Higher Education
A Worldwide Inventory of Centers and Programs
Revised Edition
GLOBAL PERSPECTIVES ON HIGHER EDUCATION

Volume 5

Higher education worldwide is in a period of transition, affected by globalization, the advent of mass access, changing relationships between the university and the state, and the new technologies, among others. *Global Perspectives on Higher Education* provides cogent analysis and comparative perspectives on these and other central issues affecting postsecondary education worldwide.

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INTRODUCTION

This book is a revised edition of the first comprehensive international inventory and guide to higher education programs, centers, and related agencies. That book was published in 2000. We have extensively updated and revised it for this 2nd edition. We have included all relevant listings from the 2000 edition in updated form. Many new listings have been added.

The book includes three main sections. The first is an essay that provides an overview of higher education research and training, reflecting in large part on the references included in the inventory. The second section is the inventory itself. The final section is a listing of journals in the field of higher education worldwide. Our commitment is to describe the growing network of institutions and programs devoted to higher education worldwide. As postsecondary education has become a major concern of every country, there has been expansion of research, service, and training programs intended to serve higher education systems and institutions. This book is an important effort to capture this growing network of organizations. We hope that it will lead to an enhanced community of concern for higher education worldwide.

The Essay
Higher education has become an area of research and scholarly concern only in the past half century, although the roots of the field extend further back. Training programs for higher education administration are also of recent origin. The essay is an attempt to provide a brief summary of the development of the field and a discussion of current trends in research and training worldwide. It is intended as a kind of "roadmap" for a field of research and training that is both rapidly expanding and on the threshold of increasing maturity. It has been modestly updated from the 2000 edition.

The Inventory
The main contribution of this book is the higher education inventory. Data for the revised inventory were collected over a period of a year and a half, from winter of 2004 through spring of 2006. In an effort to facilitate the response process, respondents were able to reply via Internet survey form, E-mail, or by regular post. All told, a total of 199 distinct programs and centers are included here. The response data were then edited for clarity and to conform to our specific data categories. In some cases, incomplete information was received. Using available resources we have tried to complete all listings as fully as possible. Nevertheless,
some listings remain less comprehensive than others. The inventory is alphabetically organized by country.

**Criteria**
We used the following categories to identify and list agencies:

- **Academic programs.** Degree-granting programs located in universities that offer postgraduate degrees in the field of higher/postsecondary education;
- **Institutes and centers.** Such institutes may be located in universities, government ministries or departments, or they may be free-standing. Some may be focused on research, while others may be mainly for data collection.

Defining our target institutions was not an easy task. We used the following categories as a guide to including centers/programs/institutes:

**Academic programs**

a. At least one FTE (full time equivalent) faculty member focusing exclusively on higher education. This might mean two or more faculty who have only a partial commitment.

b. At least four graduate courses (postbaccalaureate at the level of the most advanced degree available, often the doctorate), and in general the availability of the most advanced degree.

c. Affiliation with a university.

**Centers or institutes**

a. The organization must have a specific focus on research or policy in its field. We have excluded from the inventory centers or institutions that deal exclusively with institutional research.

b. The organization must have at least one full-time professional staff member, and at least two professional support staff.

c. The organization must have its own budget.

d. Organizations may be housed in universities, in government or private agencies, or may be free-standing. Funding may come from a variety of sources.

e. Organizations might have both an academic or training program and a center or institute.

**The Questionnaire**
The questionnaire asked organizations to provide the following information:

- Name of organization/program;
- Full address, E-mail, fax, and other contact information;
• Short statement about the foci of the organization/program, including main substantive research interests, purposes, etc.;
• Organizational publications;
• Names of full-time and part-time staff members, with an indication of their research/teaching interests;
• Abbreviated list of major books used in academic programs, research projects undertaken, major funding sources;
• Courses (if an academic program); and
• Numbers of students and degrees offered (if an academic program).

Coverage
This inventory is worldwide in scope, but there are obvious variations among the regions and countries. More than half of the listings are from the United States. There are several reasons for this imbalance. Without question, the U.S. has the largest research and training enterprise in the field of higher education, and indeed it is the only country with a well-developed graduate degree-level training sector in the field. The bulk of the American listings are for training programs. We had a fully comprehensive list of academic programs in higher education in the United States. It is our belief that the U.S. is home to about half of the programs and centers in the field. If one eliminated training programs, the United States would decrease its worldwide share dramatically.

China is underrepresented in this inventory. This was done purposely. We know that there are about 400 centers and institutes on higher education in Chinese universities today. Most focus only on the specific university in which they are housed and have little national or international role. Working with Chinese colleagues, we selected what are considered to be the main centers in China, and many of these responded to our questionnaire.

