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Knowledge and Judgment in Practice as the Twin Aims of Learning

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What is the future of liberal learning? This most distinctive of American educational traditions is both an object of concern and often overlooked amid the changing academic landscape. The academy has moved toward an ever more central position in contemporary society, propelled by long-running connections between academic research with industry and government and its growing role in the preparation of personnel for the labor market. As higher education has moved ever closer to a universal rather than elite constituency, for many college has come to mean chiefly a route to the more desirable positions in the workforce. This idea has been urged on the public not only by business leaders and the mass media but also by political leaders of both major parties.

Such an educational program is inadequate to prepare students for a world grown increasingly intertwined yet precarious. Students need the contributions of the tradition of liberal education to enable them to make sense of the world and discern their place in it. Fortunately, a number of developments in the world of higher education are converging on a rethinking of liberal learning. A central dimension of these new currents is the rediscovery of liberal learning's concern with wise judgment and responsible engagement as necessary complements to broad knowledge and intellectual rigor. This chapter outlines the key issues involved in this new direction and draws out some of its implications for undergraduate education and for faculty purpose and identity as well.

The Challenge of Articulating a Vision of Liberal Learning for Today

These developments have changed the balance between what colleges and universities have most prized historically—the disciplines of the sciences,

the humanities, and the social sciences—and the growing demand for the “practical arts” of business, engineering, technology, and the health professions.¹ The growing tendency to organize undergraduate education around instrumental, often specifically economic, purposes poses a serious threat to the future, and even the survival, of the tradition of liberal learning. Within the academy, however, this instrumental conception of educational purpose does not go unchallenged. When it is questioned it is most often by academic champions of critical thinking. Typically, such advocates of critical thinking argue that college exists to instill in students the distanced intellectual stance typical of the sciences and other analytical modes of thought embodied in the intellectual disciplines. This is advanced as a higher goal than the utilitarian aim of workforce training, and its advocates sometimes connect critical thinking with developing reflective citizens. These aims are presented, justifiably, as genuine benefits to both individuals and the larger society.

These two conceptions of education’s purpose suggest two clashing agendas. *Agenda* is here used as a metaphor to get behind the abstract language of policy objectives and outcomes to articulate the ways in which education is pictured and enacted in actual courses of study and ways of teaching. To talk of an agenda means focusing attention on how a particular set of educational experiences reveals the things that are actually valued in a college experience. The metaphor of an agenda also connotes an effort to be clear about what institutions and their staffs are “up to” in their choice of educational content, the architecture of the curriculum and cocurriculum, and their practices of teaching and assessment.²

The instrumental agenda emphasizes the occupational outcomes of the college degree, often stressing practical skills over conceptual thinking and formal knowledge. Its opponents emphasize mastery of theoretical knowledge and conceptual capacities of the kind embodied in the arts and sciences disciplines.³ The latter has tended toward an identification of liberal education with induction into a disparate set of increasingly specialized disciplines. On the other hand, the former, despite its sometimes defensive stance within the academic setting, seeks to make college a more direct and effective preparation for entry into job and career. Neither of these agendas has proved congenial to the traditional aspirations of liberal education, so reinventing liberal learning for our times must also include a reshaping of the role and identities of faculty as well as curriculum and pedagogy.

While the instrumental agenda can, at its most extreme, stress standardized routines and rigid educational programs, it is perhaps less obvious that today’s academic disciplines typically also fall short of the broad intellectual, moral, and civic purposes once espoused by higher education.⁴ What seems particularly lacking in many institutions is serious effort

to provide an integration of students' educational experiences with the orientation and resources necessary for the ethical application of knowledge as individuals, as workers, and as citizens and participants in civil society. In any case, it is also striking that neither the instrumental nor the critical thinking approach seems very effective in engaging the energies and aspirations of many of the students who pass through higher education, as documented by many studies that show a pattern of large-scale disengagement and underachievement.⁵ Other research, however, shows that this generation of students is concerned not only with the economic benefits of their education but also, to an increasing degree, with how they can make sense of their lives and live them well.⁶

The instrumental and critical thinking agendas often contend, and sometimes intersect, within national debates about the point and value of higher education. But the notion that higher education's purpose could be practical without being simply utilitarian and be intellectual without remaining detached is heard less often. Yet, one of the defining commitments of the tradition of liberal education has been just such a purpose: one that is practical in that it aims to enable students to engage with their lives, but open to critical exploration, and, most significantly, an engagement motivated by a response to values that transcend the individual. This is the idea of liberal education as preparation for a life of significance and responsibility.

