Learning communities can promote K-12 reform by modeling sound academic practices that all should master in their last year of high school and their first semesters in college. In addition, given the growing prevalence of systemic reform of K-12, and the number of systems and states aligning high school exit standards with college entrance, learning communities exemplify "reformed' higher education. In other words, if high schools demand high standards, foster inquirybased learning, and encourage students to participate in authentic assessment, then colleges also must attend to coherence, sound pedagogy, and the mastery of academic discourse.

Learning Communities, High Schools, and School Reform

The growing movement toward forming learning communities in metropolitan universities is welcome. As other articles in this volume suggest, they increase the likelihood of engagement during the first year of college for students from weak high schools or with weak academic records, and they model academic practices appropriate for all college students. Second—and the subject of this article—they represent a significant contribution of higher education to K-12 reform.

While Alexander Meiklejohn is considered the father of learning communities because of his redesign of curriculum at the University of Wisconsin in the late 1920s, more recently the term learning community, as applied to higher education, designated a program begun at SUNY Stony Brook in the early 1980s by Patrick Hill. Hill linked three firstyear courses thematically, with students traveling as a cohort from one to another. He attended to issues of learning with an unusual and creative strategy: faculty members traveled from course to course along with students, and each played the role of master learner in the others' course. The "master learner" modeled for students the way to approach a new subject area in academia, and, in the process, had a rich professional development experience of collaboration with colleagues. The master learners also integrated course content and demonstrated how diverse disciplines might "read" a problem differently.

As learning communities evolved over the last decade in metropolitan universities, interdisciplinary or multidisciplinary learning is only one of a number of purposes of learning communities. In metropolitan universities, learning communities also bear the weight of skill development, introduce students to academic discourse, and help them to achieve success in basic courses and make appropriate choices about their future studies. The dual emphases on linking disciplines in attractive ways and building skills is consistent with the current climate of constrained budgets in which the greatest need is to boost student retention and to deliver services with the greatest power at the lowest cost. Indeed, the decision to implement learning communities in metropolitan universities often starts with a retention crisis and evolves into a consideration of more powerful ways of organizing learning.

Learning Communities in Schools

The broad cluster of practices now constituting learning communities also exists in middle schools and high schools. Indeed, the school-within-a-school, or what is now called "the small school movement," shares many characteristics of higher education's learning communities. Large urban high schools are broken into "houses" or small communities of 200-400 students, often in separate physical space with the goal of implementing a key small schools principle—that students should know each other. Student cohorts travel together for some part of their class work; skill-building and advising are incorporated into the fabric of the classroom or into an "advisory" (sometimes called a "family group"), and faculty have mutual planning time to work in interdisciplinary groups. Beyond these practices, some middle and high schools support inquiry or problem-based learning and incorporate epistemological questions into the curriculum: Why are we learning X? Where do I stand as an observer? How can this knowledge be put to use? What are the values implicit in this or that question? It is important, then, for those thinking of establishing learning communities to be aware, first, that some high school teachers will be familiar with the principles and practices of learning communities and, second, that higher educators can learn much from their K-12 partners' experience in creating innovative pedagogies and curricular structures. Furthermore, one criticism of learning communities from first-year college students is that they do not sufficiently demarcate high school from college. And from faculty, that higher education shouldn't coddle students as high schools do; students should be responsible for finding resources for themselves.

The Reformed High School

Among K-12 reformers, there is sometimes a conversation that goes like this. Our knowledge factories—the large research universities—are going to find themselves the object of student criticism in the not too distant future. Students arriving from high schools where inquiry-based learning is the dominant mode of instruction, where teachers read student portfolios and help students individualize their learning plans, where students are engaged in public presentations of their research, where students can tell you the goals of a course, reflect on their ability to meet standards, and set out plans for improvement—these students will be highly critical of the typical

first year at Metro U. They will be put off by requirements that they memorize from text books, that they take five unrelated courses, that their advisors are not faculty, but staff persons who sign off to signify that a set of requirements has been met. They will come to office hours with serious questions about everything from curriculum to the reasons why freshmen are taught by TAs, rather than permanent faculty. How will higher education respond?

