

A Global Dialogue on Liberal Arts and Sciences: Re-engagement, Re-imagination, and Experimentation

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Abstract This chapter provides both an introduction and overview of the book. It discusses the background and history and conceptual arguments for liberal arts and sciences education for the global twenty-first century, as well the various trends of re-engagement with the liberal arts model in the USA (notably Harvard University) at the start of the century, the re-imagination of the model in Europe (more specifically by the Amsterdam University College experience) and the various forms of experimentation in China as well as the conditions under which these could best succeed.

Keywords liberal arts and sciences education • 21st century • Undergraduate education • global dialogue • China • Europe

In a world of higher education increasingly consumed either with the growth of professional education, particularly in business, or with “rankings,” or “league tables” of research universities and the quest for “world-

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class” institutions, we seek in this volume to talk about undergraduate education of both a traditional and very modern sort: about education, teaching, and the surprisingly enduring and now expanding conceptions of the liberal arts and sciences in a twenty-first-century education.

The global debate on the liberal arts and sciences has moved from its European origin and out of the North American academic landscape to engage many regions and countries, including China, which seeks to gain from this model in terms of global integration and influence. This is illustrated by inspiring examples of experimentation, reform, and international cooperation with liberal arts and sciences models.

This book highlights the visions and experiences of international leaders in the field of liberal arts and sciences education from around the world. The authors discuss regional trends and models, several with a specific focus on why this model seems to respond to twenty-first-century requirements for excellence and “real world” relevance in undergraduate education. Taken together, the essays explore how liberal arts and sciences curricula can be implemented in different national contexts and across a broad range of academic cultures, structures, and traditions. They investigate how teaching and learning experiences may vary in the context of different cultures and values. A variety of international innovations, start-ups, and major international collaborations between American, European, and Asian institutions are explored in order to understand the opportunities and the challenges for China in developing liberal arts and sciences education. The authors have reviewed and evaluated trends with the aim of making impact across whole systems of higher education, with implications also for secondary education before university and the demands of labor markets after graduation.

Let us start with some reflections on what education in the liberal arts and sciences entails. The debate on these issues goes back minimally to those of the nineteenth century between proponents of the Humboldtian ideal of *Bildung* (the education of the whole person) as distinct from *Übung* (more practical training), differences that are phrased differently across the world—in China, for example, as the distinction between a broad conception of education (*jiào yù* 教育) and a narrower, repetitive one of training (*xùn liàn* 训练).

Wilhelm von Humboldt, who founded the University of Berlin in 1810, envisioned an education that was broad and deep, rooted in fields in which he was deeply learned—history, classical literature and languages, and linguistics—giving citizens the capacity for self-cultivation and individual development in society. He (as notably did also his brother, Alexander)

believed also in scientific research, the creation of new knowledge, and he aimed to create an institution in which teaching and research would be integrally connected, with teaching rooted in research, in an institution free from preordained orthodoxies.

The University of Berlin is the ancestor of all modern and contemporary research universities. Humboldt's ideals have been reflected in the principles of *Lehrfreiheit* and *Lernfreiheit* (freedom to teach and freedom to learn) that have been at the heart of modern conceptions of academic freedom.

Yet the modern research university today is much larger, much more professionalized, much more focused on research, and much less focused on teaching than any institution that Humboldt could have imagined. In Germany, by the early twentieth century, a process had begun to separate out high-level research institutes from universities (named initially for Kaiser Wilhelm II, now for the physicist Max von Planck). In the USA, which in the twentieth century became home to many of the world's leading research universities, the growth of stand-alone or in-house research institutes with little or no formal teaching has been a growing feature of higher education. To give one example that we know well: Harvard University, for example, grew from a provincial college to first a national then international research university, faculty time and energy was inevitably drawn toward graduate education and professional engagement far removed from the undergraduate classroom.

The challenges faced by Harvard and by many of the universities described in this volume have commonalities, but central to them is an overwhelming concern with committing, or re-committing, these institutions and their faculty to the challenges of a broad, *undergraduate* education in a world seemingly dominated (as Humboldt's was not) by pure research and by onrushing advances in science and technology.