Reclaiming Higher Education's Orphaned Aims

In the face of these challenges and rival agendas, American higher education is witnessing a number of efforts to articulate the goals of liberal education so as to reinvent liberal learning for our times. These developments are perhaps not quite a movement, though they do exhibit common features. Perhaps most importantly, such efforts reject the adequacy of either utility or critical thinking as exhaustive descriptions of the aims of higher education. In different ways, these emerging developments seek to reclaim what have been called the "orphaned aims" of liberal education, particularly joining concern with knowledge to students' development as persons and their engagement with larger values.⁷ That is, they are attempting to articulate in new ways the traditional aim of enabling students to make sense of the world and find a meaningful place in it.⁸ These include a new attention to the exploration of large, orienting questions about the world and human identity, about meaning and life purpose, all of which have been central concerns of the tradition of liberal education.⁹

Along with concern for imparting knowledge and developing intellectual capacity, these new currents also seek to affirm the importance of

students' development as persons as well as minds. This turn toward educating the whole student is based upon more than ideals of uplift. It can draw upon a significant body of research. This work shows that even the economic and cognitive benefits sought by advocates of the instrumental and critical thinking agendas depend in significant degree upon students' development as persons, particularly their cultivation of curiosity about the world, self-understanding, and engagement with serious, long-term purposes.¹⁰ While these new approaches to liberal learning give attention to questions of occupational choice and preparation, they seek to integrate all these aims by engagement with larger values and responsible participation in the life of our times. The growing movement for educating for civic responsibility and public service provides examples of how this can be done.¹¹

It is this attention to students' development as persons, along with explicit preparation for using their knowledge and skills to engage responsibly with their lives, that distinguishes this movement for renewal in liberal education. These goals do indeed articulate aims that have been orphaned with the development of a university torn between disciplinary learning and instrumental training. Especially when contrasted with the more common conceptions of higher education as primarily concerned with either providing economic advantage to students or instilling in them habits of critical thinking, the turn toward a fuller agenda represents a movement of revitalization. It is seeking nothing less than to renew the academy's educational mission in its most important sense.

Rethinking Liberal Learning as Three Fundamental Shifts in Perspective

The reinvention of liberal learning for our times can be brought about by three fundamental shifts in perspective:

1. From an instrumental to a developmental understanding of the college experience
2. From a consumerist to a participatory understanding of learning
3. From an individualist focus to a social ecology of learning

First Shift: From an Instrumental to a Developmental Understanding of the College Experience

The underlying discovery, or rediscovery, is that college is a formative experience. There is abundant evidence that the time spent as students has profound effects on sense of world and self as well as on

larger purpose. Furthermore, it is also clear that the influences within the undergraduate experience are multiple and operate in a variety of settings, ranging from the classroom to cocurricular activities to work experience and social life with peers. Where these influences converge toward common aims and values that support responsible learning, the overall educational effect is strong and positive. Where students experience fragmented and conflicting influences, the effects are correspondingly confused and contradictory.¹²

This means that college study is never simply neutral in its effects. It necessarily has formative, developmental impacts on those who undertake it. This realization undercuts the familiar metaphor of higher education as simply a way to acquire instruments for personal advancement. This imagines knowledge and intellectual skills as value-neutral resources from which students can choose what they wish. This instrumental understanding often describes higher education as a kind of market in which student-consumers (often along with their parents) shop for desirable tools and goods. There is, of course, truth in this picture. But it is seriously incomplete and misleading. What it overlooks is how educational choices affect the identities, chances, and purposes of those who make them. Because the student-as-customer metaphor underestimates the latent impacts college necessarily has on students, it can provide no help to student-consumers for understanding what their “purchase” is doing to, as well as for, them, in either positive or negative ways. This is really flying blind when trying to launch one’s life course.

