

Chapter 15

On the Move Towards a New Convergent Design of Higher Education Systems?

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15.1 Introduction

Changes in the patterns of higher education systems and of the functions of various sectors become clearly visible when major official decisions are taken in individual countries to revamp the system, for example, through a new legislation about higher education. Through such decisions, for example, new types of higher education institutions might be established or an existing institutional type might be upgraded formally. Similarly, levels of degree programmes and types of final certificates might be changed. A careful analysis, however, shows that major changes are often underway latently and shape the systems *de facto*, even if no formal rearrangements are made. For example, the current discourse on “world-class universities” might be connected to increasing differences of quality and reputation among universities within each country.

All over the world in recent years, we have seen signs of changes in higher education and heard discussions about potential changes that seem to call for a substantial alteration in the pattern of the higher education system. While we observe substantial similarities across countries at first glance, the advocates for changes often argue that their proposals are backed by worldwide developments. A closer look, however, reveals, in many instances, quite divergent phenomena. Therefore, it is interesting to look across economically advanced countries in order to explore whether we are on the way towards a convergent model of higher education systems or whether we note various models persisting or newly emerging.

Certainly, we note, across countries, a similar debate in regards to some *factors calling for a reconsideration of the patterns of higher education systems*. Three factors seem to play a significant role everywhere.

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First, *an increase in the social demand for higher education and an actual growth of student enrolment*: As also pointed out in other chapters in this volume, the expansion of student enrolment is one of the major factors driving a reconsideration of the character of the higher education system as a whole and for a realignment of its sectors. Access to tertiary education has surpassed rates of 50 % in the majority of economically advanced countries and even gets close to 100 % in some countries (see various analyses in OECD 2008). We also note that graduation rates of 40 % of the age group reaching at least a bachelor degree have already been realized in various countries and are assumed to be reached soon in others. It is generally pointed out that enrolment growth implies an increasing diversity of the overall student body in terms of motives, talents, and job prospects. This seems to call for increased diversity of study provisions, but trends and policies vary as regards to the overall degree of “vertical” and “horizontal” diversity, as well as regarding the major modes of diversity (e.g., levels of study programmes and degrees, institutional types, informal differences according to quality and profiles).

Second, *changing curricular approaches* and changing competencies of students upon graduation, reflecting dynamics in employment and work, as well as in other life spheres. There are continuous debates about the distinction between a “professional” or “vocational” emphasis of study programmes on the one hand and on the other, a “general” or “academic” emphasis (see the overview of the debates in Teichler 1999). We note strong pressures for an overall strengthening of the “vocational” or “professional” role. This is due to the fact that most occupations traditionally held by non-graduates and now increasingly filled by graduates in the process of the massification of tertiary education tend to rely on targeted precareer specialized training. Moreover, the recent spread of the term “employability” suggests that a targeted preparation for the world of work is increasingly expected, notably in countries traditionally having been accustomed to a weaker linkage between higher education and the world of work. On the other hand, arguments are made in favor of a broader linkage between the competencies enhanced in higher education and the subsequent work tasks. As future quantities of study and employment are less predictable in the growing societal and economic dynamism, generic skills might help to adapt to unpredictable situations; moreover, study programme with a strong general emphasis or with an emphasis on “key skills” are often viewed as a superior model for a lifelong learning society.

Third, the *changing role of research* in higher education and the changing linkages between the educational and research functions of higher education. For example, it is often taken for granted that a divide will persist between a balanced research–teaching nexus at doctoral degree-awarding institutions on the one hand and a marginal role of research at other institutions of higher education on the other hand. This divide is constantly challenged, as the term “academic drift” underscores. Finally, the current preoccupation with “world-class universities” suggests that another divide is becoming more important—namely, between high-quality research universities and “the rest.”

For a long time, emphasis has been placed on the distinction between institutions putting emphasis on basic research and others pursuing “applied” research. In some European countries, for example, institutions of higher education not named “universities” have traditionally opted for the term “universities of applied science.” Leading universities in many countries of the world responded to the “knowledge economy,” with the claim that they can serve basic research and applied research equally well. Moreover, the number of experts who consider the traditional divide between basic and applied as outmoded has grown.

Besides analyses emphasizing such factors, many concepts can be observed in regards to the *overall dynamics of change in higher education* that might be relevant for the explanation of changes in the patterns of the higher education systems. We note four types of concepts.

First, some concepts focus *specifically on the development of patterns of higher education systems*. In this domain, Martin Trow’s (1974) concept of “elite higher education” is supplemented in the process of growth of student enrolment by “mass higher education,” when the entry rate surpasses 15 %, and, eventually, by “universal higher education,” when the entry rate surpasses 50 %.

Second, there are concepts addressing *individual mechanisms of change in higher education*. There is a widespread belief following the logic of system theory according to which growth leads to diversity. In contrast, other concepts point out the dynamics of limiting diversity, e.g., “academic drift,” “professional drift,” or a notion according to which higher education policies in general are shaped by an inclination to imitate.

