

Getting It Almost, Approximately, Just About Right

Patrick T. Terenzini
The Pennsylvania State University

Ernest T. Pascarella
The University of Iowa

This essay is a reflection on the nature of scholarly collaboration and the important role a collaborative partnership has played in the careers of two esteemed higher education scholars. We invited Drs. Terenzini and Pascarella to co-author an essay sharing personal insights and advice regarding the research process. We asked that they focus on important lessons learned over the course of their careers as individual researchers and as collaborators. While we believe this essay will be particularly valuable to graduate students and early-career scholars, we suspect even the most distinguished scholars will appreciate the light-hearted yet frank discussion of scientific inquiry and professional collaboration.

– The Editors

Getting It Almost, Approximately, Just About Right

It started simply enough. We had both just finished our doctoral degrees in higher education at Syracuse University. Ernie had taken a position as associate director for research in the University's Center for Instructional Development (CID), and Pat had started and directed for about a year the research unit in the Division of Student Affairs. Bob Diamond, CID's director, and Chuck Willie, the Vice President for Student Affairs, were both interested in student retention at Syracuse. We both held adjunct assistant professor appointments in the Syracuse University College of Education's Higher Education Program, and in December of 1974, attended a holiday party at Joan Stark's house (Joan was chair of the Higher Education Program). In the course of the evening, we discussed the possibility of working together on an "attrition study" (as that research area was then known). The rest, as they say, is history.

Lessons Learned

What started so modestly at Joan's holiday party has grown in ways and to an extent neither of us could have foreseen, and we have enjoyed and benefited from it immensely. Indeed, our work together has – and continues to – shape both our lives. Here, we try to distill some of what we learned along the way that others may find helpful. The more important "lessons" probably fall into two categories: scholarship and scholarly collaboration.

Scholarship

When we began, we had no idea that doing research could be so much fun, and doing it with others could be even more fun than doing it alone (although not necessarily). Designing and completing a study has much in common with play – the enjoyment and challenge of problem-solving and meaning-making that inhere in learning, the excitement of exploration and discovery, the quiet pleasure of learning, and the satisfaction of knowing that what one has accomplished has not been done before and may be useful to others (well, at least believing those accomplishments are new and beneficial; others will be the judges).

But if the product(s) of a research program are almost always pleasurable, the production process is not always so. Indeed, doing research is often hard work mentally, sometimes even physically as the work becomes continuous and protracted. Identifying a research topic or line of inquiry requires a level of intellectual focus, intensity, and discipline that can also

be frustrating. Whatever one's area of study, the same questions arise and demand satisfactory responses: "What's missing?" "What's needed if we are *really* going to understand this condition or phenomenon and, thereby, perhaps contribute to the improvement of some aspect of our colleges and universities?" Equally challenging is developing acceptable answers to those questions (note we did not say "the right answers," for more than one solution is almost always possible, each with its own limitations). It is not easy work to develop a question and design a study that is simultaneously do-able and worth doing. Sometimes the answers emerge quickly (the odds of that increase with experience). Other times they come slowly and only with reading, hard thinking, and discussions with others who share one's interests and enjoy a hard think. The best solutions come only with a determination to make the study and its findings as rigorous as possible.

We also came to understand the nature and role of "normal science" (Kuhn, 1996). Recognizing that "catalytic" science happens only rarely is no minor epiphany. We all (and graduate students in particular) want our research to transform some aspect of our world, but in seeking to define such a study, our reach almost always exceeds our grasp. Understanding that normal science is cumulative, however, has at least three benefits: 1) it frees one to undertake what may at first seem to be a needlessly narrow topic; 2) it brings finding meaningful information within the range of the do-able, and 3) it typically (with any luck) leads to more precise, if narrow, understanding. Doing a good study fills some hole (albeit perhaps a small one) in the knowledge fabric.