But for the renewal of liberal learning, this discovery has great positive value. If the totality of college experience is formative in shaping students’ development as learners and as persons, then it becomes feasible to imagine a more intentional aim at those great educational goals college catalogs often espouse. Awareness of the formative effects of the overall environment is the first step. It renders the undergraduate experience more transparent to all involved. There remains the practical challenge of investigating those effects to discern how the educational mission might be made more effective. This shift in perspective enables educators to aim more concretely at an education that develops the abilities and commitments the institution wishes to promote.

Since the effects tend to be holistic, their accomplishment requires coordination and cooperation among the various parts of the undergraduate experience. This realization entails a need for considered action. To effect positive educational outcomes, there needs to be mutual agreement about the educational mission among faculty in different areas. But the effects will remain limited if the conversation and consensus remain only among faculty. They must expand to involve student life personnel, academic

support staff, and all others involved in providing the college experience. The shift toward a formative understanding of undergraduate education therefore changes the game. It places new responsibilities and demands upon academic leadership. But it also holds out new levels of achievement for those institutions able to grasp the opportunity.

Second Shift: From a Consumerist to a Participatory Understanding of Learning

The second major change in perspective has been aided by advances in the understanding of learning. The great realization has been that learning is necessarily an active process of self-development rather than a simple transfer of information. Learning is less like consumption of a commodity and more like developing a skill or an expertise. Learning theorists argue that expertise is best developed through learning by doing. Indeed, modern learning theory suggests that even theoretical knowledge and analytical skills are learned more effectively when, rather than being taught in isolation, students are able to learn concepts and methods through employing them to understand actual contexts of living and experiences. Studies of the development of expertise from a wide range of fields, from athletes to musicians to artists and scientists, have uncovered common patterns that have direct implications for learning in college. Acquiring expertise in any area requires experience in emulating models of competent practice, response to feedback on that practice, and recurrent attention to the goals as well as the actions and understandings (such as the rules) that constitute the activities of that area of activity, whether it is athletic, artistic, professional, or academic.¹³

This more interactive understanding of learning complements and reinforces the conception of higher education as an ongoing developmental process that shapes the perception, imagination, and identity of all who undergo it. This shift in perspective holds two great potential benefits for revitalizing liberal learning: It can help educators become more self-aware and intentional about how their own activities contribute to larger educational goals, and it also suggests the possibility and importance of leading students to become more self-aware about their own development.

These implications of the discovery of the primacy of active learning also directly support the aims of the new movement for liberal education. Moving toward competence and expertise in any academic area begins with mastering procedures for describing particular events and objects in general concepts. This is analytical thinking. It remains the core focus of higher education. However, while college courses typically ask students

to solve prestructured problems by applying analytical methods, the development of expertise—and the maturation of intellectual capacities—requires going further. Achieving these ends demands learning how to think with and through concepts in complex and unstructured situations: to learn how to make sense of ambiguous situations and to formulate problems as well as solve problems already given.

These are the kinds of cognitive capacities needed for flexible and resilient performance, not only in the arts and sciences but also in professional and civic life. In principle, liberal learning connects the aim of knowing about the world with the need to take up a stance within the world. This means “knowing that” must be linked to “knowing how,” that the theoretical and the contemplative exist in interplay with the active and the practical attitudes. Too often, however, the arts and sciences provide too little teaching and active learning that can promote this development. So, part of the shift in perspective needed to reinvent liberal learning is a shift in pedagogy to foreground those forms of teaching and learning that contribute directly toward the development of intellectual sophistication and responsible engagement.

Decades of research have made clear what some of these teaching practices are and, at least in part, why they are effective. Examples include participation in courses that link various disciplines and points of view around big questions that matter for students and the world; experiential learning that involves direct experience with issues, sometimes in social service, and concepts under study and guided reflection on such experience; taking part in research along with faculty; learning to work together with other learners to both solve problems and better understand other points of view; and the intensive use of writing as a medium for exploring experience and constructing knowledge.