Third, there are a multitude of concepts according to which *certain actual features of higher education or its context* are powerful driving forces and are likely to become even more influential. In recent years, we have heard such claims regarding globalization and internationalization, competition and entrepreneurialism, strategic management in higher education, etc.

Finally, there are concepts aimed at identifying *secular mechanisms of long-term processes of change in higher education*. For example, the author of this study had argued that, in the analysis of changes of the patterns of the higher education systems from the 1960s to the 1980s, a period of a dominant search for the single best option is likely to be followed by a period of diverse options. In the 1960s, substantial growth of higher education was expected to serve both economic growth and the reduction of inequality of opportunity, and one tried to find the single best pattern serving these objectives. After a while, it became clear that the belief in a potentially best solution worldwide was accompanied by a strong influence of persisting national idiosyncrasies, as well as by a multitude of political options, for example, different notions in regards to the desirable social order (see Teichler 1988b). As a consequence, some features of higher education have become more similar over time, but striking differences persist and continue to emerge.

Another example of a concept addressing such secular mechanisms can be identified here in order to illustrate the range of such concepts. The historian Guy Neave (2011) points out that international political power constellations have enormous influence on the choice of patterns of higher education systems. For example, the options for the Humboldtian university in Germany and the Napoleonic university in France were influenced by preceding wars, and the developments of higher education systems after World War II were strongly influenced by the East–West confrontation of ideologies and values. According to Neave, it seems premature to conclude what will happen after the collapse of this political divide around 1990: whether influences of nation states will cease in favor of a single dominant model or whether other constellations will emerge.

The prime aim of this chapter is to examine actual developmental trends of the patterns of higher education systems in economically advanced countries: do we head towards similar options across countries or will we continue to observe a considerable variety across countries?

15.2 Major Dimensions of Patterns of the Higher Education Systems

The key literature on patterns of the higher education systems (see OECD 1973, 1974; Ben-David 1977; de Moor 1978; Teichler 1988b, 2007; Meek et al. 1996; Shavit et al. 2007; Neave 2011) suggests that national higher education systems have demonstrated considerable diversity during the nineteenth century and the first half of the twentieth century.

It is generally assumed among experts that the differentiation of the higher education system substantially grew in economically advanced countries in the second half of the twentieth century. Also, experts seem to agree in assuming that the differentiation was, for a long time, primarily driven along the teaching function of higher education. Differentiation could be observed (see Teichler 2007, pp. 15–16; cf. also various country reports in Clark and Neave 1992; Forest and Altbach 2006) according to:

- (a) *Length of programmes and levels of programmes and degrees,*
- (b) *Types of higher education institutions,*
- (c) *Curricular approaches of study programmes and/or institutions,*
- (d) *Varied “informal”—vertical (reputation and prestige) and horizontal (profiles)—characteristics among formally equal institutions and programmes.*

It is interesting to note that international education statistics published by UNESCO and other supranational agencies are classified only according to levels of study programmes, as will be explained in detail below. This suggests that levels of study programmes are the most frequently employed internationally and the least controversial dimension in the description of patterns of higher education systems.

This does not mean, however, that there is a consensus for the relevance of the various dimensions. Trow's frequently cited classification of elite, mass, and universal higher education is functionally oriented, but does not name any structural dimension. Frequently employed umbrella terms in recent decades—for example, in publications by the OECD, the international organization that has been the most active in the international discourse on patterns of higher education systems—have been:

- “short-cycle higher education” (OECD 1973),
- “non-university higher education” (e.g., Taylor et al. 2008), and
- “alternatives to universities” (OECD 1991).

In other words, one term addresses the length of study programmes and two focus on institutional types.

The following analysis will address all four dimensions. In this way, attention will be paid to the relative weight of these dimensions over various periods in various countries.

As pointed out above, the author of this analysis is convinced that *the public discourse on patterns of the higher education systems can be divided into three historical stages*:

- In the first stage, up to the 1950s, higher education was not conceived as “diverse” or as a “system.” The university was viewed as the primary type; other institutions and programmes might exist but they were not on a par with universities and their programmes.
- In the second stage, from the 1960s to the 1980s, the notion of a “higher education system” prevailed, with formal diversity according to institutional types and/or levels and, possibly, types of study programmes.
- The third stage, since the late 1980s, might be characterized by: (a) the notion of “tertiary education” stretching beyond “higher education,” (b) a search for a divergent system of study programmes and degrees in Europe, (c) the gradual blurring of previously existing clear distinctions in many countries between “academic” and “professional” or “vocational” programmes and institutions, (d) a stronger role played by the research function of higher education in the notions of diversity of higher education systems, and (e) an increasing emphasis placed on informal elements of diversity, notably “vertical” differences according to “quality” or “reputation” of institutions or study programmes.