There are national and regional organizations dealing with higher education issues in many countries. In the United States alone, there are perhaps 50 such groups in Washington, D.C., representing the interests of parts of the higher education community to the federal government, or involved with coordination, research, or member services. These range from the Association of Jesuit Colleges and Universities, to the Council of Graduate Schools, and the American Association of University Professors. In Britain, organizations representing university vice chancellors, international education programs, and others exist. In Japan, the private universities have their own organization. Many of
these groups sponsor research or publications, and some of the larger ones, such as the American Council on Education, have research staff. We have not included such organizations in this inventory. We have also excluded most of the international groups that represent specific higher education interest groups, such as the International Federation of Catholic Universities.

Our response rate from centers and programs which do not use English as a primary language is no doubt lower than it is for agencies which use English frequently.

The Journals List
This volume includes a listing of journals focusing directly on higher education. Our goal is to provide as complete a listing as possible in all languages. We have included national as well as regional and international journals. We have provided information concerning the publisher, editor, frequency of publication and relevant addresses. This information is current as of early 2006.

We have been especially concerned to cover research-oriented journals, but have included as many other periodicals as possible as well.

This listing is without question incomplete. We have more thorough coverage for journals appearing in English and for those published in North America. We have purposely excluded many of the higher education journals published in China. Only a few of these journals are circulated nationally within China, and we have included these. Purely local university-based publications were not included.

Yoshikazu Ogawa was responsible for the first journals list in 2000. Roberta Malee Bassett, now a lecturer at the University of Southampton in the United Kingdom, and Laura E. Rumbley, a member of the staff of the Center for International Higher Education at Boston College, did the main work in preparing the 2006 journal list, which is based on the 2000 edition.

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August 2006
I n most countries, higher education has become a large, complex enter-prise. As universities and other postsecondary institutions have grown, they acquire elaborate administrative structures in need of major expenditures of public and, often, private funds.1 Perhaps most important, postsecondary education is recognized as a central element in modern society. Universities are considered engines of the postindustrial age and of the knowledge economy. Moreover, higher education has become big business. Academic institutions employ thousands of people and educate tens of thousands—or in some cases hundreds of thousands. Degrees in a multiplicity of specialties from ancient history to biotechnology are offered. In 1971 Eric Ashby characterized the American academic system as offering “any person, any study,” in describing its diversity and scope (Ashby 1971). Martin Trow analyzed the progression of higher education from elite to mass and finally to universal access (Trow 2006). In the industrialized nations, at least, mass access has been achieved, and a few countries—first the United States and Canada but recently South Korea, Finland, Japan, and many others—have moved to semi-universal access, enrolling half of the relevant age group or more. Many others, mainly in Europe and the Pacific Rim, educate 40 percent or more of the age group. Developing countries lag

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Research and Training in Higher Education: The State of the Art

Philip G. Altbach
behind, and the main growth in the coming decades will be in this part of the world (World Bank 2000). China, for example, overtook the United States as the world’s largest academic system in 2005, although it enrolls under 20 percent of the relevant age group.

In this context, there is a great need for expertise and data about all aspects of higher education and for a sophisticated understanding of the nature of academic institutions. Academic institutions require thoughtful and competent leadership. Research on higher education and training in the art and science of administration and institutional leadership are critical to the future of the university. Policymakers outside academic institutions, in government and in the private sector, who increasingly wield power over the future of academe, need knowledge and analysis in order to effectively coordinate complex institutions and systems.

An Emerging Field
Higher education research and the preparation of administrative personnel for postsecondary education constitute relatively new and undeveloped fields. Researchers have traditionally been reluctant to study the institution in which they work. Until the mid-20th century in most countries, academic institutions were small and enjoyed considerable autonomy. Government-mandated systems of higher education did not exist. Universities, though considered to be important, seldom functioned as major social institutions. Except for a few cases, such as the Humboldtian reforms in Germany in the early 19th century where academic institutions became important in national development, universities were somewhat peripheral. Social scientists preferred to focus their scholarly attention elsewhere, especially on subjects that might yield more useful theories. Most people interested in pedagogy and education focused on primary and secondary schools and not on higher education. As a result, postsecondary education was ignored by researchers in the field of education as well as by social scientists.

Given their lack of interest in academe, academic institutions and agencies responsible for funding higher education research provided scarce funding or support for research on this topic. The reasons for the paucity of data, research, and analysis concerning higher education tell us something about the origin of the field. Few people claim that the study of higher education is a full-fledged academic discipline. Therefore, the infrastructures that go along with a scientific discipline—academic departments, professorships, and the like—are largely nonexistent (Dressel and Mayhew 1974). In part because higher education has no disciplinary base, it has never had a clear academic home. In the United States, Britain, Canada, Australia—countries with
an Anglo-Saxon academic tradition—the study of higher education has been incorporated into the research and teaching activities of universities, mainly in schools of education, where it is often considered peripheral to the main missions of these schools. Recently, in a few additional countries, higher education has been added to the curriculum, again, mainly in education or pedagogical faculties. China is the most notable example—higher education is the subject of research or teaching in at least 400 Chinese academic institutions, with major programs or centers at 20 or more. The Netherlands, Norway, and Finland are other examples of countries that have incorporated higher education into the university curriculum.