These teaching practices all involve putting concepts to use in contexts that approximate actual life situations, whether in scholarly, research, or practical contexts, allowing theoretical knowledge and experience to mutually influence each other. They also provide more intensive interaction between students and faculty and with peers than is typical, along with more intensive attention to forms of thinking and communicating. Such practices also directly encourage self-awareness within the context of cooperating as well as competing with other students. Such pedagogies can be shown to have high impact on both student engagement in learning and on student achievement, reversing the overall trends toward underachievement. Not least important, these pedagogies have proven even more beneficial for first-generation college students and those from underrepresented groups.¹⁴

Third Shift: From an Individualist Focus to a Social Ecology of Learning

The hidden soil nurturing this flourishing of personal development in liberal education is the set of practices and social bonds that sustain a community of learning. This social ecology is often taken for granted or simply ignored by both the instrumental and the critical thinking agendas, focused as they are on stimulating individual achievement, often in explicitly competitive contexts. Yet, recognizing the formative nature of college education directs attention to the importance of aligning the various aspects of campus life, including the academic core but reaching beyond it as well. This third shift, toward greater awareness of the role of an institution's social ecology in fostering student development, is also supported by a significant body of research on how learning occurs.

This research demonstrates that social bonds provide the indispensable basis for individual action, including learning and achievement.¹⁵ Effective learning in schools or colleges depends upon networks of communication organized around shared norms and expectations of reciprocity. Such relationships encourage mutual respect and the trust that grows out of shared purpose. In fact, social bonds centered on a common valuing of learning are key factors in enabling individual development. (For example, it is by supporting the value of learning and by weaving it into the norms of household life that parents who have not experienced formal education themselves can still provide crucial support for their children's achievement.) The dependence of individual flourishing upon such networks of relationships is clear in organizations ranging from armies and team athletics to scientific and business groups. But it is also the case in both schools and higher education. Rather than mere "instruments" at the disposal of individual actors, the networks of relationships that sustain and enforce concern with learning constitute patterns of meaning through which individuals come to define themselves and find motivation to persevere and achieve.

This insight sheds more light on the first shift in perspective, from an instrumental to a developmental understanding of higher education. Individual intellectual growth depends upon participation in communities that value and support learning. When the pedagogical practices in use contribute to and strengthen the norms and networks that sustain these communities of learning, the outcome is student growth along a number of dimensions. This is because intellectual growth is intertwined with moral development: For instance, achieving greater competence depends upon capacities for persistence and resilience in the face of difficulty. And these traits of character have been shown to be grounded in developing a sense of larger purpose and meaning.¹⁶ Participating in communities of

learning oriented toward important life goals is a crucial resource for enabling such development to unfold.¹⁷

However, the educational practices of today's universities and colleges often do too little to activate these potentials. They typically direct students' attention toward mastering procedures for describing particular events and objects in terms of general concepts far more than toward learning how to bring such skills to bear on questions of moment in social and personal life. Analytical thinking is important, but a nearly exclusive focus on analysis in abstraction from life fails to utilize the high-impact practices that foster the growth of informed and responsible thinkers or citizens. The relation of training in analytical thinking to students' struggles for meaning and orientation in the world, let alone ethical judgment, is all too rarely given curricular attention or pedagogical emphasis.

Linking “Knowing What” with “Knowing How”: The Key Role of Practical Reasoning

A recast liberal education, one that reunites the orphaned aims with instruction in the disciplines, must go beyond the purely analytical to provide students with experience and guidance in using theoretical knowledge and analytical tools to engage in deliberation and action. Thus, the emerging model of liberal learning needs to become centered upon teaching a wider conception of thinking, one that includes the “knowing how” rooted in the disciplines of practice as well as the “knowing that” of the analytical fields. That is to say that the teaching and learning practices must be aligned with the goals of liberal learning and be strongly rooted in communities of learning in synchrony with these ends. Achieving this kind of educational community is not just a project of restructuring the curricular architecture, of subjects and methods. It is also at its heart a matter of the faculty as a community of learning and practice—a community that today must expand to include the personnel on the “other side” of campus, in student life. They, too, are important educators, and their participation will be crucial to the long-term success of efforts to reorient liberal education.

Given the disparate starting points of today's faculty—especially when including both the arts and sciences and the professional fields such as law, engineering, business, nursing, or medicine—what could provide a common meeting point from which mutual understanding and eventual collaboration might develop? There is a strong candidate for this role of mediating discourse: traditional practical reasoning. Practical reasoning designates a form of cognition that goes beyond reflection to deliberate

and decide upon the best course of action within a particular situation. Its aim is a reflective decision to act in a certain way in light of one's sense of purpose given the particular circumstances of the present. Therefore, practical reasoning demands that individuals understand the proper aims of the activity in which they are engaged as well as the context of that activity. It also requires perceiving the different purposes and perspectives of other participants in the situation and the capacity to balance conflicting perspectives while aiming at an outcome that seems best for these persons, in this situation, at this time. Such thinking is characteristic of professional judgment as well as being the key capacity of citizens and statesmen.

