

2006) and multilevel models (e.g., Daun-Barnett, 2008b). These studies provide a body of research that overcomes some of the omitted variable problems associated with the earlier multivariate studies of student outcomes.

Finally, economists affiliated with the National Bureau of Economic Research (NBER), education foundations, and other organizations have produced research studies that address some of the problems with causal inference. This includes difference in differences as a method of comparing states to examine the effects of state merit aid programs (e.g., Dynarski, 2002b), regression discontinuity studies on the impact of guaranteed student aid awards (DesJardins & McCall, 2009), and experiments with high school reform (e.g., Bloom et al., 2010). Although this newly emerging body of research overcomes many of the causal inference problems associated with other types of policy research, the studies frequently have limited generalizability. In addition, the experiments are highly costly and difficult to replicate through policy mandates.

Structured Reviews

As the third level analysis, in Chapters 4 through 6 we provide a systematic review of exemplars of all three types of studies to document the empirical relationships between policies and outcome (the linkage structures in Figures 2.1 and 2.2) and to illustrate how research can inform policy advocacy. We review selected studies of all three types related to academic preparation (Chapter 4), access (Chapter 5), and persistence/degree attainment (Chapter 6).

Academic Preparation

The academic preparation rationale for college access used the correlation between completing advanced high school courses and college enrollment as a basis for arguing for high standards as a means of promoting college access and completion. Much of this debate omitted links between state education policies and preparation, so it was easy to use the findings to advocate for policies that could have unintended effects. Our review method corrects for this omission using a two-step process.

First, we conducted a review of studies using individual databases with information on courses completed, achievement, and graduation. As a first step, we considered the roles of SES (linkage 1), state education policies (linkage 2), and student aid, using a straightforward format. We reviewed individual research reports and articles using this format before completing the summative reviews in Chapters 3–6. We compared studies to build an understanding of the linking structure to policy outcomes, along with the limitations of research that should be considered before using findings to advocate for specific policies. Our discussion of implications looks across studies and considers whether the research is consistent with trends, providing a way of illustrating the role of research in constructing policy rationales. This method provides a way of illustrating responsible ways of discussing research findings in the advocacy process.

College Access

There has been extensive research and reviews on the effects of student aid on college enrollment (e.g., Heller, 1997; Leslie & Brinkman, 1987), but these studies did not have an influence on the decision to reduce funding for student aid in the 1990s (e.g., Advisory Committee on Student Financial Assistance, 2002). In contrast, there has been only very limited research on the links between high school graduation requirements and college