Three summers ago, Jim Ratcliff and I set off from State College in the early dawn of a beautiful July morning, headed for Pittsburgh to attend the higher education-related portions of the annual meeting of the Education Commission of the States (ECS). One of our goals was to learn more about the major issues with which state and federal higher education policymakers and their staffs were wrestling. For me, it was a Day of Revelation--the first conference I had attended in over twenty years where I knew only a handful of the people. More disturbing, I discovered that not only did I not know these people, I knew little about the issues they discussed. Even their language was different: strange technical terms, opaque acronyms, references to unfamiliar state and federal regulations, and references to leading thinkers and writers with whom I was completely unfamiliar. The conference attendees returned the favor: None of them knew me, with or without my name tag. Nor did they know what sorts of things I study and write about. Never in my 23-year professional life have I felt so isolated from the world of higher education.

I know the dangers of drawing conclusions from a sample of one, but I don't believe I am alone in my isolation. Indeed, I have since wondered whether most of the people at that ECS conference (or any other conference where state education policymakers and their staffs gather) would feel the same sense of isolation that I felt if they attended an ASHE meeting. Why should ASHE and ECS conference participants share so little in common?

A decade ago, George Keller (1985) published an article in Change entitled "Trees Without Fruit: The Problem with Research about Higher Education." That provocative essay opened with the statement: "It's peculiar but it's a fact: hardly anyone in higher education pays attention to the research and scholarship about higher education" (p. 7). According to Keller, most of the research on higher education is preoccupied with methods; avoids education's larger issues; neglects the educational policies, actions,
and decisions that institutions and legislatures must confront, and is written for other researchers rather than for "those who must act" (p. 8).

Keller is not the only person to offer such a critique or to call higher education scholars to the study of policy questions. Clif Conrad (1989), in his 1988 ASHE presidential address, Patricia Crosson (1989), in her vice-presidential address to the 1988 annual meeting of Division J (Postsecondary Education) of the American Educational Research Association, and Michael Nettles (1995) in his 1993 ASHE presidential address, have all urged higher education researchers to become more involved in policy-relevant research. I am the third ASHE president in six years to speak to this point. An entire issue of the 1986 volume of *The Review of Higher Education*, guest edited by David Leslie and Joseph Beckham (1986), was devoted to an examination of the state of higher education research. Frank Newman, President of the Education Commission of the States, has pointed out: "In today's higher education research and its journals, the really urgent issues facing higher education seldom get addressed" (qtd. in Keller, 1985, p. 7). And Dan Layzell (1990), then Assistant Director for Fiscal Affairs at the Illinois Board of Higher Education, in a 1990 "Opinion" column in the *Chronicle of Higher Education*, asked: "Why should policymakers pay any attention to what researchers are saying?" (italics his). Layzell is quick to add:

I do not ask this lightly or with disrespect for the scholarly endeavor. I say this regretfully, from the perspective of one who has completed graduate training in higher education and who helps formulate state policy affecting colleges and universities. Like others, . . . I find myself having difficulty straddling the widening gulf between higher education research and policy research (p. B1).

I know how my 19-year-old daughter would respond were I to describe this history: Tapping the button switch in the cradle of an imaginary telephone with her right hand while holding the thumb of her left hand to her ear and her pinky finger to her mouth to simulate a telephone handset, she would ask: "Like, helllll-O? Is this line working??! I mean, is anybody out there?"

What accounts for the gulf between higher education research and the worlds of policy and practice? A number of explanations are offered, but the dominant and most persuasive explanation is that we have come to think of the study of higher education as one of the social science disciplines. I am not suggesting that the tools of the social sciences cannot be used to advantage in the study of our colleges and universities. I am suggesting that we have forgotten how to do that, that we have forgotten our roots. Higher education as a field of study (and ASHE as an organization) developed out of the application of certain of the social sciences to higher education problems. A small number of psychologists, sociologists, historians, political scientists, economists, and anthropologists shared a common interest in the improvement of the educational and organizational effectiveness of America's higher education system. The study of higher education was (and is) an *applied* field of study, not a social science discipline in itself, and the difference is a significant one.
The shift in the conception of higher education as a field of study from that of a multidisciplinary, applied field toward that of a traditional discipline is neither new nor unique to higher education research. Nearly thirty years ago, Jencks and Riesman (1968), in *The Academic Revolution*, noted the tendency of free-standing professional schools to move away from their applied, action research roots toward more scholarly activities once they had affiliated with a university.