It is probably no coincidence that practices for teaching practical reasoning have been more developed in professional fields such as nursing and medicine, where it is essential that students learn to "do" as well as "know," than in the arts and sciences disciplines. As Lee Shulman has pointed out, in professional education, where students must learn to put knowledge to use in the service of others, the unit of study is often the case. A case is a unique situation, one that cannot be solved simply through the application of formula. It must first be understood and classified as "a case of" before analytical thinking can even begin. And the student must take an active part in this effort to interpret the situation. Because it involves the use of analogy and comparison, such interpretive activity opens the way toward reflection on the strengths and limits of various methods but also toward self-awareness on the part of the learner of abilities and weaknesses. Finally, in professional practice and training, such reflection is usually a group process, a search for clarity through debate that must end in practical judgment: to resolve the case in this way or that. Shulman argues that such pedagogy is needed to enrich and energize the liberal arts and sciences, making ideas come alive by linking them to the needs of the world and demands for action.¹⁸

Bringing Together Professional and Liberal Learning

If this is so, then a fully developed vision of liberal learning—one that is formative and developmental in purpose, focused on active pedagogies, and self-consciously engaged in cultivating communities that sustain networks of learning—cannot afford to neglect the contributions of the professional fields. Students typically study in these areas today for instrumental reasons and because the professions hold open the potential for both a respectable life and a meaningful way to contribute to the larger world. In this way, students are already engaged in moving between the liberal arts and sciences and the professions. What students most need in

order to do this well is to learn to configure and use knowledge so as to enable them to make sense of the world and find a meaningful place in it. For this, collaboration between the liberal arts disciplines and the practical fields is essential. The good news is that such collaboration is possible as well as needed.¹⁹

Consider some examples drawn from a research seminar convened by the Carnegie Foundation for the Advancement of Teaching that intentionally brought together educators from professional fields as well as liberal arts disciplines.²⁰ The intent was to examine how a common focus on teaching students to reason in context might provide a means for bridging the often deep campus divides between the arts and sciences and the professional programs. Entitled *A Life of the Mind for Practice*, the seminar included teachers of the liberal arts side by side with faculty from medicine, law, education, and engineering. Imagine an engineer at the beginning of her career. A recent graduate, she is skilled in the analytic techniques she learned in her engineering program. But she finds herself working on an international project for the first time, collaborating with engineers from other nations who define their work differently than she does. How can these engineers work together, in a way that meets the various needs of the client, the employer, and the engineers themselves? In one engineering course that has been designed explicitly to address these concerns, students supplement the analytic skills learned in their engineering courses with knowledge drawn from the humanities and social sciences about how the engineering profession and its history differ across nations. Through assignments that require students to imagine the work of engineers in other societies and its ramifications for their own conduct, and vice versa, the course introduces students to important knowledge and skills—drawn from both the liberal arts and the engineering profession—for an increasingly global professional world and workplace.

Or consider another course, this time one that links the sciences with humanities, but does so by focusing on the practical concerns of personal, family, and civic life. Human biology provides students with an introduction to some of the key findings of the contemporary life sciences. But the course gets its significance from questions about the human import of these scientific discoveries. Rapidly advancing biological knowledge—think of genomics, for instance—is increasingly important to the ability to act well as voter and citizen, and even as a member of one's family. Think of the expanding range of decisions that has sprung up in the face of serious or terminal illness and end-of-life care. As advances in biological science and medical technology have extended life, they have also increased the burden of judgment and decision upon both health care professionals—which some of the students in the course will

become—and families. How, then, do we think about these matters so as to be able to act well in a context where there is real disagreement about the basis for judgment?