We see in many of the examples discussed in this volume an international commitment to both general and liberal education in the broadest sense. What is "liberal education?" As Montaigne wrote: "Among the liberal arts, let us begin with the art that liberates us." Montaigne was referring to a process whereby previously unexplored beliefs and values are challenged as well as unsuspected dimensions of the self, discovered and nurtured in order that students may become "wiser and better" for themselves and for society. Liberal education presumes that a broad education will liberate the individual by offering opportunities for foundational knowledge, reflection and analysis, artistic creativity, and an appreciation for the precision of scientific concepts and experiments.

The American tradition of liberal arts and sciences education has been most robust in a (until recently) unique institution: the independent college of liberal arts. Institutions such as Oberlin, Williams, Carleton, Reed, and many others have always employed first-class scholars, normally trained at leading research universities, but their institutional focus has been exclusively on undergraduates. Theirs has been the strongest commitment to the idea of liberal education: educating the whole person, and not just training the specialist. They resist pressures for early specialization and professionalization. Professional education may be the proud tradition of many great universities, but it has not been the fundamental mission of the American liberal arts college. While their students will have devoted some significant part of their time to special and concentrated learning, they aim to graduate having developed their intellectual, artistic, moral, civic, and scientific capacities as independent thinkers with a lifetime of learning still before them.

The challenge of leading American research universities is different from that of independent liberal arts colleges. Those that have grown from the foundations of famous undergraduate colleges (e.g. Harvard, Yale) to become large and complex research institutions have the difficult task of trying to keep the undergraduate enterprise at the center of a big university. How do these research-driven universities put the energy of leading scholars back on undergraduates? How do highly selective institutions prepare their students to enter a globalizing world of national conflicts, of scientific advance, of political choice and economic uncertainty, of artistic imagination and cultural repression? There is, of course, no “one-size-fits-all” educational menu for such alternative futures, but the last decade has been one of debate and renewal of the liberal arts in many such leading American universities.

In the spring of 2007, the Harvard faculty approved a new General Education curriculum for Harvard College, after several years of drafting and seemingly endless discussion. When it passed with near unanimity, the faculty was told about the famous 1924 debate in the Chinese Communist Party about joining the Nationalists in the first United Front. The minutes of that meeting were recorded thus: “The resolution passed unanimously, even though many comrades were opposed.” Revising entrenched systems of undergraduate education is never easy, and there is no perfect model. The Harvard effort puts greater stress on internationalization, scientific and technological literacy, and new communities of learning in smaller settings than had its predecessor efforts. Above all, it tried (and so far has succeeded) in having a new generation of faculty re-engage in undergraduate

education and to create courses and departmental curricula for which they had intellectual ownership and responsibility.

The American reinvestment in the liberal arts and sciences is perhaps not surprising given the long history of institutions based on this concept, even if it is by no means the centerpiece of the large majority of US universities. Much more surprising, in our view, is the resurgence of liberal arts and sciences elsewhere: in Europe and in China in particular.

In recent decades, European universities have adapted some of the formal structures of perceived American models, such as the US baccalaureate. Distinct undergraduate (bachelor) and graduate (master and doctorate) degree cycles were introduced following the Sorbonne (1998) and Bologna (1999) declarations. By reinstating the bachelor as an educational phase in its own right, these structural reforms facilitated the (re-)emergence of liberal arts and sciences programs in Europe (Van der Wende 2011).

Many of the ideals of what has since become known as the Bologna Process carry with them the promise of making higher education in Europe a continental-wide enterprise, thereby facilitating student, faculty and staff mobility, which has been growing since the introduction of the Erasmus Program in 1987. Such mobility is important in competing, and in cooperating, with continental-sized systems of higher education, such as in the USA and China.

