

These papers and the discussions they stimulated at the Atlanta meetings represent yet another stock-taking of planning methods. Having observed a number of such events over the past 24 years, I am pleased to have been asked to offer a few general observations from the standpoint of a grizzled veteran.

Though not mentioned in the papers, a number of persons at the conference mentioned "instructor burnout" as a common problem. I think there is something to this which merits further consideration in future discussions. It is certainly true that teaching planning methods is more difficult than most other course assignments. The subject matter is unpopular with most students, it requires rigorous and disciplined handling of lectures and assignments, the material covered changes rapidly, and course content is subject to frequent review and criticism by both professionals and academic colleagues. It doesn't surprise me that many young instructors evolve from enthusiasm to disillusionment after three or four years in the trenches of the department's methods course. No one at the conference offered any remedies for this problem but a little understanding may help the next generation of instructors.

The field of planning has borrowed heavily from a variety of other disciplines and seems especially vulnerable to passing intellectual fads. While it is nice to be receptive to new ideas and techniques, we should be more critical in what we accept as relevant to our discipline and profession. This problem has been especially acute in planning methods with techniques borrowed wholesale from the social sciences, engineering, and business administration. I am pleased to note some indication in these papers and in the conference discussion that we are becoming more choosy in what we adopt. Both Patton and Schuster offer examples of approaches which are unique to planning and the policy sciences.

The survey reported by Contant and Forkenbrock offers some evidence that the gap between what is taught in the schools and the professional needs may be narrowing. After decades of sometimes very sharp criticism, this is welcome news.

One must wonder, though, whether this means the schools are becoming more responsive or the profession is becoming more sophisticated.

Both this and earlier surveys reveal that the methodological skills valued most highly by professionals are writing, research, and synthesis. Clearly the ability to understand a situation, to relate it to other events and opportunities, and to be able to communicate these results is of paramount importance to the successful practitioner. While Schuster suggests some ways of developing these skills in methods courses, all instructors should be made more clearly aware of the importance of developing these abilities. The priority given to writing, research, and synthesis offers some support to the defense academics usually mustered when accused of not teaching immediately useful skills — "our task is fundamentally to teach students to think: useful skills are easily learned on the job." Schuster's requirement that students provide written commentary on the statistics they are developing and using seems to be an important innovation in quantitative methods courses. If not already used, other methods instructors should consider making similar assignments and, most importantly, critically commenting upon the product.

Another promising innovation mentioned by Schuster is the use of spread sheets whose mathematical functions have been disabled. This requires students to understand and use computational formulas before they are allowed to call them in from the computer software. This idea has potentials far beyond the use of spread sheets. With a little care and imagination it might be possible to develop self-teaching programs which would allow students to "earn" the right to use mathematical functions and computational programs based upon their previously demonstrated ability to work out and use the equivalent reasoning and formulas on their own.

These papers offer some evidence that, at last, planning and policy making may be evolving a set of unique methodologies. Patton's BOTECs and Schuster's estimation problems both address the necessity of making reasonable decisions based on

scanty information under time pressures. Techniques requiring large amounts of precise data and days, months, or years of analysis are often inappropriate in planning. Overemphasizing them is probably a disservice to both students and to the profession.

Along similar lines, Patton's call for recognition of non-rational approaches to planning and planning methods seems to be especially compelling. Many now agree that the purely rational approach to planning and analysis leaves many important planning problems unresolved and unapproachable. In another paper (1986) I have attempted to develop this idea further, suggesting four distinctive types of planning theories and associated methodologies: Rationalism, Incrementalism, Utopianism, and Methodism. All four types represent legitimate styles of planning but one is often more appropriate than the others in any given real world situation.

The increased importance of microcomputers in training and in the office was readily acknowledged by all participants in the conference and in these papers. The most significant thing about microcomputers, however, is the lack of attention they received. They seem already to be treated as background tools on the order of enormously efficient slide rules (for those who remember what they are). I think this is a healthy sign of maturity in both teaching and the profession. Clearly the introduction and availability of microcomputers is revolutionary, fulfilling some of the promises made for the main frames in the 1960s. But the revolution is already over. Several schools report no longer offering courses specifically on microcomputers. Their use is now simply integrated in other courses. The significant issues now are what can be done with these tools, not the tools themselves.

References

Feldt, A.G. 1986. Planning Theories. In *Introduction to Planning*, eds. A. Catanese and J. Snyder. New York: McGraw Hill.