We may have underestimated the power of the disciplines to control and focus scholarly attention. The conception of higher education as a discipline requires the rigorous application of research designs and analytical methods that are widely accepted in the discipline. The concern with theory and fidelity to a set of methods (whether quantitative or qualitative), in turn, leads to an examination of narrower, more precisely defined topics and questions. It also promotes a tighter, more specialized language. The cumulative effect of these tendencies is the placement of one's work within an established discourse among a community of like-minded scholars with training and interests similar to one's own. Such specialization and narrowness, however, also reduce or eliminate access to that work by practitioners and policymakers who may be able to apply it to the solution of educational problems.

I say again: As a profession, we have forgotten our roots. Instead, we have become preoccupied with a singular conception of research. Boyer (1990) identified at least four forms of scholarship: "the scholarship of *discovery*; the scholarship of *integration*; the scholarship of *application*; and the scholarship of *teaching*" (p. 16; italics his). Higher education researchers have come to concentrate on the "scholarship of discovery," the pursuit of knowledge [End Page 7] for its own sake and the commitment to contribute to the storehouse of knowledge on a given topic. But to what end? Rediscovering our roots will require a return to "the scholarship of application." According to Boyer, this form of scholarly activity moves toward engagement as the scholar asks, "How can knowledge be responsibly applied to consequential problems?" . . . And further, "Can social problems *themselves* define an agenda for scholarly investigation?" (p. 21; italics his).

The scholarship of application is synergistic, "theory and practice vitally interact, and one renews the other" (p. 23). Oscar Handlin argues that "scholarship has to prove its worth not on its own terms but by service to the nation and the world" (qtd. in Boyer, 1990, p. 23).

It is the general tendency away from action, practice- and policy-relevant research toward the more scholastic that should concern us if the research we produce is not to become what Keller (1985) characterized as "a literature without an audience" (p. 8). Reversing this trend and engaging in more practice- and policy-oriented research is, I believe, both a professional responsibility and a self-interested necessity. In the current financial climate, accountability driven as it is, we cannot expect continued public support for research that does not serve public needs. And no one I know is forecasting
an early change in that climate.

So where do we begin? I have five suggestions:

1. **We must recognize and accept the study of higher education for what it is—a multidisciplinary, applied field.** We must direct greater research attention to issues confronting practitioners and policymakers. Our attention should be given to sectors of the knowledge base that have two characteristics: First, they are (or soon will be) vitally important areas of higher education policy or practice, and, second, the available research in these areas is seriously deficient. The list of such issues is lengthy and includes, among other topics, equality in educational and occupational choice and attainment, fiscal and financial aid policies, rising tuitions and costs, educational quality, administrative and learning productivity, restructuring, economic development, and public accountability.

One of the more important of these empirical black holes concerns the college experience and its consequences for such groups as first-generation students, women in male-dominated fields, students of color, part-time students, adults and returning students, and students from low-income families. These are our students of the future. Currently, 45% of all undergraduates are enrolled part-time (up 34% from 1978). From 1980 to 1990, the number of students 25 years of age or older grew 34%, and further growth (by about 14%) is anticipated before the end of this century. Most of this growth will be accounted for by persons ages 35 to 44 (NCES, 1994).

Despite the clear demographic trends confronting our colleges and universities, however, little research has been done on the educational outcomes for nontraditional student groups. Only rarely do studies explore whether the effects of our instructional and other educational interventions are equally effective (or ineffective) for all students, or whether those effects vary according to a students’ gender, race/ethnicity, age, socioeconomic status, or ability. Our curricula, instructional methods, and out-of-class programs and activities all rest on the assumption that the effects of college are general and not conditional. But we don't really know whether that's the case or not.