Only recently has a perceived need emerged for professionally educated administrators and other staff in postsecondary institutions. The growth of a group of midlevel administrators specifically trained in the field of higher education has been a development limited mainly to the United States, Canada, and Australia. Senior academic administrators continue to be drawn from the ranks of the professoriate and slowly gravitate to administration as a career. In contrast, in Germany a cadre of senior university managers appointed by government directly from the civil service have responsibility for certain elements of university administration and management, especially in finance and nonacademic areas. These top administrative officials have little or no background in higher education. The lack of an institutional base has limited the growth and institutionalization of higher education as an academic specialty, although the growth in the number of professional middle managers in higher education has contributed to the expansion of the field of higher education studies.

The study of higher education is an interdisciplinary endeavor, which has been both a strength and a weakness. It is a strength because researchers in many social science disciplines—including but not limited to sociology, political science, psychology, economics, and history—have contributed significantly to the development of research on higher education. Among others, this group includes sociologists Burton Clark, Martin Trow, David Reisman, and Talcott Parsons, political scientist Seymour Martin Lipset, economist Howard Bowen, and many others. Researchers in the field of educational studies have slowly begun to develop an interest in higher education; curriculum specialists, educational planners, and others now work on postsecondary issues. The small number of researchers focusing on higher education obstructed the emergence of a distinctive field. In part because it is an interdisciplinary field, higher education research has no established methodology. It borrows from other fields. Again, this is both a
strength and a weakness. Interdisciplinarity has made possible original and quite innovative research. On the other hand, it has hindered the creation of a permanent research community.

Until recently, there has been relatively little demand for data and analysis of higher education by practitioners. Academic institutions themselves have been governed according to traditional norms and were fairly small, until the post–World War II era. Governments tended to permit academic institutions considerable autonomy, even where state funds largely paid for postsecondary education. When decisions were made, research-based data and analysis were not seen as relevant to decision making.

Funding stimulates research, and little money was available for research on higher education. The few exceptions were short lived and not sustained. For example, major reform efforts in Britain (the Robbins Commission) and in Sweden (the U-68 Report) stimulated some research (Robbins 1966). Both also resulted in significant changes in higher education in those countries. More recently, government initiatives, such as the Thatcher government’s abolition of the binary system in the 1980s or the more recent Dearing Commission were not accompanied by major research studies. The Carnegie Foundation for the Advancement of Teaching in the United States and the Leverhulme Trust in Britain sponsored major studies of higher education in order to understand academic systems undergoing changes and facing considerable challenges in the aftermath of the expansion of the 1960s.

Within the field of higher education, several subject areas do have a fairly strong research base. For example, the economics of higher education has become an especially central topic in a period when the allocation of resources is of great concern. The Institut de recherche sur l’économie de l’éducation in Dijon, France focused on economic issues in higher education beginning in the 1980s as funding became problematical and continues to be active in this area. Funding issues and related themes, such as access, have received attention from commissions in several countries.

Gathering international statistical information concerning higher education has been seen as a priority by UNESCO, which has been engaged in this area for several decades (UNESCO 1993). The Organization for Economic Cooperation and Development (OECD) and the World Bank have also been engaged in compiling statistics. National agencies in many countries collect national statistics, but few efforts exist to link these statistics or to ensure comparability among them (Organization for Economic Cooperation and Development 2003). Consistent and reliable comparative statistical information concern-
Comparative studies in higher education are also an identifiable trend in the literature, in part to provide national policymakers with a basis for comparison. This is a growing interest in international benchmarking and comparisons of financial outlays and the like. Several recently published major international analyses of trends are contributing significantly to current discussions of comparative higher education. The World Bank’s 1994 policy review for higher education stimulated a good deal of discussion and controversy, including a volume of critiques (World Bank 1994, Buchert and King 1995). UNESCO also completed an overview of higher education trends worldwide (Unesco 1993). As part of the preparation for the UNESCO study, several reports were prepared. The Task Force on Higher Education and Society issued a useful report on higher education in developing countries in 2000 (World Bank 2000). Truly comparative research is both difficult and expensive, and not surprisingly there are few comparative studies. More common are compilations of case studies around a specific theme (Altbach 1996).