A fantasy? Probably not. If critics within the higher education world have been voicing their concerns about the quality of undergraduate teaching, and trustees, legislators and other policymakers have been raising questions about faculty responsibility for student outcomes, then why not students, their teachers, and parents? There is little research to confirm this prediction, but over the past several years, David Bensman, a professor of history at Rutgers' Labor Studies Center, has been following three cohorts of students who attended college after graduation from perhaps the best known reformed urban high school—Central Park East Secondary School (CPESS). This public school in East Harlem, New York, was begun by MacArthur Fellow Deborah Meier in 1988; it has been written about widely as one of the successes of the Coalition of Essential Schools. The philosophical and pedagogic innovations in the school derive from the Coalition principle: more is less. Students investigate a limited number of issues in depth. In Divisions I and II, (seventh through tenth grades), students enroll in two multidisciplinary courses, "humanities" and "mathematics and science." After completing Division II, students enter the Senior Institute, in which they complete 14 portfolios demonstrating their knowledge and skills in such areas as literature, history, mathematics, and media. Along with participating in internships and community projects, Senior Institute members take two courses at local colleges. Students also participate in an advisory, a 15-person planning and support group that meets weekly with the same teacher for two years. In every course, students are encouraged to ask and answer five questions: What is the evidence? What is the point of view? How does it compare to other situations? What if it were otherwise? Why does it matter?

In a community with a college attendance rate of 15.5 percent (1990 Census), 87 percent of students (124) in the first three graduating classes (1990-93) went on to college, 80.2 percent to four year institutions. And they persisted through the sophomore year at rates approaching 90 percent. CPESS claims that graduates who meet their performance-based diploma requirements are well-educated, reflective students and citizens. Bensman's research asked the question needed to verify that claim in regard to higher education. "When graduates enter college, how do they fare?" Given that CPESS students faced financial and family problems familiar to those who work with low-income, urban college students, the high retention rate speaks well, but Bensman's interest was in the quality of CPESS students' college experience. Not surprisingly, CPESS students found themselves well-prepared in writing, research, and critical thinking, less so in math; they were not, however, prepared for the method of instruction and testing. Some felt CPESS had failed to teach them college skills such as memorizing from textbooks and lectures, taking notes, answering multiple choice questions, and taking short-answer quizzes. And one was

resigned to the fact that, while he disapproved of this pedagogy, there was nothing he could do to change it. Finally, while CPESS students missed the structured, close relationships they had had with teachers in high school, they exercised their skill in finding adults to provide assistance.

Bensman, who is not himself a student of higher education, recommends that either CPESS consider teaching students "to memorize and regurgitate," or that it steer its graduates toward colleges with more CPESS-like educational philosophies. He concludes "that there is something profoundly wrong with the pedagogy practiced in many colleges," and proposes that modifications are imperative not at CPESS, but in the higher education system. Learning communities in post-secondary settings represent a modification that would allow CPESS students to continue the kind of intellectual work and social and emotional growth they began in high school. If the CPESS students had attended metropolitan universities with learning communities, they would have had a powerful transition or bridge to the independent decisionmaking and intellectual autonomy that differentiates high school from college.

A reformed high school still communicates with students' families, requires attendance in school and class, structures not just class time, but time outside of classes during the school day, and monitors student assignments closely—even to the extent of in-class assignments and daily home work. College permits much greater freedom and demands much greater responsibility. Indeed, take the issue of monitoring of student progress. Many motivated, talented, and well-prepared first-year students who are unqualifiedly "college material" do not understand that they are responsible for completing work for which they are not immediately tested, and that is not graded until the end of the semester. Even if we were to have a majority of entering students who had taken responsibility for their own learning during high school, and could reflect on their ability to meet high standards, it would still be good pedagogy and program design to provide transitional support in the first months and year of college, to model connections between academic disciplines, and to discuss explicitly the culture and game rules of academia.

Learning Communities as a Vehicle for High School Reform

Moving to the other end of the spectrum, we might reverse the scenario. Learning communities are vehicles for a conversation with high schools about mutual expectations. Such conversations are taking place in two contexts: between individual higher education institutions and their primary feeder high schools and in planning for K-16 systems either at the school district or state level. In either case, the goals are higher, performance-based high school graduation and college admissions standards and competencies, and an end to post-secondary remediation for recent high school graduates. While such conversations can, of course, take place between high school guidance counselors and college admission officers, the more powerful strategy is to bring together educators themselves—high school teachers and higher education faculty—to discuss student work. Learning communities are certainly not critical to such an exchange of views, but they are exceedingly helpful. Because they are structured to facilitate faculty collaboration in helping students achieve broad

intellectual goals, learning communities encourage faculty to think about learning and teaching beyond their disciplines. Learning communities turn historians, biologists, and archaeologists into educators who are interested in why a student has difficulty with a particular concept, or what amount of time, where, and how students are studying. They raise questions for faculty that qualitative and quantitative data can answer. What writing skills are needed in the linked courses? How do GPAs of learning community students compare with a control group? What are their jobs outside of class? Did their high schools ever ask for anything other than a summary book report?

