Chapter 1
The Role of Information in the Policy Process: Implications for the Examination of Research Utilization in Higher Education Policy
Erik C. Ness

Abstract
Connecting research and policy persists as one of higher education's most pressing challenges. Yet, the extent to which states rely on research evidence to craft policy remains under-studied. This chapter examines research utilization and public policy theory for their conceptual implications on how researchers might examine the role of information in the higher education policymaking process. The review of literature includes education-related studies, but also reviews classic studies drawn from political science, policy analysis, and evaluation. The inventory of how five theories of the policy process incorporate the research utilization literature identifies possible conceptual extensions of these frameworks and holds promise for increasing our understanding of how research influences policy. This chapter also discuss the influence of two types of intermediary organizations—state higher education agencies and regional compacts—on research utilization in the higher education policymaking process.

Chapter 2
From Theory to Action: Exploring the Institutional Conditions for Student Retention
Vincent Tinto

Abstract
Though access to higher education in the United States has increased over the past several decades, similar increases in college completion have not followed suit. Despite years of effort, we have, in large measure, been unable to translate the promise increased access affords to students, in particular those of low-income and underserved backgrounds, into the reality of college completion especially as measured by 4-year degrees. That this is the case is reflective in part of our inability to translate what we have learned from research on student retention into a reasonable set of guidelines for the types of actions and policies institution must put into place to increase rates of college completion.

Chapter 3
Reform Efforts in STEM Doctoral Education: Strengthening Preparation for Scholarly Careers
Ann E. Austin

Abstract
Complex societal problems, concerns about the quality of undergraduate education and the supply and talent of faculty who teach them, and questions about the quality of graduate students' experiences as they pursue advanced degrees have motivated efforts to reform and strengthen doctoral education in STEM fields. This chapter examines these efforts to improve STEM doctoral education. The chapter begins with an exploration of the context in which STEM graduate education is situated and the recent events that have created a climate for reform. Second, it discusses particular issues toward which reform initiatives in STEM doctoral education have been directed. Third, the chapter reviews the kinds of reform efforts underway, highlights several specific examples of initiatives and programs, and presents the available evidence concerning the impact and outcomes of those efforts. The chapter concludes with an agenda for research and strategic action concerning reform in STEM doctoral education.
Chapter 4
Toward a More Complete Understanding of the Role of Financial Aid in Promoting College Enrollment: The Importance of Context
Laura W. Perna

Abstract
Through a review of prior research, this chapter argues that knowledge about how student financial aid programs can best promote college enrollment is incomplete in part because existing research does not devote sufficient attention to the “context” in which these programs operate or the ways that context mediates the effects of aid. The chapter begins by explaining the need to increase educational attainment, the ways inadequate finances limit educational attainment, and the role of financial aid in addressing financial barriers. Then the characteristics of student financial aid programs are described and what is known from existing research about the effects of financial aid on college-related behaviors is summarized. A conceptual model for understanding the ways “context” may influence the relationship between financial aid and college enrollment is proposed. Building on this framework, the chapter concludes by offering questions to guide future research, as well as recommendations for fruitful research strategies.

Chapter 5
The Pursuit of Student Success: The Directions and Challenges Facing Community Colleges
Linda Serra Hagedorn

Abstract
Community colleges are the postsecondary entry point for a diverse set of students including many students of color, those from low-income backgrounds, as well as students with postsecondary dreams but with academic records that will not merit admission to the nation’s elite universities. Using a framework based on the social theories of immigration this chapter shows how community colleges have been an alienated subclass among postsecondary institutions. This chapter argues that the twenty-first century community college must emerge as a respected institution with a unique identity while continuing the types of programs and support structures designed to bolster the success of students who face multiple barriers and stumbling blocks on their path to success.

Chapter 6
Studying the Impact of Parental Involvement on College Student Development: A Review and Agenda for Research
Linda J. Sax and Katherine Lynk Wartman

Abstract
Although parental involvement in higher education has received significant attention on college campuses and by the media, this topic has received scarce consideration in the empirical literature on college student development. The chapter begins with a review of theoretical concepts and methodologies used in research on parental involvement in higher education. Next, the chapter reviews relevant findings from this body of work, both quantitative and qualitative. Finally, the chapter concludes by proposing a research agenda to advance our understanding of the implications of this phenomenon for college students, researchers, and higher education practitioners.
Chapter 7
Achievement Emotions in Higher Education
Reinhard Pekrun and Elizabeth J. Stephens

Abstract
Achievement emotions are ubiquitous in college settings. Apart from test anxiety research and attributional studies, however, higher education research has neglected these emotions. We argue that more research on the occurrence, functions, origins, and regulation of achievement emotions is needed, addressing both outcome emotions related to success and failure, such as hope, pride, anxiety, shame, and hopelessness, and activity emotions such as the enjoyment and boredom experienced by students in higher education. The chapter addresses (1) concepts of achievement emotions; (2) occurrence and diversity of the achievement emotions experienced by college students; (3) measures assessing these emotions; (4) functions of achievement emotions for students’ academic learning and performance; (5) individual and social origins, with a special focus on Pekrun’s control-value theory of achievement emotions; and (6) emotion regulation, coping, and therapy related to achievement emotions. In conclusion, implications for educational practice and higher education research are discussed.

