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Public Scholarship: Making Sense of an Emerging Synthesis

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*This concluding chapter, written by a national leader in
higher education, reflects on public scholarship from a
perspective beyond Penn State and argues that public
scholarship promises to strengthen "that special form of
public decision making that we call democracy."*

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Judith A. Ramaley

In the past decade, there has been a fresh wave of thinking about the relationship between education and democracy and a careful examination of the concept of a public good and the role of higher education in contributing to democratic life and the practice of good citizenship. This volume represents a discussion of the application of concepts of public scholarship to undergraduate education in the context of a contemporary land-grant university. We learn about how and why public scholarship has grown and how it is now establishing itself in the academic community in general and at The Pennsylvania State University in particular.

Public Scholarship and the Evolving Roles of Research, Teaching, and Service

For as long as most of us can remember, the intellectual work of the academy has been artificially separated for purposes of evaluating the work of faculty into research, teaching, and service. Seen through the research lens, we are examining a form of scholarship whose practitioners can be called *public intellectuals* or *public scholars*. Seen through the teaching lens, we are discussing an approach to the curriculum and to our expectations for our students as well as for ourselves as their mentors. Seen through the service lens, we are changing the dimensions of application of research to community problems from an outreach model of service delivery, in which experts apply well-researched answers to clearly characterized problems, to a collaborative

model, in which adaptive responses are being developed in a collaborative mode to often contested and poorly defined problems—the "swampy lowlands" Donald Schön (1997, p. 3) has described.

It has become increasingly clear that the dissection of the process of observation, action, and reflection into three separate facets of a scholarly life, either for faculty members or for students, is much too restrictive. A milestone conception along the pathway toward an integration of these aspects of scholarship was the work of Ernest Boyer. In 1990, Boyer proposed a grand synthesis in his monograph *Scholarship Reconsidered: Priorities of the Professoriate.* He began by "looking at the way the work of the academy has changed throughout the years—moving from teaching, to service, and then research, reflecting the shifting priorities both within the academy and beyond" (p. xi). Examining the changing context in which higher education operates, Boyer concluded: "At no time in our history has the need been greater for connecting the work of the academy to the social and environmental challenges beyond the campus" (p. xii). He then wrote an entire monograph addressing his core theme: "The most important obligation now confronting the nation's colleges and universities is to break out of the old tired teaching versus research debate and define, in creative ways, what it means to be a scholar" (p. xii).

The result of Boyer's wonderfully integrative reflection on this challenge was a model of scholarship that could no longer be broken into separate parts. He developed a concept of four views of scholarship: *discovery, integration, application,* and *teaching.* In recent years, many have chosen to develop more fully the idea of "the scholarship of teaching" in order to make clear that instructors can and must approach their work as teachers in the same scholarly fashion as they would a research question of interest to them. As in other realms of scholarly work, the questions of concern to all of us about how people learn now require a much more cross-disciplinary approach and the active revisiting of the habits of mind and the standards of excellence of individual disciplines.

Others, myself included, have elected to add another component of scholarship, namely, *interpretation,* and argue that anyone—student, faculty member, staff member, or community participant—can engage in all five aspects of scholarly work (discovery, integration, interpretation, teaching, and application). What varies is who defines the questions, who does the work, who interprets the results, and who puts the results to good use. If the focus is a matter of shared concern and the arena of study is community-based, it is public scholarship.

The next great milestone along the path to a richer conception of public scholarship emerged from the work of the Kellogg Commission on the Future of State and Land-Grant Universities (1995–2000), which shifted the terms research, teaching, and service to the words discovery, learning, and engagement. In so doing, the commission opened up consideration of

who participates in scholarly work, where that work is done, who defines the questions of significance, who cares about the answers obtained, and who is responsible for putting the resulting insights and knowledge to effective use in addressing complex societal problems either in a particular community or on a global scale. This shift in emphasis opened the door for thinking about the ways in which concepts of scholarship apply to the student experience.