Of course, as already pointed out, such a historical model raises the question as to whether the current stage will persist or whether we will see signs of the emergence of a further stage.

15.3 The Traditional Dominance of the University

Until the 1950s, analyses and public discourses on higher education rarely employed the term “system” in this context. If used at all, “university system” was a more widespread term in comparative analyses than “higher education system.” In many countries, it was customary to focus only on universities and pay little attention to institutions not on a par with universities, i.e., often highly specialized institutions such as engineering colleges and teacher colleges. For example, only in countries coming late to industrial modernization, e.g., the USA, Japan, and Russia, was engineering integrated into the university system from the outset. Such specialized institutions have grown over the years in status and, eventually, were recognized as universities.

This tradition of just focusing on the university certainly dominated in most European countries, for example, in Germany and Britain. The term “university” was applied traditionally to multidisciplinary, doctoral degree-granting institutions. The clear dominance of this type is reflected in the fact that the European Rectors’ Conference (CRE) and, subsequently, the European University Association (EUA) accepted only doctoral-granting institutions as members until the 1990s. This notion also exerted a powerful influence on the upgrading of institutions. In Europe, most specialized institutions of higher education not traditionally accepted as on equal terms succeeded, in the 1970s, in being upgraded to full university status.

Three other models, however, need to be mentioned. First, in France, *grandes écoles*—not universities—are seen as the apex of the system in terms of providing the most prestigious employment opportunities, although not having any substantial research function (see Musselin 2006). Second, in the USA, large numbers of institutions of higher education with no significant research role were established. “College” became the umbrella term for such institutions. Third, there is a wider notion of universities in East Asian countries. The term, usually translated into English as “university,” e.g., *daigaku* in Japan, is employed for all institutions awarding at least a bachelor degree.

In the 1960s, however, “higher education system” became the most favored umbrella term. This was linked to the notion that the growth of enrolment rates cannot and should not be accommodated solely or predominantly through long study programmes, through programmes with a strong “academic” thrust, and through institutions with a close nexus of teaching and research. In fact, a more diversified pattern emerged in most economically advanced countries, but there was no consensus in regards to the dominant dimensions of diversification. In some countries, formal diversification was characterized by more than a single level of study programme below the doctoral level, in other countries by more than a single type of higher education institution, and in some countries by both, i.e., two or more programme levels and two or more institutional types.

Since the 1980s, various supranational bodies have advocated the use of the term “tertiary education.” This moves away from the notion that post-secondary education is “higher” as a rule than secondary education in terms of more demanding and

complex processes of teaching and learning, but also comprises more years of learning. However, notions differ substantially by country. In some countries, no word is identical or correspondent to “tertiary education.” In some countries, a certain type or various institutional types serve such a sector.

In many publications, the term “tertiary education” is employed with respect to study programmes referenced in international statistics as “ISCED 5B” (in UNESCO terminology) or “Tertiary Type B” (in OECD terminology). This might comprise, in some countries, short—mostly 2-year—programmes considered to be “higher education,” as well as tertiary programmes up to the length of bachelor programmes that are offered by other institutions with vocational emphasis.

15.4 Unified or Multitype Systems

In the 1960s and 1970s, additional types of higher education institutions were established in various European countries in response to the growing social demand for higher education. The British polytechnics, the German *Fachhochschulen* and the French *Instituts Universitaires de Technologie (IUT)* were most often named as prototypes of this new development, but many other European countries opted for similar solutions (see Taylor et al. 2008).

Accordingly, higher education systems with a single dominant institutional type were often described as “unitary” or “unified,” and Italy was often named as an example. Other systems were characterized as “binary,” “two-type,” and “multitype” systems. It should be noted that such characterizations, as a rule, referred only to sizeable institutional types; for example, colleges of fine arts differ in many countries from other institutional types without being referred to in overall characterizations of higher education systems.

Terms such as “unitary,” “binary,” etc. were usually only employed if the respective higher education system was viewed as strongly shaped by institutional types—not, however, if the system was viewed as clearly characterized by levels of study programmes. For example, various names of institutional types are customary in the USA, e.g., universities, colleges, junior, and community colleges, etc., but the US system is generally described as a system characterized by levels of study programmes.

Other institutions differed from universities in various respects. For example, British polytechnics were similar to universities in regards to the entry requirements and the levels and lengths of study programmes. In contrast, prior learning for entry to German *Fachhochschulen* could be 1 year shorter and did not have to be via the academic track of secondary education, and the degree programmes at *Fachhochschulen* were shorter than those at universities (see Kehm and Teichler 1992; Kehm 2006). The IUTs specialized in short programmes, mostly 2 years in duration.

