

1. Record Nr.	UNINA9910954503103321
Titolo	Learning and understanding : improving advanced study of mathematics and science in U.S. high schools / / Committee on Programs for Advanced Study of Mathematics and Science in American High Schools ; Jerry P. Gollub ... [et al.], editors
Pubbl/distr/stampa	Washington, DC, : National Academy Press, c2002
ISBN	9786610184705 9780309170802 030917080X 9781280184703 1280184701 9780309512206 0309512204
Edizione	[1st ed.]
Descrizione fisica	1 online resource (587 p.)
Collana	Learning and understanding: improving advanced study of mathematics and science in U.S. high schools
Altri autori (Persone)	GollubJ. P. <1944->
Disciplina	507.1/073
Soggetti	Mathematics - Study and teaching (Secondary) - United States Science - Study and teaching (Secondary) - United States Advanced placement programs (Education)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"Center for Education, Division of Behavioral and Social Sciences and Education, National Research Council."
Nota di bibliografia	Includes bibliographical references (p. 206-227) and index.
Nota di contenuto	Front Matter -- Preface -- Acknowledgments -- Contents -- Executive Summary -- 1 Introduction -- 2 Context of Advanced Study -- 3 The Advanced Placement Program -- 4 The International Baccalaureate Programme -- 5 Other Opportunities and Approaches to Advanced Study -- 6 Learning with Understanding: Seven Principles -- 7 Designing Curriculum, Instruction, Assessment, and Professional Development -- 8 Analysis of the AP and IB Programs Based on Learning Research -- 9 Analysis of AP and IB Curriculum, Instruction, Assessment, and Professional Development -- 10 Uses, Misuses, and Unintended Consequences of AP and IB -- 11 Recommendations -- References -- Appendix A Overview of Panel Findings and

Sommario/riassunto

This book takes a fresh look at programs for advanced studies for high school students in the United States, with a particular focus on the Advanced Placement and the International Baccalaureate programs, and asks how advanced studies can be significantly improved in general. It also examines two of the core issues surrounding these programs: they can have a profound impact on other components of the education system and participation in the programs has become key to admission at selective institutions of higher education. By looking at what could enhance the quality of high school advanced study programs as well as what precedes and comes after these programs, this report provides teachers, parents, curriculum developers, administrators, college science and mathematics faculty, and the educational research community with a detailed assessment that can be used to guide change within advanced study programs.