We learned that following "a consistent line of inquiry" (a phrase common in promotion-and-tenure committee discussions) has a number of benefits. First, it makes research easier. One need not immerse oneself in a new literature each time the topic or area of study shifts. Second, one's command of a field and sense of competence grows more rapidly, efficiently, and effectively. Third, opportunities for theory development or refinement open as one masters an area of study and its empirical foundations. Fourth, it provides the platform for developing the kind of bibliographic record for which promotion and tenure committees look. Establishing such a consistent and cohesive record may not, in the long run, have as much impact on the development of new knowledge as some other things, but for a prudent, untenured professor, the path is understandably (and probably unavoidably) seductive.

Normal science and one's commitment to a consistent scholarly path can also lead eventually to some measure of frustration. Doing relatively

small-scale research on narrow topics *in seriatim* and over a period of years can lead to a sense of failing to move ahead meaningfully in both one's scholarship and one's career. As one journal article leads to another, and one's bibliography builds, like barnacles on a ship, one may (with any luck) come to the same question Peggy Lee asked in her 1969 hit song: "Is That All There Is?" Feeling we were running out of new ideas in our retention studies, and perhaps a bit fearful of being typecast as "the attrition guys," we began looking for new areas of study. Again the questions: "What's missing? What's needed if we and others are *really* going to understand how college affects America's college students? What would make a *real* contribution to the literature on college effects, to college and university faculty members and administrators, to the people shaping public policy in higher education?" Ultimately, but not immediately, our answers led to the two volumes of *How College Affects Students* (Pascarella & Terenzini, 1991, 2005).

As we began work in 1986 on the first of those volumes, we were coming to understand the value and potential power of thorough literature reviews. We had both begun our doctoral studies reading Ken Feldman and Theodore Newcomb's (1969) *The Impact of College on Students*, but as valuable as that volume had been, we were both beginning to think, independently, that considerable research had appeared since the Feldman and Newcomb book (we had *no* idea of just how much, and that was probably a good thing). Ernie had published three substantial literature reviews (Nucci & Pascarella, 1987; Pascarella, 1980, 1985) and had some inkling about what would be required to complete *How College Affects Students*; Pat was clueless but eager. We quickly learned that good literature reviews are extraordinarily difficult, primarily because of the level of intellectual effort they require: synthesizing the key findings from many documents; identifying common topics that thread through the literature; doing justice to the differences in study goals, samples, and methods in evaluating the contributions of those studies; and weaving those syntheses together in a coherent narrative that provides insight into both what we know and do not know in any given area. Our progress confirmed our beliefs about the value of synthesizing what we know. We appreciated less readily, however, the value of the review process in identifying what the literature does *not* reveal. Only later in our work did we appreciate how much the books would guide future research, both our own and others'. For us, the first volume led to our deep involvement in the creation of the National Center on Postsecondary Teaching and Learning and the National

Study of Student Learning (Pascarella, et al., 1996); the second led to two more large, independent studies – Parsing the First Year of College (Pat, with Robert D. Reason), and the Wabash National Study of Liberal Arts Education (Ernie, with Charles Blaich, Patricia M. King, and Marcia Baxter Magolda). It was, to be sure, still “normal science,” but on a scale far broader and further reaching than the simple accumulation of journal articles that characterized our early professional years.

Scholarly Collaboration

Our success over the years has clearly been a product our collaborative research. We have worked – together and separately – on a number of collaborative research projects, some more successful and satisfying than others. We agree, however, that for the past 35 years we have shared an extraordinary partnership, and it is reasonable to ask what makes it work so well. We think several factors are involved.

First, we share a deep interest in understanding how colleges and universities influence various aspects of student change, growth, and persistence. It is an area of interest from which neither of us has varied much throughout our careers. We want to understand better what colleges and universities do that has positive (or negative) effects on student learning and other outcomes. Common interests are, of course, a necessary condition for collaboration, but they are not sufficient.

Second, but perhaps most important of all, we manage to keep our egos under control. Before beginning to work together, we each enjoyed successes in various activities in our early and college years. Ernie had survived combat as a U.S. Marine in Vietnam. We had a strong sense of who we were, what we could do, and what we were not so good at. More importantly, we each recognized that the other was better at something important than we were, and we respected and valued the talents and experience the other brought to the partnership. We never thought ourselves to be in competition with the other (although we both had been successful competitors in intercollegiate athletics). The competition has always been about whether we can meet the quality-of-work standards we set for ourselves. We recognize that we can accomplish more and better work together than we can independently, and that has always been our goal.