Terms such as “unitary” or “binary” systems gained popularity in the 1970s. They did not refer to the institutional setting of “ISCED 5B” or “Tertiary Type B”

which became a major policy issue only in the 1980s. This additional sector could have varied institutional homes within a single country. Japan is an interesting example of such a variety. Students registered in the UNESCO statistics in ISCED 5B are those enrolled mostly in, firstly, 2-year programmes at junior colleges with a formally similar entry qualification as universities, second, at colleges of technology that integrate upper secondary education and short higher education into a 5-year study programme, and, third, at special training colleges with 2-year or 3-year post-secondary vocational education programmes not considered to be “higher education” (see Yoshimoto 2011).

In most countries with more than a single type of higher education institutions, universities, as a rule, differed from other institutions in at least in two respects:

- Universities were conceived to serve both teaching and research in a more or less balanced way, while other institutions had a limited research role.
- The right to award doctoral degrees was confined to universities.

In individual countries, further distinctions might be viewed as characteristic. For example, in some countries, other institutions do not provide study programmes at the master level or even at the bachelor level; alternatively, the typical entry qualifications might vary according to institutional type.

15.5 Lengths and Levels of Study Programmes

In international comparisons of higher education systems since the 1960s, we notice more of an emphasis placed on study programmes than on types of higher education institutions. This seems to be appropriate, because higher education is not divided across all countries similarly according to institutional type. Moreover, when the comparison of higher education systems becomes relevant, notably in the assessment of prior learning of internationally mobile students, the years of prior study and other features of the study programmes are often taken as very important criteria, while the institutional type is often viewed as only one of several indicators of the quality of study.

We are accustomed to describing higher education systems with a strong emphasis on levels of study programmes. As a result, the level tends to be characterized primarily by the required length of study and—in the case of advanced levels—of the required overall length of study up to a certain level of certification. This is most pronounced in France, where study programmes are described as “bac+2,” “bac+3,” “bac+5,” etc., according to the years of study beyond secondary education up to successful completion. For example, a degree at *grandes écoles* is usually a bac + 5 degree, i.e., achieved after at least 5 years, i.e., 2 years at *classes préparatoires* or at universities and 3 years at *grandes écoles*.

The classification of study programmes according to the required length of study traditionally takes for granted a modal type of study: full-time study of young persons, whereby the students spend more than half of the year at an institution of

higher education. We note striking differences in regards to the extent to which the students actually correspond to this modal type, for example, regarding official part-time study, programmes for adults, distance education, etc. In addition, we note striking differences by country according to the proportion of students actually studying longer than the required period of study. In some countries students graduate, on average, after less than 110 % of the required period, and in several European countries, after about 150 %.

According to overviews on study programmes in Europe in the late 1980s, first study programmes at universities vary in the required length by 3–6 years. Programmes at other institutions of higher education range from 1 to 4 years (Teichler 1988a; Jablonska-Skinder and Teichler 1992).

The required length of study can be viewed as a useful tool to determine the approximate level of competence achieved. For example, temporary student mobility within Europe works well based on the assumption that fourth-year students have more or less the same level of competence, whether the fourth year of study is the first year of a master programme subsequent to a 3-year bachelor programme, the final year of a 4-year programme, or the fourth year of an even longer study programme.

In characterizing study programmes, however, we often name the level of the study programme and, subsequently, characterize the level through the length of this programme and possibly the length of preceding programmes. In that case, we would conclude that a fourth-year student who enrolled in a master programme subsequent to a 3-year bachelor programme would be on a higher level than a student who enrolled in the fourth year of a 4-year bachelor programme.

In the process of the modernization of universities from the nineteenth century to the emergence of notions of mass higher education in the 1960s and 1970s, only two structural features seem to have applied to the university systems in almost all economically advanced countries:

- At least two levels of degrees emerged, whereby the former (e.g., bachelor in England and Wales, Magister, Staatsexamen or Diplom in Germany, Laurea in Italy, Doctorandus in the Netherlands, etc.), was viewed as the typical prerequisite for access to jobs sometimes called “graduate jobs,” and the latter, the doctoral degree, was considered to be the prerequisite to the academic profession and other research occupations.
- At doctoral-awarding institutions and units, a close link between teaching and research was considered normal in the work assignment of the academic staff.

But even these features could not be found consistently across countries. Notably, varied practices emerged in regards to the levels of programmes and certificates below the doctorate. Two distinctions are common (see Jablonska-Skinder and Teichler 1992):

- In many countries, a distinction is made between a “normal” higher education programme on the one hand and programmes that were somewhat shorter and possibly less academically demanding on the other hand. In the UK, for example, the certificates of the former programmes tend to be called “degrees” and

those of the other programmes “subdegree level certificates” (whereby the latter might be called “certificates” or “diplomas”).

- In Anglo-Saxon countries and other countries following their models, two levels of study programmes and degrees were established below the doctoral level, i.e., two levels of degrees usually leading to employment in “graduate jobs.” The former, mostly named “bachelor,” required predominantly 3 years of study in the English tradition and 4 years of study in the US tradition, while the subsequent “master” level required, as a rule, 1 year in the English model and 2 years in the US model. In contrast, a single study programme for most fields of study was common until the 1990s in most European countries. The first degree, awarded mostly after 4 or 5 years of study, tended to be viewed as equivalent to an Anglo-Saxon “master.”

