1. Record Nr. UNINA9910455808703321 **Titolo** Transforming undergraduate education in science, mathematics, engineering, and technology [[electronic resource] /] / Committee on Undergraduate Science Education, Center for Science, Mathematics, and Engineering Education, National Research Council Pubbl/distr/stampa Washington, DC,: National Academy Press, 1999 **ISBN** 1-280-18648-8 9786610186488 0-309-59258-5 0-585-07497-6 Descrizione fisica 1 online resource (0 p.) 507.1/173 Disciplina Soggetti Science - Study and teaching (Higher) - United States Mathematics - Study and teaching (Higher) - United States Technology - Study and teaching (Higher) - United States Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Includes bibliographical references (p. 65-70). Nota di bibliografia Nota di contenuto Transforming Undergraduate Education in Science, Mathematics, Engineering, and Technology: Copyright: REVIEWERS: STAFF: Table of Contents; Foreword: A Call To Action; Preface; Executive Summary; VISION 1; VISION 2; VISION 3; VISION 4; VISION 5; VISION 6; Introduction; THIS REPORT; A Goal and an Agenda For Transforming Undergraduate Education in Science, Mathematics, Engineering, and Technology; REACHING THE GOAL: AN AGENDA; Visions For Undergraduate Education in Science, Mathematics, Engineering, and Technology: VISION 1: Background: Strategies for Promoting and Implementing Vision 1 VISION 2Background; Strategies for Promoting and Implementing Vision 2; VISION 3; Background; Strategies for Promoting and Implementing Vision 3; VISION 4; Background; Pre-service Education; In-service Education; Strategies for Promoting and Implementing Vision 4; VISION

5; Background; Rewards and Recognition; Resources, Tools, and

Infrastructure; Strategies for Promoting and Implementing Vision 5; VISION 6: Background: Strategies for Promoting and Implementing Vision 6: Conclusion and Epilogue: References Appendix A Overview of the Committee on Undergraduate Science Education's Regional Symposia and Topical ForumsREGIONAL SYMPOSIUM SERIES AND TOPICAL FORUMS: INTRODUCTION: REGIONAL SYMPOSIUM SERIES: STRUCTURE AND DEMOGRAPHICS: REGIONAL SYMPOSIA: GENERAL THEMES; Theme I: Options for Action for Students; Theme II: Options for Action for Faculty: Theme III: Options for Action for Institutions; REGIONAL SYMPOSIUM SERIES: CONCLUSION; TOPICAL FORUMS: OVERVIEW; TOPICAL FORUMS: STRUCTURE AND DEMOGRAPHICS; TOPICAL FORUMS: SYNOPSES; Forums Hosted by Professional Organizations and Associations Forums Hosted by UniversitiesForum Hosted by a State Educational Organization: TOPICAL FORUMS: CONCLUSION: Appendix B Institutions And Organizations Represented At The Regional Symposia And Topical Forums; Appendix C Biographical Sketches of Members of the Committee on Undergraduate Science Education (CUSE); CURRENT MEMBERS: Former Members: Appendix D Introducing the National Science Education Standards; WHAT ARE THE NATIONAL SCIENCE EDUCATION STANDARDS?; WHY DO WE NEED THE STANDARDS?; WHO DEVELOPED THE STANDARDS?; THE VISION OF THE STANDARDS; HOW DO STUDENTS LEARN SCIENCE?