Much of the research and data concerning higher education have not been formally published in standard books and journals and may be considered part of a “gray literature” that is difficult to access and often not available in libraries or other collections. These data often relate to individual academic institutions and are circulated only within the institution. Governmental and other reports are frequently issued only for limited audiences, and there is no effort to disseminate them more widely. Similarly, many of the studies commissioned by the World Bank are kept confidential and are unavailable to the research community. The Internet has tremendously increased the available data and to some extent analysis concerning higher education worldwide—the problem here is that there are few guidelines concerning the quality or usefulness of many items.

After almost a century of intellectual development as a field of research, higher education has, however, built up a sizable literature, a network of communications, and a community of researchers. Those responsible for planning and administering higher education institutions and systems are beginning to recognize the need for data and interpretation. Yet, the field has no widely accepted theories. Policymakers and administrators often say that they do not find research produced by the research community directly applicable to “practical” problems of higher education management. Nonetheless, the field has grown and matured.
A Higher Education Research Infrastructure

The field of higher education research has expanded in large part because conditions have created a need for such research and the means with which to conduct it (Sadlak 1981; Altbach 1985). The objective circumstances of higher education have changed: expansion of enrollment, staff, and budgets; a focus on the research mission of the universities; and the value of higher education to postindustrial society have all increased the attention paid to higher education in most societies. The following factors have contributed to the development of higher education research and to the increasingly complex infrastructure of the field.

As academic institutions expand, they need more information about themselves—such as enrollment trends, indicators of student achievement, and data concerning faculty and staff. This data gathering is referred to as “institutional research” and is focused on a single institution but may be relevant to a wider audience. Institutional research offices exist at thousands of academic institutions worldwide—they are common in larger universities in countries such as the United States, Britain, Australia, and Canada and are of growing importance in Europe and Japan. In China, there are more than 400 higher education centers attached to universities—many mainly focused on institutional research and planning. Elsewhere, institutional research is less well organized is commonly carried out as part of the administrative work of universities. Networks of researchers in this field are well organized in North America and Europe. The output of the institutional research offices of individual universities probably constitutes the largest part of research on higher education. However, much of this research is only of local interest, and little of it is made available to a wider audience.

University-based centers or departments with a focus on higher education have been established in a small number of countries to educate higher education professionals and researchers. These departments and academic programs, located mainly in academic institutions in Anglo-Saxon countries, have also been the source of a considerable amount of research. There are probably more than 500 university-based programs worldwide. In the United States, close to 100 universities have programs in higher education, mostly located in schools of education that provide postbaccalaureate degrees. While many of these US programs are small and without a research emphasis, several have contributed significantly to research in the field. The larger and more research-oriented programs include the University of California at Los Angeles, the University of Southern California, Pennsylvania State University, the University of Michigan, Michigan State University, the University of Pennsylvania, and several others. Prominent European examples are
the Center for Higher Education and Work at the University of Kassel in Germany, the Center for Higher Education Policy Studies (CHEPS) at the University of Twente in the Netherlands, and the Institute for Higher Education Studies at the University of London—all of which have a strong research focus but also offer graduate level degrees and certificates in higher education. The centers in Kassel and Twente, for example, have conducted significant research for the European Union and a number of agencies, and have published many research studies. A recently established EU-sponsored higher education masters program is headquartered at the University of Oslo in Norway, and involves other universities in Finland and Portugal. The Research Institute for Higher Education at Hiroshima University, along with a similar center at Tsukuba University in Tokyo, and newer efforts at Nagoya and Kyoto universities, and Waseda and Obirin universities among the private institutions, are Japanese examples. All of these Japanese institutions offer degree study as well as working on research projects. China may have the largest number of higher education programs and centers of any country. Among the prominent Chinese institutions are the Institute for Higher Education at Peking University, Huazhong University of Science and Technology, and the Institute of Higher Education at Xiamen University, although there are more than 400 higher education research institutes around the country. Some of these university-based centers focus mainly on research, others on teaching.

Governments require national data and research for planning in higher education, the allocation of funds, and related purposes. In some countries, national research institutes have been established with funding made available for higher education research and data collection. In some places, government-sponsored agencies assist with higher education reform and innovation. These agencies have responsibility for collecting statistical information on higher education, and some have a research mission as well. Research institutes vary greatly in size, purpose, and orientation. Some are linked with academic institutions, while others are attached to ministries of education. In Japan, for example, the Hiroshima University center is funded by the national government for the purpose of data collection and analysis on Japanese higher education as well as on overseas trends.