Let me give two examples—the first from Philadelphia, where individual higher education institutions work with a cluster of high schools—and the second, from Portland, Oregon, where state systemic reform of K-16 has been legislated.

The Temple University Case

At Temple University where I was Vice Provost for Undergraduate Studies from 1993 until 1996, as we were groping for a way to better serve and retain first-year students (the work that resulted in a proposal for learning communities), we established a committee on the first-year experience. We carried out a phone satisfaction survey of students who were retained into their sophomore year and those who dropped out. We looked at data assembled by our Office of Institutional Research on GPAs and other data. (There were no major differences in academic profile between students who stayed and those dropped out.) We held interviews with student support personnel from each of Temple's colleges to hear their approaches to advising, and we reviewed Temple's new student orientation program. We had also earlier evaluated aspects of Temple's extensive core curriculum: we had hours of focus group interviews with students in Intellectual Heritage, Temple's signature great books course; and we had quantitative data on levels of math courses, numbers of students in biology, and so forth. But we had no conversations with faculty about the first-year academic experience as a whole. There were no such conversations to be had.

Three years into the implementation of learning communities, however, the terrain had changed. The learning communities program had enabled participating faculty to think holistically about the elements that make up a student's life as he or she enters higher education. And, in engaging faculty in questioning the first year, learning communities had identified persons willing to learn about their students' high school experience, that of those who taught them, and the emerging agenda for higher standards in Philadelphia school superintendent David Hornbeck's ambitious vision for the public schools, Children Achieving. (Faculty willing to consider these issues are also identified through structures such as university colleges that—in various manifestations—advise, provide homes for, and often teach special courses for entering students. Others have been identified through K-16 Roundtables, the organizations formed through the work of the Washington, D.C.-based Education Trust. The trust's work on standards setting to ensure college access and retention has especially involved progressive and open-minded college faculty in working with teachers.)

At Temple, learning communities came into being at the same point that there was increasing criticism of special entry programs for students from high schools closest to Temple in North Philadelphia. Learning communities also came into being just as the Pew Charitable Trusts began a national competition for planning grants for what were to become the Community Compacts for Student Success (CCSS). The goal of CCSS was to increase the prospects of urban high school students' college entrance and retention through the sophomore year. The Compacts' strategies were not what are called colloquially, "fix the student," but rather involved the reform and restructuring of grades 7-12 and the concurrent improvement of the first two years of college so that cohorts of students would be more successful. They required that there be public agreements about improved results forged between high schools and higher education institutions, and they demanded public accounting on a yearly basis. In applying for the CCSS grant, Temple pledged to take a lead role in high school and college reform. Temple's plan comprised a partnership with Community College of Philadelphia and Ben Franklin, William Penn, and Edison high schools, schools from which few students were admitted to Temple immediately after high school, and most of those who were admitted came through special admissions and did not fare well for long.

The initial year of the Compact preceded the appointment of David Hornbeck, and high school reform seemed a daunting task for Temple despite a clear vision for a transitional first-year of college. Hornbeck's arrival, however, enabled faculty to join immediately in Children Achieving's crusade for standards-based reform and changed teaching practices; learning communities faculty participated in the formulation of high school exit and other standards affording Temple, CCP, and their partner schools the opportunity to model the standards-setting process for the district. (References for articles and reports on the Compacts are listed at the end of this article). Furthermore, the annual Compact retreats in Philadelphia and other public events bringing together high school, community college, and Temple faculty, as well as staff and students, have been dominated on the higher education side by learning communities work. At one retreat, the central presentation on writing placement testing, writing assessment, and expectations of writing in the first year of college was shaped by issues identified in learning communities. (Most Temple learning communities link composition and an introductory course in a discipline.) When it came to student voices—always present in Compact work—learning community students reflected on their first year experiences, and, with Temple faculty, fed back to inquiring high school teachers, guidance counselors, and school reform personnel rich evidence about the achievements and difficulties of students from their high schools. For example, students from the communications magnet at William Penn now enrolled in Temple's School of Communications and Theatre noted that they had had good preparation technically, but poor preparation for college-level reading and writing; they had written almost nothing but occasional short book reports. Philadelphia, then, learning communities have been a powerful vehicle through which college faculty participate in high school reform.