One especially helpful formulation of education for the twenty-first century—as seen through the eyes of a group of people spanning K–12, higher education, business, and community leadership—is the approach offered in the report *Greater Expectations* (Association of American Colleges and Universities, 2002). The national panel called for students to "become intentional learners who can adapt to new environments, integrate knowledge from different sources, and continue learning throughout their lives" (p. xi). Matched against these goals, the experiences of public scholarship offer an especially rich and varied way to establish a context for students to become "*empowered* through the mastery of intellectual and practical skills, *informed* by knowledge about the natural and social worlds and about forms of inquiry basic to these studies, and *responsible* for their personal actions and civic values" (p. xi).

Since the work of the Kellogg Commission, some observers have begun to think both about the large domain encompassed by a scholarly agenda and the way in which both research (defined broadly as discovery, integration, interpretation, and application) and teaching (also defined broadly as an approach to the collective enterprise called "the curriculum") can be approached in an engaged manner and thus can become public scholarship (Ramaley, 2005).

There are many motivations for considering public scholarship as legitimate work for both faculty and students. At one level, it offers a way for scholars as well as students to integrate their scholarly interests and their personal experiences and motivations. As David Cooper expresses it, "Could I bring my 'whole self' to a vocation in higher education? Could I practice a scholarship that nourished an active inner life, while forging strong and meaningful links to the public sphere? What would scholarship, teaching, and service look like if they supported both personal wholeness and the fulfillments of an engaged public life?" (2002, p. 26). Powerful integration of this kind can provide students with a powerful view of an engaged mind at work, an example of passionate engagement (see Chapter Three of this volume) conducted according to the high standards of excellence that scholars across all disciplines recognize (Glassick, Huber, and Maeroff, 1997).

Glassick, Huber, and Maeroff (1997) built on Boyer's classification of scholarship to define six standards by which to evaluate scholarly work. According to them, high-quality scholarship is characterized by the following:

• Articulation of clear goals
• Careful attention to prior studies and a thoughtful consideration of context
• Use of methods suitable for the scholarly objectives of the work
• Results that offer an effective basis for the claims made about the meaning and application of the work
• Effective communication of the results and the case to appropriate audiences
• Reflective critique of the work itself and the process by which results were obtained

Glassick, Huber, and Maeroff (1997) also emphasize that scholarship must be ethical and respectful of the effect it may have on others; in addition, if possible, all stakeholders must be drawn into the deliberations that give rise to a scholarly agenda and a course of action warranted by the research findings available.

There is no consensus about what a public scholar is and what kind of work he or she does. In an exchange between Robert Kingston and Peter Levine (2004), conducted by David Brown, editor of the *Higher Education Exchange,* a number of conceptions emerged. Starting with the assumption that a public scholar is highly trained in a particular discipline, Kingston describes a person who also is a citizen of the broader world and becomes a public scholar "on the occasions and to the degree that he or she uses that professional way of thinking and body of knowledge in a manner that is directly helpful to fellow citizens who are confronting (with the scholar) a societal problem that affects them all, although not all in the same way" (Kingston and Levine, 2004, p. 17). The exchange engages the scholar in shedding light on a problem and enriching public understanding, rather than employing his or her expertise to define and solve the problem using disciplinary knowledge.

Levine had a different conception, not of a public scholar but of a public intellectual. In the absence of a clear description of the scope of such work, Levine offered three examples of the kinds of intellectual work that a public intellectual might do. The first is community-based research, which becomes public because it involves a collaboration between professional researchers and community members who are not members of the academy. The second is participation in campaigns and social movements that are nonpartisan, such as civic education, campaign finance reform, or public journalism. The third "involves research about social issues, communities, or institutions. This would describe most research in the social sciences, the professional schools, and the humanities" (Kingston and Levine, 2004, p. 19). According to Levine, what makes this third kind of work public is the presence of a genuine exchange and dialogue between the scholar and those studied. Summing up, Levine argues that he thinks of a public intellectual

as a person who "joins a group or community and tries to help, or even prod, that concrete collection of people to become self-reflective and thoughtful about their own problems and interests; conscious of their own opportunities, choices, limitations, and trade-offs; aware of their disagreements and the reasons for them; and capable of 'political' action, broadly understood" (p. 20).