These questions arise from the students' actual or anticipated practical involvements and commitments as responsible participants in society. In that sense, they have an intrinsic civic dimension. Finally, though, they are questions that stimulate the practical imagination. Among the several dimensions of personal identity, it is the practical imagination that proposes what we can make of our lives and the things we may hope for, individually and together. The scope of the practical imagination either expands or contracts students' capacities to engage with their lives in resourceful, reflective ways. It was Aristotle, one of history's great educators, who said that the institutions of a city need to be aligned in order to shape its citizens' acquisition of knowledge, skill, and character so they would care about their community and be able to contribute to its welfare. Schools, like his Lyceum, should be organized to concentrate this formative process. The effort to provide wider and more integrated horizons for students' practical imaginings remains the purpose of the reconceived liberal learning embodied in courses such as those described.

The faculty members gathered in the Life of the Mind for Practice seminar found surprising resonance across the divide between professional and liberal arts. That is, they found common ground and common cause around a specific pedagogical intention. All wanted to provide students with more than formal knowledge and analytical skill, important as these are in college education. They also aimed to provide students with opportunities to bring this knowledge and skill together in pursuit of important practical purposes that contribute to the life of the world. On this theme, the professional school faculty found they had a good deal to teach. That is because professional education must provide space for aspiring professionals to learn how to think like professionals in making judgments of importance amid the uncertain conditions of practical experience. (This often goes against the academic grain of professional schools, so that clinical teaching often acquires a certain stigma of an "impure" activity compared with the exposition of theoretical knowledge.)

In courses such as these, in both the liberal arts and sciences and in professional fields, students learn to frame their thinking through interplay of theoretical knowledge drawn from the academic disciplines and their particular loyalties as citizens; as possible future engineers, nurses, physicians, or pharmacists; and as persons with responsibilities for others. Through such experiences, students can explicitly learn how to move fluidly between the distanced, external stance of analytical thinking—the third-person point of view typical of most academic thinking—and the

first- and second-person points of view that are internal to acting with others in a situation.

This is practical reasoning: the back-and-forth between general knowledge and the challenges and responsibilities that come with particular situations, an ongoing process of reflection whose end is the formation of habits of critical judgment for action. The pedagogical vehicles for teaching this movement between viewpoints span the professional and the arts and sciences disciplines: the case study, as already noted, but also the literary and historical exploration of character and response to challenge; the simulation; and participation and reflection upon actual involvements in the world in various forms of experiential learning. But their common feature is recognition that in practical reasoning it is always the involved stance, the point of view integral to purposeful human activity, that provides the ground and the goal for critical, analytical reasoning.

Knowing Why and Knowing When: Fostering Practical Wisdom

The professional teaching practices that are of value for rethinking liberal learning, however, are principally those that are organized to develop just this kind of engaged, or practical, reasoning. This kind of reasoning involves “knowing how” to make knowledge relevant to actual persons in uncertain situations. But it also necessitates engaging with questions of purpose and value: “knowing why” some decision is right and, indeed, “knowing when” such-and-such an intervention is appropriate.

Unlike purely technical judgment, which employs methods to achieve pre-given ends, practical judgment involves the blending of formal knowledge with the concrete and value-laden dimensions of the situations of professional work. The pedagogies of professional education, then, necessarily involve a directly moral dimension: They must teach students what the profession stands for; they must seek to be persuasive advocates for the profession’s highest standards of practice. By necessity, this is unapologetically formative education with public responsibility in view.

A more integrated form of liberal education provides a way to address a large problem confronting our culture, perplexing and frustrating individuals and institutions. On the one hand, progress in academic disciplines is like the division of labor that underlies economic growth: By focusing on a single criterion, it is possible to become progressively better at attaining it. On the other hand, where what matters is integration among several goals—as in professional practice and in civic life—decisions often cannot be broken down into single-goal issues; the several goals must be blended,

and compromised, with other goals. In such situations—and most of life, especially civic life—the premium is on holistic practical judgment.

Such judgment can also be described using the traditional term *practical wisdom*. Unlike simply wielding an instrument or following the rules, practical wisdom requires an active understanding of the deeper purposes of social practices. Achieving the ends of such practices of marriage as well as medicine, of education as well as civic activism, requires a kind of reasoning that is appropriate to the practice involved. This is true of the professions and the arts as well as business and government. In recent work, Barry Schwartz and Kenneth Sharpe have powerfully recovered a venerable insight: that practical wisdom is the end of education. Drawing upon contemporary cognitive psychology as well as sociology and classical philosophy, Schwartz and Sharpe show how holistic practical judgment—perceiving a situation correctly so as to engage with it in the right spirit, making possible insightful deliberation and purposeful action—can be developed, but also undercut, through different ways of organizing both education and work.²¹ This work underscores the importance to liberal learning of the shifts in perspective discussed earlier.