But while there is some emulation of the current American concept of the baccalaureate, until recently, European universities have appeared less interested in the educational values that have defined the Bachelor of Arts degree in many American colleges, which stress a broad undergraduate education in the liberal arts and sciences. If one looks at the documents of the Bologna, Prague, Berlin, Bergen, and other meetings, there is enormous attention paid to research, to funding, and to math, science, and technology, and precious little to teaching, to citizenship, and to valuing the broad and deep education of the next generation of Europe's citizens. The "key competencies" for lifelong learning recommended by the European Parliament in 2006 quite appropriately include language learning; information and communication technologies; and math, science, and technology. But nearly absent are the humanities, the multidisciplinary study of other cultures and religions, and education in moral reasoning and philosophy. Even the "harder" social sciences seem short-changed.

It may be that any Europe-wide reform must be limited, given the restricted mandates of European institutions¹ and the sovereignty of European member states in the domain of (higher) education. But it cannot be denied that such EU policies do lean heavily on economic ratio-

nales. An underlying human capital approach expects higher education to propel economic growth and spur competitiveness in the global knowledge economy, leading to a utilitarian focus on skills, rather than on values that would underpin European identity and citizenship as a basis for further social and political integration.

Now, however, with the emergence of truly innovative “university colleges,” European universities, led by those in the Netherlands, seek to do the Americans one better by bringing together the separate strengths of the stand-alone liberal arts college and of the large research university.

Driven by the need to overcome the disadvantages of early and overspecialization, to differentiate the massified and overly egalitarian European higher education systems, and to meet employers’ demands for well-rounded graduates, various leading universities went back to their roots. There they recovered the origin of the European university which taught the *artes liberales*, including the *trivium* (literary arts; grammar, logic, rhetoric) and the *quadrivium* (mathematical arts; arithmetic, geometry, music, astronomy). Re-imagined, twenty-first-century-oriented versions of this model now re-enter undergraduate education at the center of large and complex research universities and help to re-balance their teaching and research missions by sheltering undergraduate teaching from the pressures of research performance, rankings, and reputation race. These initiatives draw the energy of leading scholars back to undergraduate teaching, re-committing them to the challenges of a broad education that prepare students for a globalizing and evermore complex world.

Amsterdam University College (AUC) is a prominent example of the Dutch model, which is typically a highly selective honors college that teaches a three-year liberal arts and sciences bachelor and has a radically international ethos and community. The model combines the virtues of a small-scale residential college with the resources and facilities of a large research university. Ten such university colleges have been established, following the first such initiative launched in 1998 by Utrecht University (University Colleges Deans Network [UCDN] 2014). They are all fully owned by a Dutch research university and are granted a privileged status in the higher education legislation allowing for additional funding and more autonomy. The demand for this model is confirmed by the exceptionally strong growth in both domestic and international applications in comparison with other undergraduate programs.

AUC was established in 2009 as an excellence initiative jointly undertaken by the University of Amsterdam and VU University Amsterdam.

They joined forces to create a liberal arts and sciences program, based on the vision that the leaders of the future will have to work together across the boundaries of nationalities, cultures, and disciplines, in order to be successful in the globally engaged and culturally diverse society of the twenty-first century.

AUC's mission, "Excellence and Diversity in a Global City," reflects the belief that both excellence and diversity matter, as both competition and cooperation are key to success in a globalized world. Leadership does not only require excellence but also the understanding and valuing of diversity (Van der Wende 2013a). AUC students "are offered what US liberal arts colleges can only envy: access to laboratory-based research projects and the lab facilities of a research university," as emphasized by the president of the European Research Council, who also stressed: "AUC seeks to link the parts of our *globus intellectualis* that seem to have become separated, much like oceans dividing the continents. Reconnecting the natural sciences—physics, chemistry, and the life sciences—with the humanities and social sciences" (Nowotny 2012).

The AUC curriculum was designed from scratch based on orientations and considerations quite similar to that of Yale-NUS College as described by Lewis in Chap. 4 and Penprase in Chap. 5. AUC allows students to focus on "big questions in science and society" from a multi and interdisciplinary perspective. Because: "Snow was right.² A complete education should be a multidimensional experience, since students, teachers, schools, and research are all multidimensional" (Dijkgraaf 2009, p. 22). AUC's curriculum reconnects the sciences, humanities, and social sciences by means of a rigorous academic core that ensures the development of strong analytical and quantitative skills as well as foreign language and intercultural competence in students from all majors. It offers all students ample opportunities to focus on science and science-related subjects, because: "There are many great crises or challenges facing the world: food, energy, climate, pandemics, all driven by globalization. And many of our students will later be in a position to make important decisions, whether in business, government, policy or academia. The scientific way of thinking and approaching life could be valuable if not crucial for their success" (Dijkgraaf 2009, pp. 23–24).