The notion of having two levels of higher education degrees other than a doctoral degree spread internationally over a period of years. However, even today, this is not fully supported, e.g., many European countries opted, in the first decade of the twenty-first century, for a bachelor–master model (see CHEPS et al. 2010). This is shown by the fact that international organizations collecting statistical information on students, notably UNESCO and OECD, still divide higher education study programmes into two levels: one comprising both bachelor and master programmes, as well as other types of first degree higher education programmes (e.g., ISCED 5A in UNESCO terms), and the other comprising doctoral and other advanced programmes (ISCED 6).

In the USA, a divide emerged in the nineteenth century between “undergraduate education,” leading mostly—after 4 years of study—to a bachelor degree, and “graduate education” or “professional education.” In many bachelor programmes, an initial general education phase was introduced, and some bachelor programmes were viewed as crossdisciplinary throughout, often deemed as serving “liberal education.” The majority of bachelor graduates in the USA transfer to the world of work and, often, acquire the necessary professional competencies in the period of initial professional training while being employed. Those continuing study in the USA either strive for academic careers or for higher-level occupations. In some professional areas, notably medicine, law, business studies, and teacher training, study beyond the bachelor level at graduate and professional schools is viewed as an indispensable professional training period. The term “graduate education” is the period of learning from the award of a bachelor to the doctorate, usually with a required “time to degree” of 5 years, no matter whether students are awarded a master or a similar degree after 2 years or whether they can spend these 5 years in an integrated graduate programme leading directly to the doctoral degree. The notion of a divide between “undergraduate education” and “graduate education” became customary in many other countries. However, this is by no means an established divide across economically advanced countries.

There have also been differences between countries in regards to the “level” and the quality of a doctoral award. Over the years, however, the US notion of the doctorate level has become widely accepted, i.e., the need to spend about 3 years of

learning and research work beyond the master level in order to be awarded the doctoral degree.

There is less consensus, however, with regards to the status of doctoral candidates (student, candidate, employed researcher, etc.), their supervision, elements of courses, modes of examination, etc. Further, we note that, in some countries, there is a divide between academic and professional doctorates, while in other countries, such a distinction does not exist. Finally, the role of the doctorate varies in terms of the academic career. In some countries, the doctorate has long been the prerequisite for professor positions at universities, while this has become true for other countries only recently. In some countries, a higher-level entry qualification for the professoriate has been established, for example, the *Habilitation* in German-speaking countries.

Altogether, the number of years of study seems to be the mostly frequently used yardstick for comparing study programmes within and across countries. In some instances, this is modified by levels of degrees. For example, a bachelor degree might be viewed as indicating the same level of competence, irrespective of whether the required period of study is 3 years or 4. This does not mean, however, that other criteria do not have a role. In addition, noteworthy differences might exist regarding entry qualifications, curricular thrusts of the study programmes, as well as informal reputational differences between individual institutions or departments.

In a substantial number of countries, we note differences in the formal entry qualification for study programmes and institutional types. For example, the successful completion of academic secondary education is the usual entry route to university programmes in the German-speaking countries and in the Netherlands, while vocational upper secondary education with 1 year less of overall schooling is considered to be the normal entry route to study programmes with a strong vocational emphasis that are also provided at other institutions of higher education.

It should be noted that, in rare cases, the entry qualification and, more frequently, the actual entry selection can vary at institutional types and at individual institutions by fields of study. Institutions of higher education, as a rule, are internally structured according to disciplines or fields of study (that are often closely linked to individual disciplines), and the units in charge of disciplines or disciplinary groups—often called “faculties” or “departments,” “schools,” etc.—are the units admitting students. The USA is a notable exception, where bachelor students are mostly admitted to the university as a whole and opt later for specific study programmes.

15.6 Curricular Thrusts of Study Programmes

In most countries of the world, we note general trends about the relationships between institutions of higher education as a whole and the world of work. For example, it is frequently emphasized that a university has a “theoretical” or “academic” thrust, even though striking differences in this respect according to

discipline are known. In contrast, other institutions of higher education might be described as “applied” or “vocational.” For example, German *Fachhochschulen* started calling themselves (in the English translation) “universities of applied sciences” in the 1990s in order to claim parity of quality and esteem among other universities, while underscoring their distinct character of teaching and learning, as well as research. Many similar institutions in various European countries have adopted the term “universities of applied sciences” as well.

However, there are significant country differences in the extent to which the individual study programmes of universities are understood to lead clearly to certain occupations or whether there is a less distinct articulation between the individual fields of study and respective subsequent employment areas (see the international comparison of curricular approaches in Lattuca 2006; cf. the country chapters in Clark and Neave 1992; Forest and Altbach 2006). The former relationship, common in European countries, is often called a “professional” linkage, while the latter, typical for Anglo-Saxon countries, is often called a “labor market” linkage (see Teichler 2009b, 2011).