Our community colleges constitute a second area that I believe requires greater research attention. In many ways, it has been these institutions that have been responsible for extending equal access to higher education and greater social mobility to all Americans. Between 1978 and 1991, enrollments in four-year institutions grew by 23%. In two-year institutions, they rose by 31%, and the number of two-year students is expected to grow by another 11% before 2003 (NCES, 1992). Currently, these schools constitute 28% of all colleges and universities in the country and enroll 37% of all our students (Chronicle, 1995).

Despite the educational and social significance of community colleges, however, the educational and administrative functioning and effectiveness of these institutions remain largely unexamined. The dearth of research cuts across areas of study, whether on students, faculty, or organizations. While the belief persists that community colleges
offer a less rigorous and effective education than four-year institutions, recent evidence from the National Study of Student Learning, conducted by the National Center on Postsecondary Teaching, Learning, and Assessment, indicates that there may be a relative parity between two- and four-year institutions in their effects on students' cognitive growth (Pascarella, Bohr, Nora, & Terenzini, 1995; Pascarella, Edison, Nora, Hagedorn, & Terenzini, 1996). This emerging evidence, however, amounts to a trickle at a time when a torrent is needed. The fact and problem remain: Students beginning baccalaureate degree study at a community college are 15-18% less likely to complete that degree than students enrolling at a four-year institution (Pascarella & Terenzini, 1991). Why? We don't really know. Why do we know so little about the educational and organizational functioning and effectiveness of institutions that enroll nearly 4 in 10 of our students? Why does only about 5% of our research on college effects focus on community colleges?

A third area to which I believe higher education researchers should give greater attention is the instructional effectiveness of information technology in general but of distance education in particular. The term covers an enormous expanse of conceptual ground, encompassing widely varied instructional approaches and media ranging from correspondence courses, to pre-produced instructional television programs, to audio conferencing, audiographic conferencing, computer conferencing, and various forms of videoconferencing.

Many campus administrators and state and federal policymakers view distance education as a highly promising solution to current problems relating to cost and instructional productivity. Whether technology and distance education yield such gains in instructional productivity, however, remains an open--but researchable--question. According to Moore (1994), much of the available research is based on inadequate (usually one-site) research designs and weak statistical methods, and is usually "unrelated to any theoretical framework and [therefore] of limited generalizability" (p. 5). Substantial work awaits us in examining the relation between technology and learning outcomes and in ascertaining the costs of improving learning and extending it to underserved groups.

Distance education has practical and policy implications that go far beyond the classroom. The dazzling promise of technology appears to have blinded us to a wide range of questions relating to faculty, the curriculum, administrative and financial matters, and student and faculty support systems. And then there are social equity questions. To what extent do technological and instructional advances carry a cultural or socioeconomic bias against those individuals and institutions in our society with little or no access to computers and educationally related telecommunications? The answer right now is: "We don't know."

Individual campuses and entire state systems are moving quickly into this brave, new, expensive, educational world and others are queuing up behind them. If colleges and universities are to invest wisely in distance education and other instructional technologies, and if we are to understand how distance education is reshaping the
Bringing our research to bear on some of the black holes of our knowledge base, however, is only part of the challenge in striking a new balance in our research between theory, on the one hand, and practical and policy relevance on the other. Attitudes, values, reward systems, and even philosophies will also have to change, which leads to my second recommendation.

2. We must reconsider why we do research and write. Do we write for publication and, thereby, enhanced prospects for promotion and tenure? Or do we write to make a difference in the lives of others? That is not a dichotomous choice, of course, but the overlap at present is, I suspect, far smaller than it might be. Most of us study the topics we do because we are interested in them and believe they are important to others, although we are often vague--even in our own minds--about who those "others" are and why they might be interested in our work. Rediscovering our roots will mean confronting some potentially painful questions: How will answers to the questions I pose contribute to a better understanding of one or more of the import problems confronting higher education and our country? Why are these questions important? Will the focus and design of the research serve practical and policy purposes or only theoretical ones? Redressing the balance will also necessitate greater intellectual effort than we now require of ourselves in clearly identifying and explicating the implications of our findings for practice and policy, as well as for theory.