The university college model allows research universities to overcome the fragmentation of disciplinary silos and to create a more flexible, open, and intellectually challenging space for undergraduate learning, simultaneously allowing for student choice and focusing on interdisciplinary and

international themes. The model attracts a larger number of (also female) students to science subjects and has gained strong support from employers, meeting their demands for well-rounded graduates or “T-shaped professionals” with quantitative and qualitative abilities, soft skills, and STEM competences.

In Chap. 9, Van Damme analyzes this approach of “transcending discipline boundaries” to liberal arts and sciences education to show that it holds the promise to provide better answers to the needs and demands of the twenty-first century. However uncertain labor markets and skills demands may be, with loosening ties between degrees, skills, and jobs, in Chap. 6, Gombrich argues for the re-emergence of polymathy and generalism as educational ambitions related to the future of work.

The university college model inspired and coincided with initiatives in other European countries, including Germany, presented by Eschenbruch, Gehrke, and Sterzel from University College Freiburg in Chap. 7, and England at UCL, an illustration of Gombrich’s argument for polymathy in Chap. 6. Yet the model is no panacea. While more internationally oriented and better facilitated than most US stand-alone liberal arts colleges, it remains a small-scale, cost-intensive solution. To make such a liberal arts model mainstream throughout the entire undergraduate phase, as Dirks describes of major US research universities in Chap. 8, represents an immense challenge for the overly regulated public European universities. These universities may also see a limited scope for general education in tertiary education as it has such a strong foothold, and usually lasts longer, in secondary education.

Thus, the model is so far an elite option. The UK examples all belong to the Russell Group of universities. Freiburg was among the first to benefit from the very competitive German Federal Excellence Initiative, and the Dutch colleges are all owned by the country’s highly ranked research universities. As such, these initiatives contribute to the differentiation of higher education systems with the advantage of breeding excellence, seen as essential in the face of global competition.

But it also confirms Lewis’s point regarding eliteness and access as its pitfall (Chap. 4). Globalization generates both new generations of cosmopolitans, who increasingly opt for international and bilingual education, as well as immigrants who face challenges in bridging the cultures and languages of old and new home countries. Colleges aiming to prepare students for a global future should include both these populations.

But even those that value diversity as a broad and inclusive concept, who feel that a white middle-class student population would be inadequate and inappropriate for their mission, and are aware of the role that cultural and social capital may play in admission processes and in residential obligations, may find it easier to attract international students than local minorities (AUC 2012). The latter group may have a specific preference for professional degrees for reasons of social mobility, but middle-class students likewise seek these professional options after their undergraduate degree. Establishing good connections to (also heavily regulated) professional graduate programs is therefore another challenge in Europe, with hitherto more success in medical and engineering schools than in law and teaching. Fortunately, employers are able to mobilize support for both aspects as they value diversity and broader skills profiles in their workforce.

Experiments in liberal arts and sciences education in Europe are building on a strong (if at times dimly recalled) foundation in humanistic traditions. There are parallels in Asia, as we see in this volume: in India and notably in Singapore (see the essays by Penprase in Chap. 5 and Lewis in Chap. 4); in Hong Kong, where every one of the eight government-supported universities has created a new form of general education (see the essay by Postilgone in Chap. 2); and also recently in China (the essay by Cao Li on experiments in liberal arts and sciences education at Tsinghua University, once known as “China’s MIT.” See Chap. 3)

Let us focus here on the Chinese scene. China is home to arguably the world’s oldest, continuous tradition in the humanities, and a commitment to an education rooted in values—a concept recalled in Cao Li’s essay by the current phrase, quality education (*suzhi jiaoyu* 素质教育), to define new forms of general education.