In all countries—irrespective of a general professional notion of a looser relationship between fields of study and occupational areas—some fields of study are characterized by a strong work-preparatory task. This holds true in most countries for medicine, engineering, and teacher training, as well for law, economics and business studies, physics, and chemistry, in some.

In some countries, this stronger work-preparatory task in select subjects is linked to the weaker power of the university to award a degree or another mode of entry qualification to the respective occupation. For example, professions in the fields of engineering and business award a professional license after some years of professional experience and a university degree assures the candidate an exemption from a theoretical professional exam. In this manner, the professions have an enormous influence on the respective curricula at universities (see, for example, Goodlad 1984). In Germany, students in medicine, law, and teacher training are traditionally not awarded a university degree, but take a state examination at the completion of study jointly held by university teachers and state or professional representatives. There are various European countries where a degree in all fields of study is considered to have an “*effectus civilis*,” thus being recognized as the entry qualification for all respective occupations (see Jablonska-Skinder and Teichler 1992).

In spite of these differences of the relationships between study programmes and subsequent professional work according to disciplines and according to countries, descriptions of higher education systems often characterize study programmes at universities as “academic” and possibly theoretically oriented, while programmes at other institutions of higher education are often named “vocational,” “professional,” or “applied.” As already pointed out, another type of higher education institution or even more than a single type were established in a number of European countries alongside universities between the 1960s and the 1990s in order to diversify higher education. The curricular thrust of these institutions was viewed as differing from that of the one dominating at universities, and was often termed “vocational” or “applied.” These study programmes were mostly viewed as

highly relevant for future employment, but, as a rule, they were not considered to be on equal terms to academic programmes at universities. So, a person successfully completing a 3-year or 4-year “vocational” programme could not just transfer for the respective fourth or fifth years of study to a university. The opportunities for transfer and the hurdles to be overcome varied considerably by country.

It is generally assumed that study programmes not leading to the bachelor level have a “vocational” thrust. This is taken for granted, irrespective of whether such programmes are provided by universities, other higher education institutions, or tertiary education institutions not considered to be “higher education institutions.”

15.7 New Discourses, Policies, and Trends Around the Turn of the Century

Policies and trends in regard to the patterns of higher education, as they have become visible notably in the 1960s and 1970s in the wake of the first major wave of expansion, did not remain stable for long. We have already noted signs of changing conditions in the higher educational function since the 1980s. This was the period when, according to Martin Trow’s classification, the stage of “universal higher education” was reached in various economically advanced countries, while most others followed in the 1990s or in the first decade of the twenty-first century.

Four themes highly relevant for patterns of the higher education system played a major role in the public discourses on higher education in most economically advanced countries in the recent two decades that might suggest a structural convergence across countries:

- The increasing formal diversity of higher education institutions through the emergence of a “tertiary education system,”
- The increasing formal similarity of patterns of diversity through the *emphasis placed on levels of study programmes and degrees* in all European countries,
- The *blurring of a divide between “academic” and “professional” or “vocational” higher education* and, in this context, the declining weight of an institutional divide between universities and other institutions of higher education, and, finally,
- The growing relevance of *informal vertical distinctions* between higher education institutions, as the “ranking” discourse suggests, and, in this context, the potentially *growing role of the research function* of higher education for the overall structures of the higher education systems.

Key international organizations, such as UNESCO, the OECD, and the World Bank, began campaigning in the 1980s for the new umbrella term *tertiary education* to replace *higher education*. Tertiary education should not only comprise higher education programmes, traditionally considered in most countries as at least 3-year programmes with a certain degree of academic emphasis and leading to a degree

often called a bachelor degree (ISCED 5A and ISCED 6 in the UNESCO classification), but, in addition, the new term should also cover 3-year study programmes without an academic emphasis, as well as any kind of shorter post-secondary programmes. For example, 2-year programmes were clearly viewed as belonging to this category, e.g., programmes at community colleges and junior colleges in the USA, which might be considered to be part of “higher education” in the respective countries.

In reality, the international organizations expected that this wider notion would be reflected in a different interpretation of the overall system of education beyond the age of about 18 years, as, for example, the OECD study “Redefining Tertiary Education” (OECD 1998) suggests. In fact, figures on entry rates and enrolments presented in recent years in the public debate about educational expansion are mostly those of tertiary education—regardless of whether those quoting the figures refer to “higher education” or “tertiary education.” According to an overview published by the OECD, the entry rate to tertiary education had surpassed 50 % in the early 1990s in only a few countries. By 2005, however, various OECD member states had rates higher than 75 % (Teichler and Bürger 2008), and the most recent statistics show entry rates above 90 % in some instances (see Shin 2011). Clearly, this development can be viewed as the second major wave of higher education expansion. As predicted by the OECD in the late 1990s (OECD 1998), three-quarters of the population study, and employment without a tertiary education has become a reality in the twenty-first century.