State planning and coordinating agencies have been established in many countries, and these organizations sometimes sponsor research and collect statistics to assist their work. Some of these agencies were established in the 1960s and others more recently—during the period of expansion of higher education—to meet the need for relevant information and analysis. Not surprisingly, the former “socialist” coun-
tries of Central and Eastern Europe and the former Soviet Union, with their centrally planned economies, established large higher education research agencies to provide the data needed for planning and development, as well as for coordination with other economic and political entities; these agencies have either been scaled back or abolished. The Higher Education Funding Council for England is the governmental body responsible in that country for allocating funds to academic institutions and also conducts limited research. Scotland has a similar agency. In the United States, most state governments have coordinating bodies for state-supported higher education, and in some cases, these agencies collect and publish research as well. The US federal government, through such agencies as the National Center for Educational Statistics, collects data, publishes analyses of higher education developments, and commissions some research. The Indian University Grants Commission has a research function and a responsibility for allocating research and other funds from the national government to higher educational institutions. The semigovernmental Korean Council on University Education has funding and coordinating responsibilities and also sponsors some research. ANUIES, the Mexican federation of universities, publishes a journal as well as other publications. The Center for University Studies (CESU) at the National Autonomous University of Mexico (UNAM) also produced research studies and a journal. Other countries have similar agencies and organizations. The arrangements for the collection of national statistical information and for the allocation of public funds to higher education vary considerably around the world—the expansion of the higher education enterprise has led to the growth of agencies responsible for coordination, the allocation of funds, and to some extent research.

University associations in many countries engage in research domestically and to some extent internationally. In the United States, the American Council on Education, the National Association of State Universities and Land Grant Colleges, the Council of Graduate Schools, and many other entities have made research and the dissemination of information a part of their missions. The German Hochschulrektorenkonferenz sponsors publications and supports some research. The Association of Indian Universities publishes books and journals and supports some research. These are just a few examples of university-sponsored organizations that conduct research and analysis as well as representing the interests of academic institutions to government and the public. On a regional basis, the Association of African Universities and the European Universities Association disseminate information and occasionally conduct research. The International Association of
Universities has promoted research and its dissemination at an international level; its journal, *Higher Education Policy*, is the source of useful research.

International and regional organizations are among the most effective in bringing together specialists on higher education as well as providing a forum for discussing higher education issues. UNESCO, established in 1946, has from the beginning been involved with post-secondary education—sponsoring many conferences, stimulating research, and publishing books and reports. It has also established regional offices that focus on higher education, including the UNESCO European Center for Higher Education (CEPES), based in Bucharest, Romania and focusing especially on central and eastern Europe, and the Center for Higher Education in Latin America and the Caribbean. In recent years, the World Bank has sponsored research and issued publications concerning higher education. While much of its research concerns World Bank loans and projects and thus is unavailable to the public, a growing number of studies have been published and now constitute some of the best sources for research on higher education on developing countries (Saint 1992; Salmi and Verspoor 1994). OECD, an agency representing the industrialized nations, has long been involved with higher education research and related activities and has produced a series of country-based studies that provide useful analysis. The OECD also sponsors the Institutional Management in Higher Education initiative and a journal, *Higher Education Management*. Some parts of the world, such as Southeast Asia, do not have active regional organizations, while others, such as Latin America, have a range of research-based groups.

A large number of private nongovernmental organizations have emerged in recent years to provide research and policy perspectives on higher education. Some of these organizations have an international focus, while many serve national needs. The Program for Research on Private Higher Education (PROPHE), in the United States, focuses on private higher education internationally, one of the fastest growing sectors of postsecondary education. The Center for Higher Education Policy Studies in the Netherlands has a special interest in higher education policy, but its research and publications have a broader focus. The Institute for Higher Education Policy, based in Washington, DC, is an example of an organization that does research, mainly with a US focus, on policy but also has an advisory role. The Center for Higher Education Transformation (CHET) in South Africa provides advice on higher education to government and universities and also has an active research and publication program. These are only a few examples of
many national, regional, and a few international organizations focusing on higher education.

The perceived need for data and analysis has spurred a plethora of organizations and agencies to provide information. Many are new, reflecting the emerging nature of the field, and they exist at institutional, national, regional, and international levels. There is relatively little interaction or cooperation among them. Almost the entire infrastructure of higher education research is a post–World War II phenomenon—a product of expansion in the 1960s and of the emphasis on accountability and assessment as postsecondary education experienced financial problems in the 1980s and 1990s.

The Information Infrastructure in Higher Education

With the proliferation of research centers and agencies concerned with higher education administration, coordination, and policy, a network of publications and other means of communicating the knowledge base in higher education have developed. In many countries, journals relating to higher education have been launched that are aimed at researchers and other professionals in the field. The listing of journals included in this book provides an indication of the scope of publications. While their circulation is usually limited, these journals do provide access to relevant research, current data, and analysis on the field. There are also many publishers who consistently publish books and monographs in the field of higher education. The Internet has stimulated the development of websites devoted to higher education, which are now significant sources of data and analysis. Many journals are now available on-line to subscribers as well, although there do not seem to be any solely electronic journals in higher education yet.