Third, because of our professional comfort and understanding of place in the partnership, and because we value each other’s friendship, we are able to – and will – compromise. Early in our relationship, we explicitly agreed

that we would not let professional differences jeopardize our friendship. We do not always agree on things, whether the framing of research topic, a study's design, the most appropriate analytical procedures, or the meaning or implications of our findings. But when we did disagree, we discussed the merits of each point of view, and, in the end, we both know when it is time to compromise for the good of our friendship and the project. We are not always happy with the compromises we agree to accept. But we have come to recognize those situations that involve a position that is, for one of us, a potential deal-breaker. At that point, one of us finds humility, and we move on.

Fourth, we understand each other's personal and professional strengths and work habits. We both know, for example, that Ernie is the better methodologist, and that Pat, with more years of administrative experience, is better able to extract the practical or policy implications of study findings. We are each determined to carry our weight. We write with roughly similar styles, so each can take responsibility for a particular part of a paper or article. Throughout our partnership, we followed a rule that solves all "order-of-authorship" matters: Whoever writes the first draft of a paper (regardless of who had had the idea first or who did the analyses), that person is the lead author of the piece. (At such times, the traits described in numbers two and three above are helpful.)

Fifth, we each benefit from the partnership in multiple ways: (a) We draw great enjoyment from the other's company; (b) We are more productive than we would be separately (large, complex datasets contain tens, if not hundreds, of possible studies, and while one of us takes the lead on one study, the other can work on another); (c) We get better thinking and higher scholarly quality from having two minds on a task rather than just one; (d) We produce better writing (the second author can read a draft paper with a sharper eye than the lead author); and (e) We continuously learn from each other, whether about some theory or the content of a study, something statistical or methodological, or the sharper grasp of our own ideas that comes from working through the challenges or critiques of the other.

* * * * *

Producing good scholarship is a difficult task, challenging enough by itself. Doing good research with others can increase the challenges by an order of magnitude. Collaborative, scholarly relationships are for neither the faint-hearted nor those with tender egos. Under the right conditions,

however, good, collaborative scholarship is clearly possible and enormously satisfying in many, many ways. We earnestly hope others are as fortunate as we have been in finding such a productive and enjoyable partnership. And if they are as lucky as we have been, they may, like us, get it almost, approximately, just about right.

References

- Feldman, K. A., & Newcomb, T. A. (1969). *The impact of college on students*. San Francisco: Jossey-Bass.
- Kuhn, T. S. (1996). *The structure of scientific revolutions* (3rd ed.). Chicago: University of Chicago Press.
- Nucci, L., & Pascarella, E. T. (1987). The influence of college on moral development. In J. S. Smart (Ed.), *Higher education: Handbook of theory and research* (Vol. III, pp. 271-326). New York: Agathon.
- Pascarella, E. T. (1980). Student-faculty informal contact and collage outcomes. *Review of Educational Research, 71*, 21-26.
- Pascarella, E. T. (1985). College environmental influences on learning and cognitive development: A critical review and synthesis. In J. S. Smart (Ed.), *Higher education: Handbook of theory and research* (Vol. I, pp. 1-61). New York: Agathon.
- Pascarella, E. T., & Terenzini, P. T. (1991). *How college affects students: Findings and insights from twenty years of research*. San Francisco: Jossey-Bass.
- Pascarella, E. T., & Terenzini, P. T. (2005). *How college affects students (Vol. 2): A third decade of research*. San Francisco: Jossey-Bass.
- Pascarella, E. T., Whitt, E. J., Nora, A., Edison, M., Hagedorn, L., & Terenzini, P. T. (1996). What have we learned from the first year of the National Study of Student Learning? *Journal of College Student Development, 37*, 182-192.

Patrick T. Terenzini is Distinguished Professor of Education and Senior Scientist in the Center for the Study of Higher Education at the Pennsylvania State University.

Ernest T. Pascarella is Mary Louise Petersen Professor of Higher Education at the University of Iowa.