However, this did not lead to a convergent model of diversity with similar proportions of ISCED 5B new entrant students as compared to ISCED 5A new entrant students. Rather, the majority of OECD member states did not create a sector of ISCED 5B as clearly distinct nationally from ISCED 5A. So, in some instances, ISCED 5B programmes were allocated in international statistics while remaining part of the existing system of vocational training. In some countries, all vocational training previously considered to be neither “higher” nor “tertiary” was upgraded to vocational bachelor programmes as part of the ISCED 5A level (see, for example the case of Finland in Schmidt 2006). As a consequence, the proportion of ISCED 5B new entrant students among the corresponding age group ranged in 2005 from none, as in the case of Finland, to 30 % and more, as in the case of Belgium, France, and Japan (Teichler and Bürger 2008).

There were various early signs of a growing weight of levels of study programmes and degrees at the expense of the weight previously placed on the type of higher education institution. In Denmark, a decision was made in 1989 to award all students a bachelor degree after 3 years of successful study, irrespective of the type of institution and whether the degree programmes usually required 3 or more years of study; this policy did not become widely known internationally. In 1992, the UK upgraded the institutions of the second type of higher education institutions, i.e., polytechnics, and this became a major issue in debates about the future of higher education. It was interpreted, in part, as a sign of the increasing quality of higher education at other institutions of higher education, and, in part, as a sign of blurring curricular distinctions between institutions as a consequence of an

“academic drift” at other institutions of higher education and of a “vocational drift” at universities, and, finally, in part, as a sign that the reputational differences between individual institutions of higher education had clearly outweighed the differences by institutional types (see, for example, Fulton 1996).

The weight of levels of study programmes and levels or degrees for the overall patterns of higher education systems increased most strongly through the so-called Bologna Process. The majority of European countries decided in 1999 in the *Bologna Declaration* to strive for a cycle structure of study programmes and degrees. This was advocated primarily in order to facilitate international student mobility, but also reflected the changing function of higher education at a stage of expansion when the majority of youth moved towards some type of tertiary education.

At that time, the majority of students transferred to the world of work with a bachelor degree only in the UK and Ireland. Otherwise, no bachelor-level degree existed at all (e.g., Italy), or it was the exit point for a minority of university students (e.g., France, Norway, and Spain), or the degree awarded at other types of institutions with a more applied emphasis was considered to be equivalent to a bachelor or slightly higher (e.g., Germany and the Netherlands).

The Bologna Process led, instead, to a substantial, somewhat convergent restructuring of higher education systems. By 2010, more than two-thirds of initial higher education degrees awarded in Europe were bachelor degrees. But it would be misleading to assume that Europe was on the way to a consistent and comparable “cycle” system of higher education (see Huisman 2009; CHEPS et al. 2010; Eurydice 2010; Curaj et al. 2012).

In various countries, some disciplines were exempted from the bachelor–master structure, e.g., medicine, law, and teacher training (see Sursock and Smidt 2010). The introduction of this cycle system did not lead to a discontinuation of types of institutions of higher education in countries where different types have played a major role in the past (see Taylor et al. 2008). In contrast to the USA, there was no notion of a dividing line between “undergraduate” and “graduate education” across Europe. Also, no convergent curricular model emerged of a progression from a general toward a specialized curricular thrust during the course of study. Moreover, no agreement was reached regarding a typical length of study programmes, as, for example, the predominant 4–2 system in the USA and the predominant 3–1 system in England, Wales, and Northern Ireland. Most bachelor programmes, in fact, vary between 3 and 4 years, most master programmes between 1 and 2 years, and the two programmes altogether between 4 and 5 years. Finally, the majority of university professors and students in those European countries where a distinction between a bachelor and master is completely new do not accept the bachelor as the exit point for the majority of students, but, rather, as an interim degree for students preparing for typical graduate jobs, and, actually, the majority of bachelor graduates continue to study up to the master degree (see Schomburg and Teichler 2011).

Fifth, there are some indications that differences between curricular thrusts might diminish. On the one hand, sectors of higher education previously considered to be in charge of a “vocational” and “applied” emphasis in teaching, and possibly

in research, seem to have become more similar over time to the “academic” universities. On the other hand, the discourse on “knowledge society” and “knowledge” has strengthened in many countries the notion that higher education has to become visibly more useful. The term “employability” is often used as a call to higher education to subordinate itself quantitatively, i.e., in the number of students and graduates, and qualitatively, i.e., the competences fostered, to the presumed demands of the employment system. This might mean a more targeted specialization of study programmes in those countries traditionally unaccustomed to a clear linkage between study programmes and subsequent work, for example, the UK (see, however, the more differentiated discussion in Knight and Yorke 2003). In other countries with a traditionally professional emphasis, the term “employability” (see the critique of the misleading term in Teichler 2009b) is used in a different way. For example, efforts to foster “key skills” are in the forefront of the curricular debate in Germany. It might be added here that the discourse about the changing role of higher education moving towards a lifelong learning society has gained momentum in this context as well.