Public Scholarship and the New Economy

Levine's argument forms an excellent segue to the last form of public scholarship, the one examined in this volume. This conception is the application of engaged scholarship to the education of the next generation. It entails a contemporary approach to the linkage of education and democracy, the preparation of a generation that must acquire *adaptive expertise* rather than *routine expertise* (about which more in a moment), the challenges of social responsibility and civic engagement in a working democracy shaped by global and multicultural forces, and the impact of these changes on our approach to an education for the twenty-first century.

In this volume, contributors have explored the many dimensions of public scholarship in the context of the connections between democratic life, informed citizenship, and the historic and cultural arguments about the nature of scholarship and its expression in their several disciplinary frameworks. As the editors assert in the Editors' Notes, it helps to see these issues as they play out in a particular institutional context—in this case, one of the nation's premier land-grant universities. They ask the question, "What does it take to build and sustain a higher education public culture?"; they answer by proposing that the hitherto severed elements of intellectual life (research, teaching, and service) be reunited, that universities embrace partnership with communities beyond university walls, and that concepts of public scholarship be applied to the design of the curriculum and employed in defining our expectations of college graduates. Together, these actions can form a shared response to the overarching question of how we can bring our diverse experiences, our disciplinary perspectives, and our talents together to make the world a better place through the strengthening of that special form of public decision making that we call democracy.

Each author takes on the challenge of exploring the meaning of public scholarship using the tools of his or her own discipline and expertise. We are allowed to see public scholarship through many different lenses: Constitutional law and the explication of public sovereignty (Cohen in Chapter One), the study of faculty careers and organizational design (Colbeck and Wharton-Michael in Chapter Two), the philosophy of ancient Greece and twentieth-century interpretations of the relationships of absolute and contingent knowledge (Eberly in Chapter Three), early adult development and the demands of education research (Flanagan in Chapter Four), the gritty

realities of building affordable housing on American Indian reservations (Riley in Chapter Five), the exploration of an emergent educational philosophy (Wharton-Michael, Janke, Karim, Syvertsen, and Wray in Chapter Six), and the philosophical tools of postmodernism (Yapa in Chapter Seven).

The results captured in these different chapters are fascinating. Underlying these multiple conceptions are a few, often unvoiced assumptions: (a) scholarly activity intended to serve the public interest can engage students in the vital activities of reflection, study, and involvement that are essential qualities of an informed and engaged citizen in the twenty-first century; (b) active learning shaped by real problems is essential in order to foster the capacity for transfer of knowledge from a theoretical framework or an overly specific or controlled classroom context to new and unfamiliar settings and problems; (c) people who are well educated will be better citizens and more likely to accept responsibility in their communities if they have been involved in public scholarship during their undergraduate years; there is no one best model of engagement or community-based public scholarship or single theory to justify it; (e) it always takes a leap of faith to go from a highly controlled experimental or theoretical environment and context into the realities of application with real people in a real place; public scholarship is the right form of education for young adults who are in an especially receptive stage of their development and who are seeking meaning and purpose in life.

Is there a way to put this all together and see public scholarship as a common element across stages of education and phases of development of a professional life as well as an essential instrument in approaching a twenty-first-century education? Is this form of engagement best understood in the context of shaping the citizens of the future, or is there a larger purpose that can be well served by these same conceptions? As any good scholar might do, let us start with a series of difficult questions. In the manner of this volume, I will apply what I have learned in a very different context from the disciplinary perspectives and daily experiences of the other authors included here.

I note that the issues explored by the authors lacked a scientific perspective. As a senior official at the National Science Foundation from 2001 to 2004 and then as a visiting senior scientist at the National Academy of Sciences in the spring of 2005, I devoted my time to exploring the role of science, technology, engineering, and mathematics education in the overall fostering of public understanding and responsible action in a nation shaped increasingly by science and technology. This experience led me to the idea that engagement and public scholarship are essential to the development of the capacity for informed and responsible action in today's society. Although my ideas encompass citizenship, they also reflect emerging ideas about what it means to be a professional, how an expert learns and applies his or her expertise, and what a person needs to know to act responsibly in today's world.

