sustainability of Projects and Project Deliverables -- |

Personal Experience: Failure of Delta Steel Company -- Absence of Project Management Office: International Practice for National Project Management and Sustainability -- Going Forward -- Necessity for a Nigerian National Project Management Office -- Questions -- References -- Chapter 3 Examples of Failed Projects in Ghana -- Failure of the Ghana-STX Building Project: A 10 Billion Housing Project [1] -- Questions -- References -- Chapter 4 Examples of Failed Projects in South Africa -- Poor Planning and Implementation: Poor Project Management -- Nelson Mandela Bay Metropolitan Municipality Metro Buses: A Failed but Not Abandoned Project [2]. Failure in the Telecommunications Industry in South Africa [3] -- Microsoft's Digital Villages in South Africa [4] -- Comments -- Questions -- References -- Section 2 Failed Projects in Some Industries in Africa -- Chapter 5 Failures in Construction Industry -- Questions -- References -- Chapter 6 Failures in Water (Borehole) Projects -- Money "Wasted" on Water Projects in Africa -- New Operations Strategy -- Success of Boreholes in Ghana Government Support Scheme -- Comments -- Questions -- References -- Chapter 7 Failures in the Electricity Industry -- Poor Power Supply Causes Poor Economic Growth -- Questions -- References -- Chapter 8 Renewable Energy Projects -- Problem of Low Investments in Africa -- Lack of Access to, and Grossly Inadequate Reliable Grid Supply in Nigeria [2, 3] -- Grossly Deficient and Lack of Electricity Supply Extends the Cycle of Poverty -- Nigeria's Solar Projects: A Mixture of Failures and Successes -- An Example of a Failed Renewable Energy Project in Nigeria [4] -- Cause of Failure: Poor and Inadequate Maintenance -- Causes of Failure of Renewable Energy Projects in Nigeria -- Successful Renewable Energy Project in Nigeria [4] -- A Bright Spot in Jigawa -- Going Forward -- Comments and "Turning of the Tide" in the Renewable Energy Industry -- Why Should There Be a Section on Successes in a Book That Discusses Failed Projects? -- Successful Developments in the Solar Power -- Successful Streetlights in Lagos, 2016 -- Lagos State and UK Department for International Development (UK DFID) -- Building the Market for Solar Power in Nigeria -- The Programme Approach -- Progress and Improvement in Education as Solar Power Provides Affordable Energy for Classrooms, IT Lessons and Much More -- Maintenance Arrangement of Deliverables -- Observations and Comments -- Renewable Energy in Other African Countries [5].

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PPM Governance and Portfolio Management -- Governance Implications within the PMO -- Governance at the Programme and Project Level -- Management of Corporate Benefits in PPM Implementation, Challenges and Maintenance of PPM Implementation: Suggested Checklist of Key Components Required for Successful Project Portfolio Management -- A Suggested Checklist of Key Components Required for Successful Project Portfolio Management -- Questions -- References -- Chapter 14 Programme Management -- Programme Goals and Objectives -- Programme Roadmap -- Managing Successful Programmes -- A Specific Work Success Story -- Questions -- References -- Chapter 15 Project Management Life Cycle -- The Process Groups -- Initiating Process Group -- Activities of the Initiating Process Group -- Develop Project Charter -- Develop Preliminary Project Scope Statement -- Planning Process Group -- Develop Project Management Plan -- Scope Planning -- Scope Definition -- Create Work Breakdown Structure -- Activity Definition -- Activity Sequencing -- Activity Resource Estimating -- Activity Duration Estimating -- Schedule Development -- Cost Estimating -- Cost Budgeting -- Quality Planning -- Human Resources Planning -- Communication Planning -- Risk Planning -- Plan Purchases and Acquisitions -- Plan Contracting -- Project Execution Process Group -- Monitoring and Controlling Process Group -- Integrated Change Control Process -- Close Project Process -- Administrative Closure -- Contract Closure -- Questions -- Chapter 16 Transitioning from Project to Operations and Maintenance -- Questions -- Reference -- Section 5 Summary of Suggestions for the Achievement of Success and Sustainability in Project Delivery -- Chapter 17 Contributions of the Book for the Achievement of Success and Sustainability in Project Delivery -- Tabular Guideline for the Use of the Recommended Framework.

Appendix 1: National Project Management Office (NPMO) -- Appendix 2: Definitions and Explanations for Frequently Used Project Management Words for Busy Executives and Managers in Developing Countries -- Appendix 3: KPI-BSC Link -- Appendix 4: Enterprise Project Management Office (EPMO) -- Appendix 5: Tips for PPM Success -- Appendix 6: Programme Benefits Management -- Appendix 7: Key Performance Index (KPI) -- Appendix 8: Balanced Scorecard (BSC) -- Appendix 9: Enterprise Risk Management -- Index.

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## Sommario/riassunto

African nations have an underdeveloped industrial and economic base such as their water supply, electrical systems, roads, railways, etc. Massive funding is required to build each of these basic services to the levels of developed nations - funding they don't have. Many African countries rely on assistance from the government and global companies looking to invest or facilitate projects in the region. And for a variety of reasons, many of these projects fail or are inadequate to fulfil the needs of the nation. In order to facilitate their own economic development, African nations need to cultivate efficient project management practices and policies that will help them achieve their goal of sustainability. This book by a multidisciplinary project management consultant, contributes to the body of knowledge that

each African country can attain and sustain economic development by suggesting how to eliminate and correct most causes of failures of projects in construction, water treatment, electricity and renewable energy. It suggests that they should also be able to obtain the sustainable harvesting of the benefits of project deliverables which have been planned for in order to implement the various aspects of their economic development. The suggestions in this book will make a difference in project delivery and are comprehensive enough to create a root-and-branch change which will affect the people involved in making decision on projects and their delivery. Thus, project management teams and their managers, organization decision makers, companies looking to invest in the region, and politicians who plan the economy have to understand the causes of unhelpful practices and what needs to be done in order to produce productive and effective delivery of long-term sustainable project. The principal goal of this book is to advise public and private companies, and international organizations conducting projects in Africa on how to prepare themselves, their businesses and enterprises to solve the problems that cause failure of projects and abandonment of project deliverables. The book also recommends the necessity for a commercial enterprise or government entity to prepare and develop its vision, mission, and strategic objects to constitute the basis of a business plan which should be implemented for successful operations. After first identifying various failed and abandoned projects in Nigeria, Ghana and South Africa, the author provides an analysis of why these projects failed or were abandoned. By using methodologies of Organizational Project Management (OPM), Project Portfolio Management (PPM) and project management techniques, he suggests a framework for project delivery which could be used as a foundational structure and platform that will address the problem and provide solutions for the achievement of successful and sustainable project delivery in Africa.

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