It is not possible, in the context of this essay, to discuss all of the national, regional, and international publications in the field. However, it is useful to focus on selected sources of information. As noted earlier, much of the higher education research base is not easily accessible either because it has not been published or has been issued by institutions only in limited editions. This “gray literature” is generally not included in standard indexes or reference sources. Much of the material deals only with specific academic institutions, but some are institutional planning documents and studies, reform reports, and similar policy-related materials with wider relevance. Unfortunately, there is no clearinghouse or data center for “gray literature” in higher education. The ERIC (Educational Resources Information Center) bibliographies and database, which was sponsored by the U.S. Department of Education, was the single largest source of bibliographical information; it included some of this below-the-radar literature—ERIC mainly collected American ma-
research and training in higher education

Several bibliographical sources in higher education exist. Contents Pages in Education (a journal that covers scholarly and research journals in education, including higher education) is an important worldwide resource, although it is limited to publications in English. Several abstracting journals dealing with higher education publications in Britain and the United States have good coverage of their respective countries. However, as pointed out earlier, these publications include only material published in journals or, in some cases, books.

Additional contributions to the research literature can be found in two encyclopedias on higher education in an international context (Clark and Neave 1992; Forest and Altbach 2006). These reference volumes provide not only worldwide coverage of higher education but also include “state-of-the-art” essays on key topics in the research literature. They are benchmarks for the field, showing that the study of higher education has come of age and has produced a coherent and reasonably comprehensive body of research. There are also several national encyclopedias or handbooks focusing on higher education. An important resource is the annual Higher Education: Handbook of Theory and Research, edited by John C. Smart and published by Springer. Now in its 22nd year, this largely US focused publication features lengthy essays on aspects of research on higher education.

The number of research and other journals focusing on higher education has expanded in the past several decades. Most of the internationally circulated journals in the field have been established since the 1960s. In the past decade, new internationally focused specialized journals dealing with assessment, quality issues, technology, and teaching in higher education have been established, reflecting important new trends in the field. A number of well-established more broadly focused internationally circulated magazines and newspapers relating to higher education provide news, commentary, and reporting on research and policy initiatives. The most important of these are the Chronicle of Higher Education in the United States, the Times Higher Education Supplement (The Higher) in Britain and Le monde d’éducation in France. All of these publications have an international circulation, and all report on international developments as well as national news. There are also many national periodicals with similar aims—for example, University News in India, China Education Daily (Zhongguo Jiaoyu Bao), Das Hochschulwesen in Germany, Universitas in Italy, Universi-
dades 2000 and Campus Milenio in Mexico.

There are a small number of internationally circulated research journals in higher education. These publications set the standard internationally for research and disseminate key scholarship in the field. Most are published in English, and are edited and published in the United States, Western Europe, or Australia. Higher Education, Higher Education Management, Minerva, and Higher Education Policy are the most explicitly international of the journals. Other periodicals include Studies in Higher Education and Higher Education Review (Britain), the Journal of Higher Education, Review of Higher Education, and Research in Higher Education (United States). Higher Education in Europe and the European Journal of Education focus on higher education from a mainly European perspective.

Hundreds of national journals also exist. In general, these do not circulate outside the countries of origin. Among the most important of these journals, are the IDE Journal in Japan, Universidad Futura in Mexico, the Canadian Journal of Higher Education, and Change in the United States. Others, such as the South African Journal of Higher Education are less well known internationally but publish valuable material. There are approximately 400 journals devoted to higher education in China alone—all but a half dozen published by individual universities and seldom circulated outside the sponsoring institution.

The publication of books on higher education has also increased significantly. Several publishers now specialize in books on higher education. Multinational publishers such as Springer (formerly Kluwer) publish many higher education books and journals. Others include the Open University Press in Britain, RoutledgeFalmer Publishers, Jossey-Bass, Greenwood, Praeger, and the Johns Hopkins University Press in the United States; Tamagawa University Press in Japan; Campus Verlag in Germany; and Lemmons Publishers in the Netherlands. Research institutions and other organizations also publish books and monographs in the field—these include the Research Institute on Higher Education at Hiroshima University in Japan, the Russian Research Institute on Higher Education in Moscow, the American Council on Education in the United States, and others. The Society for Research into Higher Education in the United Kingdom has perhaps the largest series of books in the field of higher education, published in cooperation with the Open University Press.