Until the twentieth century, the study of Chinese tradition, defined by officially sanctioned texts, not only defined what it meant to be educated but also served as a path to officialdom, and to wealth and influence. The famous imperial examination system, which lasted in one form or another for nearly a millennium before 1905, brought the empire’s most learned men—only men—into the service of the state—not because they had been trained in statecraft or tax collection but because they had deeply studied what we would today call the “humanities”: because they had studied, memorized, chanted, and metaphorically consumed the classics, and they would, in office, act according to the principles of human behavior that the *Analects*, *Mencius*, and other great works set out.

Perhaps never has there been a higher academic ideal: good people embarking on the living study of great books in order to do good work in society.

This was the ideal, of course never fully realized in practice, and the ordeal of studying to be a scholar-official was a tortuous one, captured satirically in Wu Jingzi's eighteenth-century novel, *The Scholars* (*Rulin waishi* 儒林外史, 1992) and I. Miyazaki's scholarly classic, *China's Examination Hell* (1976). There were limits to this system, which became painfully obvious in China's nineteenth-century encounter with the West: the absence of the study of mathematics, of science, of practical affairs, did not mean that the Empire was thereby better governed or better defended.

When the ancient examination system ended overnight, in 1905, it would be replaced by institutions shaped explicitly on international models, from technical institutes to liberal arts colleges to comprehensive universities. Every major Chinese institution today has an intellectual and indeed architectural foundation that is international in origin. The first full campus of Tsinghua University, for example, may be mistaken for an American Midwestern university, for it was the president of the University of Illinois at Urbana-Champaign who convinced the American president, Theodore Roosevelt, to remit Boxer Indemnity Funds to support the founding of Tsinghua. In the 1950s, during an era of Stalinist influence, Tsinghua would be reconceived, in architecture and curriculum, on the model of Moscow State. Peking University sits today on the original, American-designed (albeit in Chinese style) campus of Yenching University, a great private college of the pre-Communist era. Nanjing University has two international parents: Jinling College, a women's college that partnered with Smith College in the USA; and National Central University, founded by the Chinese National Government in 1930 and modeled on what was then the most prestigious university in the world, the University of Berlin. (To emphasize this point, a model of the Brandenburg Gate serves as an entryway both to the original grounds of National Central University and to Nanjing University's new campus.) Particularly in the Republican era (1912–1949), China built one of the world's most dynamic (if small) systems of higher education comprised of institutions Chinese and foreign, public and private. These would be Sovietized in the 1950s and nearly destroyed by Mao Zedong's "cultural revolution" in the 1960s, but the memory of excellence and internationalism has helped to fuel the more recent regeneration and growth of Chinese higher education.

What did this history mean for the liberal arts and sciences? Well before the Communist takeover, Chinese education at all levels began to drift strongly toward the study of those subjects that could defend China in a hostile world, and bring about a return to “wealth and power” (*fu qiang* 富强)—primarily through mathematics, science, and engineering. Within a decade of the end of the old imperial examinations, the moral foundation of both Chinese government and culture, Confucianism, would come under a withering attack during the “May Fourth Movement” of the late 1910s and 1920s, even as China’s leading intellectuals of that era were deeply educated in both the Chinese classics and modern international disciplines. After 1932, American models of general education were gradually replaced by European-style, discipline-specific training. By 1949, when the mainland fell to the Communists, less than 10% of graduates of Chinese public universities graduated with degrees in humanistic disciplines. The Communists then took that number to the vanishing point.

As study of the humanities declined, education became at once more practical and more political. The dream of Chinese leaders from Sun Yat-sen, the first provisional president of the Republic of China, was to physically engineer and indeed a new citizenry. This was the dream of a government of technocratic expertise, capable of “reconstructing” (*jianshe* 建设) China with roads, railroads, and dams—a government of huge engineering ambition, as seen in the Three Gorges Dam project, first conceived by Sun Yat-sen in the 1920s, and now built by the governments of Jiang Zemin and Hu Jintao. In recent decades, nearly every recent member of the Standing Committee of the Politburo of the Chinese Communist Party—the seven to nine or more men who run the country—has had training in engineering. China today is home to the largest pool of engineering talent in the world.