Chapter 8
The Use of Panel Data Models in Higher Education Policy Studies
Liang Zhang

Abstract
Panel data consist of multiple units observed at multiple time periods. Due to the availability of panel data and recent development in econometrics, panel data analysis has become an increasingly popular and important analytical tool in social and behavioral sciences; however, the use of panel data models in higher education research is a fairly recent phenomenon. This handbook chapter provides a discussion on panel data, focusing on different models of panel analysis (including for example, fixed and random effects models). Variations of panel data models such as pooled cross sections, difference-in-differences, and random coefficient models are also briefly discussed. In addition, two empirical examples are presented to illustrate the use of panel data models in higher education policy studies. The chapter concludes with a brief discussion of popular statistical software and procedures capable of performing panel analysis.

Chapter 9
Enlarging Our Understanding of Glass Ceiling Effects with Social Closure Theory in Higher Education
Jerlando F. L. Jackson and Raul A. Leon

Abstract
Institutions of higher education have committed significant resources to diversity efforts over the past 50 years (Williams, Berger, & McClendon, 2005). For the most part, these resources have been allocated to improve student representation and experiences for women and persons of color (Jackson, 2004a). In doing so, less attention has been given to similar organizational experiences for women and professionals of color. Therefore, fewer research and practice-based resources are available to address workplace discrimination challenges in higher education. Accordingly, this chapter draws heavily from glass ceiling effects research conducted in business and the armed forces to help understand how higher education can foster workforce diversity. Concurrently, social closure theory is introduced as an analytical framework to advance organizational ownership of workplace discrimination in general and glass ceiling effects in particular.
Chapter 10
Cultural Perspectives of Academia: Toward a Model of Cultural Complexity
Ryan E. Smerek

Abstract
This chapter describes and analyzes studies of organizational culture in higher education through the perspectives of integration, differentiation, and fragmentation. Cultural analyses are reviewed that perceive culture as unitary at the organizational level-of-analysis, differentiated and conflict-driven, such as the cultures of academic disciplines and academic versus administrative subcultures, and cultural analyses that describe the ambiguity and enduring tensions within higher education organizations. These studies are compared to conceptualizations of colleges and universities as loosely-coupled systems, professional bureaucracies, and multiversities. Based on this literature review, a framework of cultural complexity is proposed. The implications of the framework and perspectives are explored, including whether better knowledge is a result of interdisciplinary scholarship, differentiated inquiry, or the pervasiveness of ambiguity and unclear goals.

Chapter 11
Research Libraries in the Twenty-First Century
Yvonna S. Lincoln

Abstract
Libraries are a key resource in maintaining research, funding and teaching capabilities of research extensive universities today, but they rarely receive significant research attention, treated instead as a kind of “add-on” to other considerations. Yet research libraries and their search and linking capabilities are changing the way in which faculty and students alike work, and some suggest, the way in which we even think, about knowledge, knowledge production, and our relationships with the world. Libraries—and librarians—are undertaking roles which go far beyond collecting, cataloguing, storing and retrieving information, and are now working as knowledge producers themselves. As well, librarians in research extensive universities are now key to organizing new information and knowledge, creating new accessibility paths for faculty and students. This chapter also considers the role of major research libraries in teaching in the knowledge economy; contributing to the development of new metrics for evaluating libraries, their collections and their services; the economics of collections and collection development including space and space renovation which meets new teaching needs and modes; the role of funding and development; the creation and expansion of digital libraries and archives; and libraries’ contributions to the creation of research collaborative across time and space.

Chapter 12
An Examination of Faculty Work: Conceptual and Theoretical Frameworks in the Literature
Vicki J. Rosser and Lynn N. Tabata

Abstract
There have been numerous books, monographs, articles, and opinion pieces examining the various roles and responsibilities regarding faculty work (i.e., teaching and advising, research and scholarship, and internal and external service activities). These roles and responsibilities consist of an incredible range of valued and tiered activities that add to the complexity, as well as to the debate, to adequately define and measure faculty workload and productivity, including the influence of culture and technology. The
purpose of this chapter was three-fold: to examine the various scholarly approaches within the burgeoning research conducted on faculty workload and productivity, to explore the various conceptual and theoretical frameworks within the empirical research, and to present those motivational or affective responses to the quality of faculty worklife, such as job satisfaction, institutional morale, and the intent to stay in or leave an academic position.

Chapter 13
Herding Cats and Big Dogs: Tensions in the Faculty-Administrator Relationship
Marietta Del Favero and Nathaniel J. Bray

Abstract
This chapter builds on previous work of the authors by examining a much underexplored limitation to effective shared governance in higher education—the fragile relationship between faculty and administrators. An assessment of the literature was undertaken to uncover evidence of the sources of tension in the relationship in three academic contexts where faculty and administrators interact: (i) curriculum and teaching; (ii) academic entrepreneurship and research; and, (iii) hiring, promotion and tenure, and reward systems. The chapter concludes by suggesting theoretical approaches which might advance our knowledge about this relationship as one step toward improvement in faculty-administrator collaboration and ultimately in shared governance processes.