The Portland State University Case

Portland State University represents a different strategy for using learning communities to link college and high school and to promote a school reform agenda, although it shares with Temple an external incentive for change. Oregon has passed sweeping school reform legislation transforming the high school Carnegie unit credit system into a performance-based system. At around tenth grade, students demonstrate the skills and knowledge required for a Certificate of Initial Mastery (CIM); around 12th grade, they demonstrate skills and knowledge for the Certificate of Advanced Mastery (CAM). This performance-based system has been piloted in a small number of Oregon schools, and all schools are gearing up for it. The higher education system has also established performance-based entrance requirements (PASS). Portland State's own curricular innovation involves a new model of general education called University Studies. It begins with Freshman Inquiry, a required multidisciplinary, year-long course taught by five faculty members. Freshman Inquiry represents the kind of pedagogy, content, and assessments demanded by the performance-based system mandated by the state. For the last several years, an Inquiry course has been taught at a suburban high school, an urban high school, and a community college. Students completing the course get fifteen credits tuition-free if they enroll at Portland State. Elsewhere, the course provides transfer credit. The course is taught by a mix of high school, community college, and college faculty with the help of undergraduate and graduate student mentors. High school teachers and community college faculty attend Inquiry retreats and become colleagues of the PSU faculty for purposes of teaching Inquiry.

While this is still a small program involving just 219 high school students, and, for this first year, 81 community college students, all involved have learned a great deal from it. Open to all students who wish to take it, not only those qualifying for AP or Honors, the high school course has demonstrated to skeptical secondary teachers that students can meet the very high performance-based entrance standards under PASS. Furthermore, with its focus on goals and results, its serious intellectual demands, and its standards-based syllabus, Inquiry models an approach to learning that is new to many high school teachers who still think that "coverage" is the currency of excellence. The Portland State faculty have gained as well. For example, they entered high schools thinking that because students travel together and are treated as a class, they would find qualities of the learning community they were trying to produce in college. Preliminary observations are that to form a learning community, there must be intentional community-building activities such as those in the Inquiry program. Also important, the PSU faculty have come to understand and respect the challenges of high school teaching-from environmental factors such as bells between classes, to the lack of discretionary time during a day, to the sheer number of students with whom a high school teacher interacts during a day or week.

The relationship with Clackamas Community College is more encompassing than that with the high schools. While PSU's learning communities course, Freshman Inquiry (FRINO), was the catalyst for bringing the institutions together, one might argue that in this

case, too, FRINQ has been the source of more widespread reform. The community college now has an attractive co-admission program with Portland State, but in the process of forging it, it entered into discussions about advising, financial aid, educational quality, teaching strategies, and the meaning of the new performance-based standards of exit and entrance. Like the situation in Philadelphia, these small programs are validating a broad reform plan, and providing evidence that students can meet higher and different kinds of standards when challenged to think hard, apply knowledge, and discuss their ideas in a supportive setting.

Conclusion

The three strategies centered on teaching and learning about which there is greatest agreement in the current K-12 school reform movement—the now fifteenyear period succeeding A Nation at Risk—is implementation of some form of explicit, public agreement on academic standards, whether mandated by the state or developed locally; a pedagogy of active learning; and a strong emphasis on professional development. Indeed, in those urban systems and districts within urban systems in which there has been documented progress, a common denominator is that major resources have gone into providing support, intellectual stimulation, and new learning for teachers. With their explicitly stated, holistic learning goals, their emphasis on faculty collaboration, and their attention to the engagement of entering students, learning communities represent practices compatible with school reform. If learning communities can encourage faculty not only to prepare their students for the future the major, graduate school, careers—but to look back critically at the preparation students bring to class from high school, learning communities can play a consequential part in the reforms that are the urgent dream of critical friends of public education in the United States today.

Suggested Readings

Bensman, David, "Learning To Think Well; Central Park East Secondary School Graduates Reflect on their High School and College Experiences" (Teachers College, Columbia University: NCREST, 1995).

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