The two Leninist party-states that have ruled China from 1927 to the present have put a strong political mark on higher education. The National Government of the Guomindang (Nationalist Party) aimed at once to nationalize or otherwise regulate higher education and to “partify” university curricula (*see* Yeh Wen-hsin, *The Alienated Academy* 1990). At the same time, “culture” and the arts were to be subordinated to the purposes of the developmental state. First, under Chiang Kai-shek’s New Life Movement in the 1930s and, devastatingly, under Mao Zedong’s Cultural Revolution of the 1960s; art, culture, and the humanities were mobilized for the purposes of the party-state. As Mao Zedong put it in the 1940s, even before he seized power, literature and art were to be defined as “the

artistic crystallization of the political aspirations of the Communist party.” And these traditions continue in part today. President Xi Jinping has cited the need for enhanced Communist Party control of universities, and he has recently echoed Mao’s call for literature and the arts to follow the lead of the Chinese Communist Party: “Contemporary arts must also take patriotism as a theme, leading the people to establish and maintain correct views of history, nationality, statehood, and culture while and firmly building up the integrity and confidence of the Chinese people” (Canaves 2015).

At the same time, there are countervailing trends and experiments. “General education” (*tongshi jiaoyu* 通识教育) is now the cornerstone of curricular reform in leading universities throughout the People’s Republic, as well as in Hong Kong and Taiwan.

In the People’s Republic of China, universities have long had general education programs of a certain sort: required classes (*bixiu ke* 必修课) in Marxism–Leninism–Mao Zedong Thought, at least one version of which is now available globally as an online course (*see* Hernandez 2015). Like required courses everywhere, students loathe and endure these *bixiu ke*. Over the past 15 years, however, mainland universities, together with those in Hong Kong and Taiwan, have competed to introduce general and liberal education programs that open opportunities for learning across the humanities and social sciences.

The expansion of general education in Chinese university curricula has taken place in new institutions (e.g. Fudan College as the liberal arts college to which all Fudan University undergraduates belong) or it may be embedded in distribution requirements. Either way, it is a sign that pace-setting Chinese universities—the ones that disproportionately educate future political leaders—now assert that China’s next generation of leaders should be broadly educated in the humanities and social sciences as well as in the sciences. In 2001, Peking University inaugurated the Yuanpei Program (now Yuanpei College), named for Peking University’s famous German-educated chancellor of the early twentieth century, the philosopher Cai Yuanpei, as part of a broad reform of undergraduate education to foster “a new generation of talented individuals with higher creativity as well as international competence so as to meet the needs of our present age.” Tsinghua University’s School of Economics and Management, under the leadership of Dean Qian Yingyi, who received his doctorate at Harvard and holds a professorship at Berkeley, has implemented among the most imaginative program in liberal arts and general education to be found in any Chinese university—and this in a professional school. Cao

Li's article in Chap. 3 of this volume recounts Tsinghua's experiments with moral or "quality" education (*suzhi jiaoyu* 素质教育) and now the founding of Xinya College, a residential college devoted to general education. Renmin University in Beijing, founded as the "People's University" on a Soviet model, now houses several of China's leading centers of classical studies and Chinese history. To these must be added the return of international institutions (now as joint ventures): the liberal arts college opened by New York University in the form of NYU-Shanghai, and plans for a liberal arts college in the 200-acre residential campus of Duke Kunshan University, outside of Shanghai.

Perhaps Chinese educational leaders, at least in the elite institutions, believe that they need to do this, in part because, in China, as in the USA and Europe, all the pressures are in the opposite direction: on the part of students, who too single-mindedly pursue their careers, and, on the part of faculty, whose careers and interests are ever more specialized, and for whom good teaching is seldom rewarded—leading to a situation in which students and faculty interact on ever narrower ground. Perhaps Chinese educational leaders know, better than anyone else, what life can be like in the absence of a liberal education. For that was largely the history of China's twentieth century. But conceptions of general and liberal education have limits in a one-Party, Leninist state that is far from guaranteeing the *Lehr-* and *Lernfreiheit* that are central to a Humboldtian enterprise. This leads to a final challenge: can world-class education in the liberal arts and sciences exist in a politically illiberal system? Perhaps, but perhaps only if they are largely self-governed. German universities in the nineteenth century had many political pressures, but they were the envy of the world in part because they also had traditions of institutional autonomy that fostered and (at times) protected creative thinkers.