My argument boils down to the difference between the acquisition of *information and knowledge* (routine expertise, see following) and the generation and innovative use of *knowledge* (adaptive expertise). As John Seely Brown puts it, "Learning . . . requires immersion in a community of practice, enculturation in its ways of seeing, interpreting, and acting" (Brown and Duguid, (2000, p. 15). Memorizing does not.

Is learning the mastery of content by memorization and practice, or is learning the making of meaning in a community of other learners? Is one conception better than the other, or do we need a combination of both? Sadly, we are still arguing about whether education is "the steady supply of facts and information" (Brown and Duguid, 2000, p. 135) and accurate computation, or the thoughtful development of understanding and knowledge in the company of a community of fellow learners. More recent explorations are, as we might expect, showing that the extremes are actually a false dichotomy. Recent studies have shown that explicit learning goals and guidance are essential in supporting learning in exploratory settings such as laboratories, another way of talking about the clear theoretical foundation on which exploratory studies and public scholarship must be based.

My basic premise is that public scholarship, as explored in this volume, is at least as essential to the acquisition of twenty-first-century skills as it is to the preparation for a life of citizenship and social responsibility. The two aspects of learning are closely aligned. The broader demands on all of us now require a much more complex and engaging approach to undergraduate and graduate education. Since these chapters are focused primarily and implicitly on undergraduates, I will leave the question of graduate study for another time and place. It is worth considering questions like the following, measuring the promise of public scholarship as a way to address each of these issues:

How is the nature of the workforce changing? What skills and proficiencies are required for the different kinds of jobs in our current economy and in the economy as we imagine it will evolve? Can we make these distinctions without artificially limiting access to higher-end jobs for all students?

What observable and testable qualities are associated with the various characterizations given of twenty-first-century basic and advanced skills, and how will we demonstrate the capacity of our graduates to apply their education successfully to the complex challenges of the new economy, both in school settings and in work and community contexts? What can we measure and how can we best use the information we obtain to evaluate the capacities of institutions and systems of institutions, as well as individuals and groups, and to inform our approaches to instruction, to clarify our goals for learning, to support educators in their professional development and their practice, and to drive critical decisions about the distribution of resources?

How must we educate for the twenty-first century, and how will we prepare our educators to introduce strategies that promote the complex communication and expert skills required in both the workplace and in the community in an age shaped by the rapid production and distribution of knowledge?

What knowledge and skills will educators (K–12 and postsecondary) and administrators require in order to adapt our schools and postsecondary institutions to the needs of the twenty-first century, and how shall we prepare them to take on these responsibilities?

What do we know about why people pursue certain educational and professional goals and what they want out of their educational experiences? What can we learn about the dynamics of the labor market in an age of global competitiveness and universal accessibility to knowledge?

What do we know about the cycle of innovation that links theoretical concepts and research findings to professional practice, policy formulation, and programmatic design in education, and how can we best foster the accumulation of useful and legitimate knowledge that can guide decision making in all of these realms? Does the movement of ideas into practice in educational settings behave in similar ways to the diffusion of technological innovation through the economy? What skills and experiences are needed to help prepare people who can support innovation and invention, both in education and in society more generally?

What are our changing expectations for baccalaureate and graduate education? What should all students and graduates know, understand and be able to use, and what should be reserved for advanced education and application? What do people learn when they study in engaging and adaptive ways?

