Chapter 10
Possible Futures for Higher Education: Challenges for Higher Education Research

Ulrich Teichler

10.1 Introduction

Higher education research, as a rule, informs both the small academic community as well as the interested policymakers and practitioners about the recent past of higher education. Research has a wealth of methods to observe what has happened, but it takes time to design a research project, to get the necessary resources, to collect information, to analyze and interpret the findings, and to disseminate them through publications and other means. Researchers are accustomed to reporting about the findings of some years earlier, as if they were just recent, but they would like to be even faster in acquiring and spreading knowledge. A timespan between an event and a systematic account of it cannot be avoided, but the author is convinced that reflection about possible futures of higher education will eventually lead to more timely research and reporting of the research results.

Over the years, the author has made three major efforts to consider the possible futures of higher education and the tasks of higher education research. As there was a timespan of about a decade between these activities, a short account also might illustrate a change of approaches and themes.

The first activity of that kind was called "The Changing Nature of Higher Education in Western Europe." It was an external expert presentation at the first meeting between representatives of the first post-Apartheid government and their experts with the leaders of the South African universities in 1994 held in order to discuss "The Future Role of Universities." The following themes were addressed by the author:

- The philosophies of higher education,
- Patterns of the higher education system, and
- Access and admission to higher education.

U. Teichler (✉)
International Centre for Higher Education Research (INCHER), University of Kassel, Moenchebergstrasse 17, 34109 Kassel, Germany
e-mail: teichler@incher.uni-kassel.de

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It was pointed out that a bewildering variety of higher education systems in Europe hardly allowed a country willing to undertake major reforms to note a clear line of converging trends in advanced countries. Rather, higher education policies have to take into account three perspectives and find an appropriate solution: (a) to choose a functional perspective and ask whether some developments are most timely, modern, and successful, and can be viewed as a model worldwide; (b) to accept an idiosyncratic view, according to which specific philosophies and contexts of higher education in a given country might be indispensible and a strength in its own right; (c) to take a political view according to which one does not want to be programmed by tradition or fashion, but, rather, does want to shape higher education deliberately according to a specific vision of what is desirable. The starting place is the choosing of a specific balance between these perspectives (Teichler 1996a).

The second presentation was named "The Future of Higher Education and the Future of Higher Education Research," which was a keynote speech at the 24th Annual Forum of the European Association for Institutional Research (EAIR) held in Prague (Czech Republic) in June 2002. The European association, which had chosen the US term "institutional research," even though policy-related research of that kind within institutions of higher education had not developed in Europe, was an appropriate arena for the discussion of futures of realities and the future of research.

The major themes addressed in the 2002 presentation played a substantial role in subsequent years:

- Expansion of higher education and its possible consequences,
- Diversification,
- System steering and institutional management, and
- Professionalization in higher education.

The author argued that future-conscious higher education research is needed in order to anticipate future problems and themes of debates, and start generating knowledge relatively early. In this way, one would address themes already being publicly debated, but would also seek to identify issues not frequently discussed but likely to be major issues in the future (Teichler 2003).

Finally, two presentations were made in 2010 and 2011: as a keynote speaker at a conference of the Consortium of Higher Education Researcher (CHERIF) in cooperation with the association of academics at Finnish Universities of Applied Sciences (KEVER) held in Helsinki (Finland) and at the 2011 forum of the Southern African Association for Institutional Research (SAAIR) in Cape Town (South Africa). In these presentations, the need for higher education research to reflect on the future of research planning was expressed (Teichler 2011, 2013). The subsequent analysis draws substantially from these recent presentations.

10.2 The Need for Higher Education Research to Identify Problems in Advance

Reflection on the future of higher education is a customary activity of *higher education researchers*—often among themselves and often in interaction with policymakers and practitioners in this area. This might come as a surprise because research is strong in analyzing past and, at most, present, but only speculative when addressing the future. It is worth considering the importance of reflecting on the future before we embark in that area.

Obviously, higher education research often embarks on reflections on the future of higher education. In the dialogue with higher education policy and practice, higher education research, as a rule, plays the following roles: (a) problem identification and explanation, (b) consultancy and advice in decision-making processes, (c) regular monitoring of developments in higher education, and (d) evaluation of the impact of decisions taken and measures implemented by the decision-makers in the higher education system. In playing these roles, *higher education research primarily pays attention to the recent past*.