China's universities today boast superb scholars and among the world's best students. But these students are also forced to sit through required courses in party ideology, and they learn a simplified book version of the history of their own country. Despite new programs of general education, in the realm of politics and history, the distance between what students have to learn in order to graduate, and what they know to be true, grows greater every year. This is a recipe for two types of graduates: cynics and opportunists. In 2014–2015, there were signs that the Chinese Communist Party sought to limit recent trends toward a more liberal education. The reformist president of Peking University who sought to establish an international Yen-ching Academy, named for Yen-ching University, was summarily dis-

missed. The Communist Party Secretary of Peking University, Zhu Shanlu, stressed by contrast the need for enhanced “propaganda and ideology work” at Chinese universities. As Zhu wrote in February 2015:

Universities are an important battleground for the production and confluence of ideology, and have an important role as leaders, models, and spreaders of ideas to all of society... For questions of political principles, you must have a resolute standpoint, have a clear-cut stance, dare to catch and dare to manage, have the courage to reveal your sword, and master the important principle of “Academic Research has no boundaries, classroom lecturing has discipline” (*xueshu yanjiu wujinqu, ketang jiaoxue you jilv* 学术研究无禁区、课堂教学有纪律), and seriously handle public attacks of party leadership, attacks on the socialist system, misrepresentations of party and national history, and words and actions that start rumors and create trouble.

Sadly, the greatest obstacle to the emergence of an education in the liberal arts and sciences in contemporary China is the Chinese Communist Party and its political insecurity.

Yet Chinese institutions still are part of the international discourse on general and liberal education, which this volume broadly illustrates through various arguments for a liberal arts and sciences approach to undergraduate education in the global twenty-first century. The epistemological arguments in favor of focusing on cross- or interdisciplinary themes and big questions; the economic and utilitarian arguments requiring graduates to be equipped with “twenty-first-century skills” for employability and innovation; and the social—moral arguments underlining the importance of educating the whole person, social responsibility and democratic citizenship (van der Wende 2013b).

The various chapters together confirm that the first two are driven across the continents into a converging global knowledge economy agenda for undergraduate education in the twenty-first century. This may explain the rising popularity of liberal arts and sciences education among employers looking for much sought-after twenty-first-century skills. But they also acknowledge the importance of liberal arts in crafting a public response to the problems of pluralism, fear, and suspicion that their societies face. This argues for an approach to learning that goes beyond utilitarian goals of studying for employment into the development of moral character, intercultural understanding, and responsible global citizenship (Nussbaum 2010, p. 125). And as argued by Penprase in Chap. 5, these twenty-first-

century skills may not all be so new but could rather be seen as virtues that the complexities of life in this century demand more than ever. They can therefore not be singled out as technical and economic benefits from the political and social institutions that generate innovation, equity, and social cohesion and that are constantly challenged in the global context.

Finally, globalization emerges as the main challenge even for the world's leading universities, as explained by Berkeley's Chancellor Dirks in Chap. 8: "We have only started to come to terms with the volume and velocity of global connections, and have not gone nearly far enough in altering our content and methods to support students in a deeply interdependent world. When planet-wide problems do not recognize either national borders or the boundaries that have traditionally separated academic disciplines, universities must adapt. Any burgeoning university system, too, should take advantage of the opportunity to build around this critical aspect of modern life." To paraphrase Pericles Lewis's chapter title in this book, our mission is to seek liberal education and innovation in Europe, America, and Asia, *and for the World*.

NOTES

1. Most relevant for higher education are the European Commission, Council of the European Union, and the European Parliament.
2. Referring to C.P. Snow's The Rede Lecture on "The Two Cultures and the Scientific Revolution" (Cambridge University, 1959) in which he stated that the breakdown of communication between the "two cultures" of modern society—the sciences and the humanities—was a major hindrance to solving the world's problems.

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