Today, knowledge production and the effective use of that knowledge are essential for individual and organizational success, both in the for-profit and nonprofit sectors. The current "new economy" is shaped by the information technology revolution, including the Internet, software, the microprocessor, and telecommunications, as well as the convergence of these capabilities into composite devices (Foray, 2004). What is emerging is a "global, entrepreneurial and knowledge-based economy in which the keys to success lie in the extent to which knowledge, technology, and innovation are embedded in products and services" (Atkinson, 2004, p. 5). Responsible citizenship also increasingly requires a deeper understanding of cultural differences, the impact of humans on the environment, an appreciation of the influence of technology on society, and an understanding of the contributions of science and mathematics as the globalization of the marketplace and the flow of ideas and applications across regions and nations is facilitated by the introduction of broadband communication. "And just as these prior economic transformations led to major changes in the organization of industry, work, governance, and politics, today's New Economy is doing the same" (p. 5).

The nation's educational system will have to change to match the demands of the new technologies shaping our lives, our communities, our economy, and our global relationships. In an address to the Forum of OECD Education Ministers, Hargreaves (2000, p. 1) argued that the industrial age had a profound effect on education systems that were designed to prepare workers for manufacturing jobs. The question he posed is this: "How will the education system, including the school, need to change to prepare people for a knowledge economy?" Although educators have concluded that all students need "a sound grasp of basic literacy and numeracy," a robust knowledge economy "rests as never before on knowledge, intelligence, and creativity as its key resource and driving force" (pp. 1–2). Because knowledge economies are by definition learning societies, our schools, colleges, and universities must become genuine learning communities built around the same principles of knowledge generation and effective use as any other organization in a knowledge-based society. Hargreaves concluded his remarks by asking one of the primary questions we must address: "How can we refashion schools so that they mirror, and thereby help to prepare the young for, life in a knowledge economy?" (p. 3). To make these profound changes from an industrial-based model to a knowledge-based one, our schools must learn the skills of knowledge management, "how organizations track, measure, share, and make use of intangible assets" (p. 1) such as an employee's knowledge or the results of corporate research and development ("Significance of Knowledge Management," 2004).

As we look forward into the twenty-first century, there are many challenges ahead. Social stratification in this country has become increasingly linked to the system of education, especially postsecondary education. Whether a person enrolls in postsecondary education, the type of school he or she attends, and the amount of education he or she receives will have a profound effect on occupational status, access to further career advancement, and quality of life (American Diploma Project, 2004; Halperin, 1998). According to *The Forgotten Half Revisited: American Youth and Young Families, 1998–2008,* the nearly ten million eighteen- to twenty-four-year-old Americans who do not go to college are not doing as well now in most dimensions of life as they were a decade ago. Most of the indicators that were studied (ranging from public schooling to college education to preparation for employment) are either not improving, or worse, are regressing for the "forgotten half." Furthermore, the widespread assumption that everyone is going to college turns out to be questionable. According to *The Forgotten Half Revisited,* "In 1996 almost half of all adults (48.2 percent) either did not complete high school or terminated their formal education after graduation" (Halperin, 1998, p. i). This may change, for the report also notes a somewhat hopeful trend toward rising educational aspirations and attainment among late adolescents and young adults (ages eighteen to twenty-four). Unfortunately, only a third

of young people from lower-income families go to college, whereas 83.4 percent of children from upper-income families do.

This reality has significant implications for our approach to K–12 education as well as for postsecondary education and continuing professional growth and development. We must rethink yet again what learning means, who our students are, how to close the gap in participation and educational achievement among various sectors of our society, and how to support the continuous learning that modern society demands. Here enter the broader purposes of public scholarship.

What can we do now as we enter the next generation of reform? According to Jerome Bruner ([1960], 1977, 1997) and those who have followed him, including John Seely Brown (Brown and Duguid, 2000), Paul Feltovich (Feltovich, Coulson, and Spiro, 2001), and Joe Novak (1998), we need fresh ways to engage our young people in the exploration of knowledge that is growing at such a rapid rate. We can do this by involving them in the thinking and exploration that generates that knowledge. We should "talk physics" or "talk math" with students rather than talk *about* it with them. We should build a *spiral curriculum.* In such a model, we can make knowledge and problem solving accessible by starting where students are— that is, by building on what they already know and how they think.