3. We must reconsider the audiences for whom we write. Not everyone will be good at doing policy-relevant research, of course, and it is probably unreasonable to expect policy relevance in every piece of research. Some studies should be written for other researchers. But doing so is a slippery slope. It is far easier to write for an audience we know than one we do not. The problem is that, for most of us, the audience we know best includes primarily our scholarly colleagues, particularly those interested in the same topical areas as we. The people for whom I have written most were not those attending that Pittsburgh ECS meeting. I have always hoped that policymakers would benefit from my work; but until recently, I have never fully thought through how I expected them to learn of (or from) my findings. The journals in which I have published are not those which policymakers read, and I am not alone in this practice. As the philosopher possum, Pogo, has said: "We have met the enemy, and he is us."

Increasing the relevance of our research for practice and policy will mean establishing closer and more frequent contacts with practitioners and policymakers and their staffs. It will mean opening two-way lines of communication between researchers and practitioners and policymakers. It will mean adopting prose styles that avoid jargon and dense technical explanations. (Writing clearly and forcefully about research, by the way, does not mean "dumbing down" one's work.) It will mean reading the publications policymakers read. It will mean occasionally attending and contributing to the conferences they attend. It will mean doing readable, practice- or policy-focused literature reviews (and I hasten to add that these are as vitally important to practitioners
and policymakers as they are intellectually challenging to do!). It will mean writing for different publications. Outlets such as *Change*, the *Chronicle of Higher Education*, the *AAHE Bulletin*, and the *Educational Record*, as well as the publications of such organizations as ECS, other interstate compacts, and the National Conference of State Legislatures, reach very different (and larger) audiences than most research journals.

4. **We must review our graduate programs.** Graduate programs not only prepare students to become higher education administrators or researchers, but they also serve as powerful socializing agents. Graduate students learn about more things than the history, curriculum, students, organization, administration, and research methods of higher education from their faculty guides. They learn—and in many cases internalize—their mentors' intellectual orientations, value systems, criteria, and standards about what constitute appropriate topics and good research. What we are teaching them may not be conducive to the development of their awareness of policy issues. In five of the last six years, for example, more than half to two-thirds of the graduate students participating in the graduate student policy seminar offered as part of the ASHE annual conference indicated that they had had little or no exposure to state policy issues in their doctoral programs.

Students preparing to become researchers should, as part of their graduate programs, be exposed to the major policy issues and the tools available to study them. Courses outside colleges of education in such areas as policy analysis, economics, and public administration should be required to broaden students' perspectives and skills for doing policy-relevant research. Failure to expose graduate students to important state policy questions and their analysis will only perpetuate (if not exacerbate) the current gulf between higher education research and public higher education policy.

5. **Finally, we must search for ways in which ASHE can promote and support policy-related research.** Following the 1993 ASHE meeting in Pittsburgh, the *ASHE Newsletter* carried an announcement that a group was forming to discuss policy issues and research in higher education and invited interested persons to join. When I called the individual identified in the notice to find out about the group's progress, I learned that the effort had already died on the vine. I'm told that a group interested in research in community colleges suffered a similar fate. I encourage my successors, and all ASHE members, to join me in finding ways in which we can both encourage and support research that has promise for benefiting practitioners and policymakers.

The challenges of returning to and honoring our roots as a multidisciplinary, applied field of study are substantial, but they have been before us for at least a decade. It is time to do something about it. It will be well for us to remember a comment by John Gardner, the former Secretary of the U.S. Department of Health, Education, and Welfare (which I paraphrase): "In a society that disparages its plumbers and honors its philosophers, neither the pipes nor the theories will hold water." I earnestly hope that the day is not too far off when more of us can walk into an ECS meeting and know the issues with which the policymakers and legislative staff members in attendance are
wrestling. I also hope that those policymakers and their staff members will know more of us because our research has helped them solve some of those policy issues.

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