Important as professional education can be to the development of these capacities in students, it is the possibility of developing a holistic understanding of the world through study of the arts and sciences that makes liberal learning indispensable. Judgment has to be informed by both disciplined knowledge and trained experience. The ability to ask questions, investigate complexity without being overwhelmed, and keep refined judgment through participation in communities of practice is necessary for successful development of expertise in any art, craft, or profession. But as we have seen, this is far from the typical outcome of higher education.²² What the liberal arts at their best can contribute to this purpose is more than tools or disciplines. The arts and sciences also contain surprising power, not only to provoke insight but also to enchant and beguile both teachers and learners toward wider horizons for living and deeper engagements with the world.

These considerations also suggest the need to articulate a new sense of identity for faculty. In their capacity as guides in the realm of liberal learning, they function as more than the disciplinary specialists that college and university faculty have aspired to become over the past century. There is an analogy here to the work of physicians. Just as in their clinical judgment, physicians must learn to deploy general knowledge in the service of practical judgments of what is important for the healing of particular patients in specific situations. Liberal arts teaching requires a similar kind of practical wisdom. As a recent study of medical practice concluded, medicine is “more than a science.” It is a complex practice of healing in

which “diagnosis and treatment are intensively science-using activities,” though not “in and of themselves, science.”²³

In an analogous way, liberal arts teaching of the kind discussed in this chapter is not an “application” of disciplinary knowledge. Nor is it identical to induction into particular fields, whether professional or among the arts and sciences, as is typical of introductory courses in many fields. These are all versions of the educator as disciplinary specialist. Rather, genuine liberal education entails a different understanding of the liberal arts teacher as an intensively discipline-using educator whose aim is not so much specialized knowledge as the fostering of practical wisdom. Such a self-understanding is probably already widespread in the ranks of liberal arts faculties, among those who feel a calling to this kind of work. But it goes against the grain of the academy’s more fashionable model of disciplinary specialist. If a genuine reinvention of liberal education is to succeed, it will require that this alternative faculty identity become public, recognized, supported, and advanced.

Notes

1. Steven Brint, “The Rise of the ‘Practical Arts,’” in *The Future of the City of Intellect: The Changing American University*, ed. Steven Brint (Palo Alto, CA: Stanford University Press, 2002), 231–59; Patricia Gumport, “Universities and Knowledge: Restructuring the City of Intellect,” in *The Future of the City of Intellect*, 47–81.

2. William M. Sullivan and Matthew S. Rosin, *A New Agenda for Higher Education: Shaping a Life of the Mind for Practice* (San Francisco: Jossey-Bass, 2008), 95.

3. For documentation and an elaboration of the educational practices and values at stake in this contrast, see W. Richard Scott and John W. Meyer, “The Rise of Training Programs in Firms and Agencies,” in *Research in Organizational Behavior*, ed. Lawrence L. Cummings and B.M. Staw (Greenwich, CT: JAI Press, 1991), 297–326.

4. See, for example, the historical discussions in Douglas Sloan, “Harmony, Chaos, and Consensus: The American College Curriculum,” *Teachers College Record* 73, no. 2 (1971): 221–52, esp. 246–47, and Julie Reuben, *The Making of the Modern University: Intellectual Transformation and the Marginalization of Morality* (Chicago: University of Chicago Press, 1996).

5. Derek Bok, *Our Underachieving Colleges* (Princeton, NJ: Princeton University Press, 2007), esp. 86–101; George D. Kuh, Ty Cruce, Rick Shoup, Jillian Kinzie, and Robert M. Gonyea, “Unmasking the Effects of Student Engagement on College Grades and Persistence,” *Journal of Higher Education* 79, no. 5 (2008): 540–63.

6. Larry Braskamp, Lois Calian Trautvetter, and Kelly Ward, *Putting Students First: How Colleges Develop Students Purposefully* (Bolton, MA: Anker, 2006).