The kinds of concepts that are both difficult to learn and resistant to correction when misunderstood are just the kind of things we most need to know and understand in our complex and changing world. There are ways to help students learn this material. We need to create opportunities for faculty and students to work together and explore ways to approach the topics that students find the hardest to understand. Through collaboration on issues of public scholarship, we can draw our students into a community of professional practice and help them acquire adaptive expertise.

The notion that children must learn by repetition and rote or that undergraduates learn best by listening to gifted and inspiring lecturers must be replaced with a rich concept of young people as thinkers in their own right, who can learn best in a context that is meaningful to them. This is not a new idea. Some of us probably encountered it when we read John Dewey. All of us, in fact, are better able to learn if we are helped to become makers of meaning in collaborative settings where we can draw on a rich cultural tradition of shared learning. The transmission of *information,* which is free of any context or of a particular person or situation and can be facilitated by information technology, is less important than the generation and sharing of *knowledge,* which *does* have a context and requires effective communication and good working relationships.

In *How People Learn* (Bransford, Brown, and Cocking, 1999), four design features are extrapolated from the research literature that can serve as an overall framework for thinking about teaching, learning, and the design of educational environments that incorporate the characteristics of

a knowledge-based learning organization ("Significance of Knowledge Management," 2004). David Garvin (1993), in his original description of a learning organization, described the capacities that support continuous improvement and a commitment to learning—the signal features of an effective organization in the knowledge economy. A learning organization is "an organization skilled at creating, acquiring, and transferring knowledge, and at modifying its behavior to reflect new knowledge and insights" (p. 80). In school or on a university campus, this process must involve educators, staff, students, and interested community members. The core of this concept is simple and easily overlooked. As Garvin (p. 80) puts it, "New ideas are essential if learning is to take place," but ideas are not enough if the organization itself does not change to generate the human and social capital it will require to take on the characteristics of a learning organization that is skilled in knowledge production as well as knowledge management. As the authors of the OECD policy brief shown in the References explain ("Significance of Knowledge Management," 2004), it is now very clear that the renewal and rejuvenation of our public sector, including our schools and our postsecondary institutions, will require adopting and using new methods of knowledge management that have been shown convincingly to promote productivity and success in the private sector.

A companion volume, *How Students Learn,* takes this framework and carries it further by providing examples of how the principles identified in *How People Learn* can be used in educational settings to foster learning in three core subject areas: history, mathematics, and science. The four concepts (Donovan and Bransford, 2005) are as follows: the *learner-centered lens* encourages attention to preconceptions and begins instruction with what students think and know; the *knowledge-centered lens* focuses on what is to be taught, why it should be taught, and what mastery looks like; the *assessment-centered lens* emphasizes the need to make students' thinking and learning visible as a guide for both the teacher and the student in learning and instruction; and the *community-centered lens* encourages a culture of questioning, respect, and risk-taking.

Conclusion

Today, we are expected to achieve high standards of learning for all students as we face the rapid changes brought about by the technologies and social challenges of our own knowledge-based age. Yet our expectations of what our schools can do are really still an expression of our cultural anxieties, and the work of changing them is still limited by our capacity to address the challenges that face us. Our responses are shaped by the same limitations of culture, experience, and tradition as our forebears encountered. As *The Forgotten Half Revisited* puts it (Halperin, 1998, p. ii), "As the nation has become more conscious of the importance of education and skills, the translation of public

concern about schools into public action has been difficult and erratic. The society's demand for high skills has rushed ahead of the capabilities of schools and work institutions to meet the new requirements of a global economy."

Fortunately, we now know a lot more about learning and cognition and must put what we know to good use. We also need to give serious consideration to the realities of the environments in which we must work—complex and swirling patterns of conflicting "attitudes about educational accomplishments, preparation for the workforce, the demand for higher educational standards, the importance of teaching values, the importance of public safety and order, rising educational aspirations, the dropout problem, and job skills and training" (Halperin, 1998, p. ii). In my opinion, an especially powerful way to approach this swirling environment is to employ the ideas of public scholarship as expressed in this volume, so that we can engage our students with us in work of significance and public purpose while at the same time contributing to their individual development as productive, creative, and responsible adults.

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