A Map of the Field

Although the field of higher education studies did not exist until after the World War II, a small but insightful literature on higher education predates the field and helped to shape thinking about the nature of
higher education. For example, Hastings Rashdall’s history of the medi-

eval university remains a classic of scholarship (Rashdall 1895). The Arab scholars who established the Al-Azhar University in Cairo thought about higher education, as did those responsible for the establishment of universities in medieval Europe (Makdisi 1981). Philosophers such as John Henry Newman (Newman 1859), and sociologists Max Weber (Shils 1974) and Emile Durkheim (1977) analyzed higher education. Psychologist G. Stanley Hall is said to have taught the first academic course on higher education, at Clark University, in 1893 (Goodchild 1996). Visionary academic leaders, from Wilhelm von Humboldt to Robert M. Hutchins, have articulated their views on the development of the university. Plato and Aristotle discussed advanced education in their writings, and Confucius had a profound impact on the nature of higher education in China and East Asia.

One of the first formal policy-focused studies was Abraham Flexner’s influential report on American medical education, which inspired significant policy reforms in the training of physicians (Flexner 1910). Later, Flexner wrote one of the first books to use a comparative approach to study higher education and recommend policy. His *Universities: American, English, German* was aimed at stimulating reforms in American higher education (Flexner 1930). One of the first government-sponsored reports on higher education was conducted as part of a reform effort in 1911 at the University of Calcutta in India. This document, and several others commissioned to shape higher education policies in colonial areas, influenced the later use of official reports on higher education in India. There is a rich literature in many countries concerning the history of higher education, focusing especially on the history of individual universities (Rüegg 2004).

This brief review indicates that although the research has been scat-
tered and lacking in focus, influential work of high quality has been produced in the century or more prior to the emergence of a field of higher education studies in the mid-20th century. Scholars and researchers worked within the confines of their disciplines, although with little if any communication across fields of study. Thus, higher education was hardly a neglected subject, although it did not emerge as a field of scholarly and research analysis until quite recently.

At approximately the same time that higher education was developing as an interdisciplinary field, researchers in other subspecialties were dealing with topics relating to the higher education enterprise. For example, the sociology of science grew dramatically as researchers turned to analyzing how research networks in the scientific disciplines work, how research is carried out, and how scientists and researchers mea-
sure productivity and influence in science. This subfield established its own journals and other infrastructures. The sociology of science and the history of science relate only indirectly to higher education studies (Ben-David 1991). Researchers in the two disciplines rarely come into contact, and the science studies literature is seldom used by higher education scholars. Similarly, the subfield of bibliometrics, which examines the impact of research and the diffusion of scholarly work, is not generally consulted by researchers in the field of higher education.

The links are closer between the field of higher education and that of science policy studies. The journal *Minerva*, especially during the editorship of Edward Shils, straddled both fields and attempted to contact the concerns of researchers in both areas. Others, such as *Technology and Society*, cover this intersection of fields. However, there has been little cross-fertilization, and only a limited number of researchers pay attention to both fields. Science policy is central to higher education now because it seeks to examine research networks that extend beyond the universities—for example, to university-industry linkages.

More integrally related to higher education is the community of researchers involved with planning for college and universities. This field has its own professional organizations and a small research network—the Society for College and University Planning in the United States is the main organization. Higher education management has also emerged quite recently as a distinct subspecialty, but in this case there are strong links with higher education research. The OECD’s *Higher Education Management* journal provides an international perspective on this topic. Because of the increasing complexity of academic institutions and the growing professionalization of university administration, there is a growing interest in management issues. So far, there seem to be few links between the broader field of management studies and higher education (Cohen and March 1986). Management studies and business administration actually have a special relevance to higher education.

Another strand of research relates to globalization and internationalization in higher education. With the growth of international study—about 2.5 million students study outside of the borders of their own countries—and a concern about how academe is being globalized, there has been an expansion of interest in this field. The *Journal of Studies in International Education* was established in 1996 to reflect this interest. Hans de Wit has analyzed internationalization trends in the United States and Europe (de Wit 2002; de Wit, Jaramillo, Gacel-Avila, and Knight 2005). The globalization of higher education, as defined by the increasing use of English for communication and teaching world-
Research and training in higher education

Wide, academic institutions from one country being establishing in another nation, the role of the World Trade Organization and the General Agreement on Trade in Services (GATS) in higher education, and other factors, have concerned higher education as well (Altbach 2004). The European Union’s Bologna Accord is the most important European initiative in internationalization and will harmonize European academic systems and increase intra-European mobility, international study, and international students (Reinalda and Kulesza 2005). International student exchange remains a key theme of internationalization (Davis 2003; Altbach, Kelly, and Lulat 1985). Organizations such as NAFSA: Association of International Educators in the United States, the European Association for International Education, the Canadian Bureau of International Education sponsor research—much of it applied and intended to improve international education programs and exchanges. The Institute of International Education Open Doors provides annual statistics concerning international study in the United States.