It is difficult, however, to establish whether distinctions between a “theoretical” and “academic” thrust on the one hand and on the other hand, a “vocational” and “applied” thrust have really become marginal. Many factors come into play, such as possibly the increased imitation of top universities as a consequence of “ranking,” employment opportunities for graduates, and the stability or change of professional traditions in the individual countries. Last but not least, changes in curricular thrusts cannot be measured as easily as, for example, increasing enrolment rates.

Finally, it is widely assumed that higher education systems might move towards increasing similarity in terms of informal vertical distinctions between higher education institutions. National systems of higher education have varied substantially in the past in this respect. For example, countries such as the USA and Japan were known for differences in the quality and the academic reputation of institutions of higher education. Countries such as the UK and France were also viewed as having a few exceptional institutions at the top, though the vertical differences across the system were considered to be clearly lower than in the USA and Japan. In contrast, the differences of quality between universities were conceived as being very low in Germany and various Northern and Central European countries. This, for example, made it easy for students in some of these countries to move from one institution to another during the course of study. National ranking studies of universities or departments and study programmes (often doctoral programmes) are widespread in some countries, but attention to differences in quality and reputation grew as the notion spread at the beginning of the twenty-first century that top universities are competitors on a global scale, as expressed by the increasing popularity of the term “world-class universities.”

In recent years, global rankings of universities has become widespread (see Dill and Soo 2005; Sadlak and Liu 2007; Kehm and Stensaker 2009; Shin et al. 2011). There are many indications that these rankings not only functioned as descriptors of the informal vertical diversity, but as a trigger for policies to deliberately increase the vertical differences, for example, for the preferential funding of top institutions

(see Hazelkorn 2011). In this framework, it seems appropriate to argue that both the measurement of ranks and the policies in favor of increasing vertical differences have put a much stronger emphasis on the role of research than all prior discourses and policies regarding the patterns of higher education since World War II.

It would be an exaggeration, however, to argue that higher education policies in economically advanced countries in the first decade of the twenty-first century moved consistently towards a steeper vertical stratification of higher education. One could consider the emphasis placed in the Bologna Process on facilitating temporary international mobility of students as implying a call for keeping vertical differences within limits. Obviously, opportunities for temporary mobility are reinforced if quality differences between institutions and study programmes are relatively small and trust is widespread that a period of study somewhere else is equivalent to study at home (see Teichler 2009a). Moreover, many experts argue that the overall move of governance in higher education to increasing competition, the stronger power of the university management, increased activities of evaluation, and stronger output and outcome-based funding stimulates many universities to seek specific profiles. As a consequence, there is a greater increase in horizontal diversity, i.e., in terms of substantive profiles, than in terms of the publicly more visible vertical stratification. It might be appropriate to assume that the forces in favor of the increase of informal vertical differences are dominant; yet, this trend might be weaker and less consistent than the widespread preoccupation with rankings and “world-class universities” suggest.

15.8 Conclusion

The waves of increased enrolment rates in economically advanced countries after World War II, the first in the 1960s and 1980s, and the second beginning in the late 1980s, were each accompanied by international discourses on the search for the single best pattern of the higher education system. In the first wave, an increase of structural diversity was considered necessary, and diversity seemed to have increased to some extent. But the options remained varied in regards to the major modes of diversity and the overall extent of vertical and horizontal diversity. In the second wave, the search for the worldwide best solution was discussed with a tone of greater urgency because higher education was increasingly viewed as globally intertwined. Again, we see steps towards increasing diversity as well as some convergent signs towards similar patterns of diversity, but, altogether, national options remain more diverse than the claims of global forces and needs suggest. This can be illustrated by the title of a collection of recent accounts of the Bologna Process, which is the single most powerful political activity in favor of the convergent pattern of higher education systems: “European higher education at the crossroads: Between the Bologna Process and national reforms” (Curaj et al. 2012). If we do not get overwhelmed by the most visible political campaigns, we will conclude that no clearly convergent models of higher education systems are in

sight. The relatively open search for the best structural solution goes on, as another title has underscored for the past: “Between over-diversification and over-homogenization: Five decades of search for a creative fabric of higher education” (Teichler 2009a).

The OECD study “Redefining tertiary education” (OECD 1998) reminded us to be attentive to a new issue of higher education. How does the function of tertiary education change when study is the rule and only a minority has a lower level of educational attainment? Do our traditional expectations of rewards for investment in education, and our views on status and power and the overall social order fade away and what will be substituted? After the currently dominant discourse on the top sector of higher education loses its attractiveness, will there be a new discourse on patterns of the higher education system? And will the implications of the phenomenon that Martin Trow called some four decades ago—with some exaggeration—“universal higher education,” be given more attention?

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