7. Donald W. Harward, “Engaged Learning and the Core Purposes of Liberal Education,” *Liberal Education* 93, no. 1 (Winter 2007): 6–15, www.aacu.org/

liberaleducation/le-wi07/documents/le-wi07_Harward.pdf. This article reports on how the formerly orphaned aims of liberal education have been consciously brought together in the work of the Bringing Theory to Practice network, developed and led over the past decade by Donald Harward.

8. For a discussion of the range of new approaches, see “Symposium on Effective Practice,” *Liberal Education* 95, no. 4 (Fall 2009), 6–45.

9. The efforts of national philanthropic institutions have also pushed this development ahead: The Teagle Foundation has promoted a wide-ranging series of experiments in introducing the “Big Questions” into a variety of curricular areas. Over a decade, the Lilly Endowment has supported the intensive development of campus programs in church-affiliated colleges and universities aimed at enabling students to consider questions of life purpose and values while pursuing undergraduate studies in a wide range of subject matters, including both the arts and sciences and the professional fields. The Lilly Endowment, “Program for the Theological Exploration of Vocation,” www.ptev.org; W. Robert Connor, “Big Questions?” Teagle Essays (revised October 13, 2005), www.teaglefoundation.org/learning/essays/20051011.aspx.

10. The ongoing work of the Liberal Education and America’s Promise (LEAP) initiative of the Association of American Colleges and Universities (www.aacu.org/leap) exemplifies this integrated approach: National Leadership Council for Liberal Education and America’s Promise, *College Learning for the New Global Century: A Report from the National Leadership Council for Liberal Education and America’s Promise* (Washington, DC: Association of American Colleges and Universities, 2007).

11. Ann Colby, Thomas Ehrlich, Elizabeth Beaumont, and Jason Stephens, *Educating Citizens: Preparing America’s Undergraduates for Lives of Moral and Civic Responsibility* (San Francisco: Jossey-Bass, 2003).

12. Ernest T. Pascarella and Patrick T. Terenzini, *How College Affects Students: A Third Decade of Research*, vol. 2 (San Francisco: Jossey-Bass, 2005), esp. 629.

13. John D. Bransford, Ann L. Brown, and Rodney R. Cocking, *How People Learn: Brain, Mind, Experience and School* (Washington, DC: National Academies Press, 1999); Charles Bereiter and Martin Scardamalia, *Surpassing Ourselves: An Inquiry into the Nature and Implications of Expertise* (Chicago: Open Court, 1993).

14. George D. Kuh, *High-Impact Educational Practices: What They Are, Who Has Access to Them, and Why They Matter* (Washington, DC: Association of American Colleges and Universities, 2008).

15. The classic study is by James S. Coleman and Thomas Hoffer, *Public and Private High Schools: The Impact of Communities* (New York: Basic Books, 1987). The concept of “social capital” that Coleman used to describe these networks of norms and reciprocal relationships has been developed and expanded by other scholars showing its importance for many dimensions of personal and social development, notably Robert D. Putnam, *Bowling Alone: The Collapse and Revival of American Community* (New York: Simon and Schuster, 2000), esp. 296–305.

16. William Damon, *Path to Purpose: How Young People Find Their Calling in Life* (New York: Free Press, 2008).

17. Anne Colby and William M. Sullivan, "Strengthening the Foundations of Students' Excellence, Integrity, and Social Contribution," *Liberal Education* 95, no. 1 (Winter 2009): 22–29.

18. Lee S. Shulman, "Professing the Liberal Arts," in *Education and Democracy: Re-imagining Liberal Learning in America*, ed. Robert Orrill (New York: College Entrance Examination Board, 1997), 151–73.

19. The following section excerpts material that is used with permission from *Liberal Education* 96, no. 3 (Summer 2010).

20. This work is described in more detail in Sullivan and Rosin, *A New Agenda*.

21. Barry Schwartz and Kenneth Sharpe, "Practical Wisdom: Aristotle Meets Positive Psychology," *Journal of Happiness Studies* 7, no. 3 (2006): 377–95. See also their *Practical Wisdom: The Right Way to Do the Right Thing* (New York: Riverhead Books of Penguin Press, 2010).

22. See the discussions by Bereiter and Scardamalia, *Surpassing Ourselves*, and Damon, *Path to Purpose*.

23. Katherine Montgomery, *How Doctors Think: Clinical Judgment and the Practice of Medicine* (New York: Oxford University Press, 2005), 46, 52.