

Book Reviews

Astin, Alexander W. *What Matters in College? Four Critical Years Revisited*. San Francisco: Jossey-Bass, Inc., 1992, pp. xxi; 482. Price: \$30.95 U.S. Reviewed by Peter Bartram, School of Liberal Studies, Seneca College of Applied Arts and Technology.

According to a 1990 study by J.M. Budd in the *Journal of Education*, "Higher education literature: Characteristics of citation patterns," Alexander Astin's 1977 book, *Four Critical Years*, was "the single most frequently cited work in higher education literature" (p. xi). Professor Astin's new book, *What Matters in College?* is subtitled, *Four Critical Years Revisited*, and is a continuation of his work to provide educators and policy makers with an understanding of how the social, personal, academic, and vocational development of undergraduate students is affected by their college experience. To do this, Astin has used the results of surveys of more than 20,000 students, 25,000 faculty members, and 200 institutions. This book presents the results of the study and analyses these results to suggest some implications for educational theory and practice.

Following the two introductory chapters, chapters three through nine each deals with a particular aspect of college experience: the student's political identification; personality and self-concept; attitudes, values, and beliefs; patterns of behaviour; academic and cognitive development; and satisfaction with college. The first chapter outlines the overall design of the study and the second describes the 192 environmental measures used in the subsequent chapters, 57 of which are student involvement measures. The final three chapters summarize the results and state the implications for educators and policy makers. This structure allows parts of the book to be read independently. Astin cautions that a reader of this book may be "subjected to information overload" (p. xiv). In an attempt to minimize the risk of this, Astin limits this study to bachelor degree-granting institutions and excludes community colleges, which were surveyed for *Four Critical Years*. He also omits some technical detail relating to the

statistical analysis that is not critical to an understanding of the findings (p. xv). Although Astin makes good use of tables to present much of the data, this is not an easy book for a non-statistician to read. The book also presents the reader with so much information that it requires concentration and constant referral to the data to follow the analyses. Being able to read the chapters independently, however, does help to overcome this.

The basic methodology used is the input-environment-outcome (I-E-O) model developed by Astin, the conceptual framework of which is described in detail in chapter one. In the model, *input* refers to the:

...characteristics of students entering the institution; *environment* to the various programs, policies, faculty, peers and educational experiences to which the student is exposed; and *outcomes* to student characteristics after exposure to the environment (p.7).

To implement this model, Astin has developed 192 environmental measures which he uses to determine outcomes resulting from these inputs. (These are defined in chapter two.) Some of the most interesting are those used to measure the faculty environment. These were developed from various studies of teaching faculty conducted by Astin, the National Centre for Education Statistics, and Astin, Dey and Korn (p. 35). To define the overall faculty environment, Astin has identified twenty-one factors that measure faculty perceptions of academic competence, students' social activism and community orientation, and some other aspects that are then combined with other more commonly used measures of faculty. These included, for example, number of doctorates, types of courses taught, and hours per week advising students. This approach to defining faculty environment will be useful for future researchers interested in the effectiveness of college faculty.

Chapter three details how Astin uses the variables he developed to assess the effects of these on one outcome measure, the political identification of students during their four years of college. In this way Astin explains his methodology and compares his findings with those of previous studies. By selecting just one outcome for detailed analysis, Astin is able to make the six chapters that follow concise and less detailed than they otherwise may have been. The format of this chapter is repeated in chapters four through nine. Each chapter concludes with a summary of Astin's findings for the particular outcome examined in that chapter.

Chapter ten summarizes the effects of environmental factors on various outcomes by reviewing and expanding on the findings presented in chapters

three through nine. Here Astin distinguishes between the “direct” and “indirect” effects of environmental factors. Since Canadian colleges and universities are more heterogeneous than U.S. institutions, much of the discussion about the differences between private and public institutions, men’s and women’s colleges, and historically black colleges has no parallel. His conclusion that a formal general education curriculum has a relatively weak influence on student development is surprising when the debates of the late 60’s and 70’s over the effectiveness of such curricula are remembered (p. 331ff). His assessment of the effects of the faculty environment are relevant to the continuing discussions about the relative merits of research and teaching in universities. Because of the frequently heard criticism that the use of teaching assistants adversely affects undergraduate students, it is hoped that Astin’s suggestions for further research on this point will be acted upon. Overall, it is the importance of the peer group on individual student development that Astin feels “is the most compelling generalization” resulting from his research (p. 363). This suggests that, unless admission can be controlled for other than just academic standing, institutions may have little control over student development.

The last chapter states some implications for educational theory and practice which Astin directs to faculty, administrators, and policy makers (p. 396). It is a chapter that should be read by everyone interested in improving the effectiveness of colleges and universities. After the publication of *Four Critical Years* in 1977, Astin concluded that policy makers were guided “more by *economic* than by *educational* considerations” (p. 434). This is as true, or even more true, today. Typical is the recent University of Toronto announcement that it is cutting out some athletic programs for economic reasons. Commenting on this in the *Globe and Mail*, Professor Jean Smith writes:

The excellence of a university is not measured by the books we write, the articles we publish or the research grants we garner. The test of a university is the extent to which it compels each of us to exceed our expectations.

Astin would agree and argues that there is a need to focus on values in higher education which, he says, are fundamental to every aspect of undergraduate education and are defined as:

...whom we admit, and on what basis; *what* we teach them, and *how* we teach it; what *rules* and *requirements* will govern our students’ conduct; how to *test* and *certify* our students; *whom* to hire, and the *criteria for hiring*, tenuring, and promoting them; the manner in which we treat each other as

professional colleagues; the *topics* we choose for our research and scholarship; and how we faculty use our discretionary time. (p. 435)

Astin's research supports his arguments and suggests that the *quality* of higher education will only improve when policy makers, especially those in government, recognize the need to pay attention to values. If this happens, Astin's book will be invaluable to those faculty and administrators charged with making the changes necessary to improve quality. Meanwhile this is an interesting book that contributes to an understanding of student development, has implications for educational theory and practice, and also identifies many topics for further research.

Bromwich, David. *Politics By Other Means: Higher Education and Group Thinking*. New Haven, CT: Yale University Press, 1992. Price: \$39.50 U.S. (cloth). Reviewed by Glen A. Jones, Faculty of Education, Brock University.

In thinking back over events within the academic world of the 1980s, it is difficult to ignore the irony that while most of the public policy agenda concerning higher education focused on science and technology, the most controversial debates within academe focused on and emanated from the humanities. At the same time as the "Star Wars" initiative was being sold as the technological panacea of the cold war and "technology transfer" was fast becoming a cliché as governments sought ways of linking university science and engineering with private industry, large segments of the academic community wrestled with such notions as core curriculum, "Great Books," postmodernism, relativism, "political correctness," eurocentrism, and deconstruction. The town believed that technology was the answer while the gown viewed epistemology as the question.

In many respects, David Bromwich's recent book, *Politics By Other Means*, is only a minor contribution to the established epistemological debate. Readers of Bloom and D'Sousa will find similar basic arguments within Bromwich's critique of contemporary, professionalist, scholarly theory. Readers familiar with the literature from the far left of the debate will recognize many elements of Bromwich's critique of the far right, his attack on those, like Bloom, who essentially argue that there is only one way of knowing. The strength of Bromwich's work is his ability to push aside each of the established sides of the debate in order to clear a middle path for independent thought and liberal education. He rebukes both the left and the right for viewing education