The internationally prominent higher education programs and centers, mostly located in North America and Europe, control most of the publications. The major research paradigms originate mainly in the major English-speaking nations, which play a central role in defining the field. Other parts of the world are to a considerable extent peripheral. Approximately 75 percent of the world’s internationally circulated research in the field of higher education emanates from the United States, Britain, and Australia. In the 1990s, the research communities in such countries as Japan, the Netherlands, China, and Germany did, however, grow in size and scope. Initiatives on the Pacific Rim and, to a lesser extent, in Latin America are indications of growth of higher education research and analysis and the establishment of centers and institutes. While the major English-speaking countries continue to dominate the research networks, the balance is changing as other countries build up research capacity in higher education. The field of higher education displays the same geographical inequality as most scientific disciplines, although probably to a lesser extent than in many fields.

Institutional Research

Institutional research, the collection of data concerning all aspects of a specific academic institution, is in great demand as academic institutions expand and as accountability becomes a more central part of governmental agendas worldwide. Institutional and system-wide planning also increases the salience of institutional research. Although institutional research data are rarely reported outside the institution and are frequently restricted, they are increasingly important. For the most part, institutional reporting on such issues as trends in enroll-
ments, student achievement, and fiscal arrangements have limited relevance to a wider audience despite the importance of this data for institutional planning and assessment. Benchmarking, now widely practiced in universities throughout the world, uses this data among other measures. Institutional research has become of central importance for planning, accountability, benchmarking, and other purposes and is increasingly used in higher education research.

The institutional research community is well organized in only a few countries; outside of Europe and North America, few national or international links exist. Outlets for publication and analysis of data based on institutional research have grown in recent years, although they remain to some extent outside of the mainstream of higher education research. In the United States, the Association for Institutional Research provides a professional forum for the research community, although there is still only limited coordination between the institutional researchers and the wider higher education research community. The European Association for Institutional Research recently broadened its mission to encompass broader higher education research—and thus serves as the central forum for both kinds of research and analysis. Because much of China’s higher education research on higher education is focused on institutional research, it receives more emphasis. There are no international journals focusing on institutional research and few forums for international discussion in this field other than at conferences held in the United States or Europe. Despite these problems, institutional research is coming into its own as a subfield of higher education research and is increasingly part of the mainstream.

The Education of the Administrative Estate

Academic administration has become increasingly complex. As institutions have become larger and more complex, providing many more services and offering more specialties, the need to provide skilled management and administration has grown as well. It is no longer possible for amateurs without training or a serious interest in administration to run modern universities.

Senior academic leaders, including presidents, rectors, vice chancellors, and deans still come from the ranks of the senior professoriate. They typically have no specific training for the administrative roles they perform, and most who assume these offices return to teaching and research after serving one or two terms. The United States is somewhat unique in that many senior academic administrators enter into administrative careers, going from one senior post to another, often at different institutions, and do not return to the professoriate.

The situation is different for the large and growing number of middle-
level managers in higher education, and it is here that major expansion has taken place. It is not surprising that the United States, with the largest, most diversified and complex academic system, developed this new profession first. There has been recognition that this new cadre of administrators require training for their jobs. The field of higher education administration developed after World War II, and by 2000, more than 100 American universities offered graduate-level specialties in higher education. The first subspecialty in higher education was that of student personnel administration—which provides training for those responsible for counseling and guidance, student extracurricular activities, and administering dormitories and other student facilities.

Later, training for general academic administration and the development of such subspecialties as financial administration and university legal affairs evolved. Special areas such as leadership studies, institutional research, community college administration, fund raising, and others are offered. Today, higher education programs are offered as graduate (postbaccalaureate) degrees at both the masters’ and doctoral levels, and serve both entry-level students seeking administrative careers as well as experienced administrators wishing to upgrade their skills and qualify for higher office. Traditionally, higher education graduates were hired for lower- and middle-level management positions at colleges and universities, as well as posts in government agencies dealing with higher education, think tanks, and related jobs. Institutional researchers often hold graduate degrees in higher education. In recent years, higher education graduates have assumed presidencies and other upper management positions, especially in the community college sector and in lower-ranking four-year institutions.

As of 2006, higher education administration is a well-established field. The programs are housed in schools of education in many of the top universities in the United States. Faculty members in these programs provide much of the published research on higher education and are often called on to serve as consultants and advisers for postsecondary institutions.

Similar programs have been established in several other countries, although growth has been surprisingly slow given the expansion in the number of administrators worldwide. The major English-speaking countries of the United Kingdom, Canada, and Australia now have university-based programs that provide training for academic administrators. A few other countries, such as China and Japan, are beginning to provide training for administrators, and others are beginning to think about it. It is likely that this field will continue to grow in response to the need for career-level administrators informed about