But higher education research has to reflect on the possible future directions of the discipline and its context prior to the public's awareness of the issues, because research needs some time to identify the problems and their causes. Only if higher education research starts doing this *well in advance of public awareness* will it be prepared for the moment when public debate eventually looms (cf. the overviews on higher education research in Clark and Neave 1992; Teichler 1996b; Teichler and Sadlak 2000; Begg 2003; Meek et al. 2009).

Moreover, higher education research has to be forward-looking, because *higher education shapes the future life and the future activities* of university graduates in general, as well as of those persons who will be teaching and conducting research within higher education in the coming decades. As the graduates will be professionally active for three to four decades and as it takes at least a decade to reform curricula and teach the first generation according to those new curricula, we might argue that higher education research should ideally be in the position of looking ahead about 50 years. But we know that the prediction of the future tends to be targeted at shorter periods and become fuzzier if long periods are addressed. We believe, therefore, that looking ahead even two decades is already quite courageous.

In sum, higher education research has to be forward-looking in order to be socially relevant. The author has pointed out, on various occasions, that research on higher education varies dramatically in its relationship between systematic academic knowledge and practice (Teichler 1996b, 2005). This notwithstanding, not only institutional research and policy research in higher education, which might be directly linked to decision-makers, but also academically based higher education research enjoying academic freedom is expected to be socially relevant: the latter is not established at universities as part of the historically grown academic spectrum (as, for example, philosophy and history), but, as a rule, in relatively new units created for the purpose of bridging theory and practice.

10.3 Examples of Forward-Looking Activities Undertaken by Higher Education Researchers

Addressing potential future developments of higher education is not a recent phenomenon. Many years ago, a higher education researcher formulated a long-term model of the development of higher education that was cited more often in the field than any other concept put forward by higher education researchers. In the late 1960s and early 1970s, Martin Trow, social scientist at the University of California at Berkeley (USA), proposed the model of "elite higher education," "mass higher education," and "universal higher education" (Trow 1974; see Burrage 2010). He argued that the typical features of "elite higher education"—a close link between teaching and research, a strong theoretical emphasis, a consistently high intellectual caliber, and a preparation for top positions in society—are likely to shape higher education as long as it serves at most 15 % of the respective age group. When expansion moves beyond 15 %, "mass higher education" will emerge as a second sector, thereby serving the talents, motives, and career prospects of the additional students in a targeted way, while protecting the functions of elite education. When, eventually, student enrolment surpasses 50 %, a third sector of "universal higher education" will emerge alongside "elite higher education" and "mass higher education." Trow formulated his ideas at a time when only a few countries had surpassed 15 % and most economically advanced countries still had enrolment rates below 15 %. And he remained cautious in delineating the differences between "mass higher education" and "universal higher education," because the latter seemed to belong to such a distant future.

It should be noted that Trow has often been misunderstood. He did not talk about a "mass higher education era" because he did not consider "mass higher education" to be a substitute for "elite higher education," but, rather, to become a second sector with a specific character which also served the preservation of the "elite higher education." He expected an increasing diversity of higher education systems in the process of expansion.

Various higher education researchers from European countries cooperated from 2005 to 2008 in a project called "Higher Education Looking Forward" *(HELF)*. The *European Science Foundation* (*ESF*), an association of major national research promotion agencies and national coordinating agencies of public research institutes in various European countries, had concluded that "forward-look" projects are a promising way to explore the possible futures of technology and society, as well as possible futures of research in the respective areas. In 2005, the ESF invited scholars in the areas of humanities and social sciences, for the second time, to suggest a priority area for a forward-look project. Higher education researchers received grants for a project on higher education. The results of the project were published in the special issue "The future of higher education and the future of higher education research" of the journal Higher Education in September 2008 (Brennan and Teichler 2008; cf. also Brennan et al. 2008). The European higher education researchers raised the following salient future issues:

- What concepts of "knowledge society" will shape the future discussions, and what kind of developments are to be expected in society with respect to the utilization of knowledge as compared to internal knowledge developments in the system of higher education and research?
- How will higher education in the process of expansion change its role in relation to social equity and related notions of citizenship, social justice, social cohesion, and meritocracy? Will there be an increasing divide between winners and losers of higher education expansion, or will efforts succeed in reducing social inequities with the help of education?
- Will higher education move towards more comprehensive functions both by widening the activities beyond knowledge production and dissemination, as the discussions about the "third mission" of higher education suggest, and by including more "stakeholders" into the decision-making processes, or will higher education consider such movements as a "mission overload?"
- How will the steering of the higher education system change as the consequence of future challenges: will governments play an even stronger role than in the past, will there be a coexistence of strong governmental and university strategies, will market forces play a stronger role, will autonomy of institutions of higher education increase, or will another mix of steering occur?
- What will be the future structure of the higher education system? Will national higher education systems in the process of expansion become extremely stratified, as, for example, the discussion about "world-class universities" and rankings suggest, or do we note moves towards a relatively "flat hierarchy" and towards a variety of "profiles" of the individual universities?

In response to the HELF project, the ESF decided to fund, in cooperation with various national research promotion agencies, a programme for the support of higher education under the name "Higher Education and Social Change in Europe" (EuroHESC), whereby research consortia were to be funded in the period 2009–2012 on higher education and knowledge society, governance in higher education, and on the academic profession. So, the future scenarios turned out to be a successful start for research in that area.

The Organisation for Economic Co-operation and Development (OECD), the major intergovernmental organization of economically advanced countries, often starts "think tank" projects in which representatives of governments, scholars, and other experts cooperate in analyzing the current situation and in discussing possible futures. In the project "Higher Education to 2030" (see OECD 2008, 2010), experts analyzed and developed future scenarios about three themes: "demography," "technology," and "globalization," i.e., contextual changes for higher education. In addition, the OECD discussed changes of governance and management in higher education as ways of handling such challenges; in this framework, the OECD (2006) presented "four future scenarios for higher education": (a) "open networking," (b) "serving local communities," (c) "new public management," and (d) "higher education inc." The OECD study, obviously, suggests that the *configuration of*

governance and management has an enormous impact on the structure and function of higher education.

Policymakers and practitioners have been quite active in recent years in reflecting on the future of higher education and in setting targets for future developments. In this context, they encourage "experts," including higher education researchers, to participate in those reflections and in examining the impact of such future-oriented policies. This was visible, for example, in the latter half of the 1990s, when many conferences, special issues of journals or books comprising a collection of essays had titles such as "Higher education in the 21st century." This also played a role—to take another example—in supranational higher education policies in Europe in the late 1990s. The ministers in charge of higher education in most European countries signing the Bologna Declaration in 1999 aimed to establish similar patterns of study program and degrees across Europe, thereby declaring that a "European Higher Education Area" should be realized by 2010. When it became clear in 2009 that some of the aims linked to this structural reform were likely to be largely achieved and the majority of the aims to a lesser extent (see Kehm et al. 2009; CHEPS et al. 2010; Curaj et al. 2012), the ministers set even higher targets for 2020 as regards one of the major objectives, namely, the increase of intra-European mobility. Similarly, in 2000, the governments collaborating in the framework of the European Union called for a substantial increase in the public and private expenditures on research up to 2010—their target date for a "European Research Area" to be realized.

10.4 Towards Interesting and Meaningful Future Scenarios

Futurology is often viewed as boring and too focused on the present situation. This is due to the fact that visions of the future are often overwhelmed by the current scenario and by current trends. Future scenarios often unconsciously assume that we are at the "end of history" and can, at best, expect a trend which is an extrapolation of the past. When we look back to the beginning of industrialization, we note forecasts that an enormous increase of horses would be needed to cope with the growing demand for transportation; actually, other "horse powers" emerged instead, and horses became a small segment in the leisure world in the economically advanced countries. Do we fall in the same trap now in predicting that universities in the future will have larger and larger administrations in order to cope with more and more demanding managerial tasks?

Obviously, we can overcome this predictable approach to the future by considering various possible models of the relationships between past, present, and future. And there is no need to be confined to a limited range of models. In sorting the logic of the multitude of arguments about the future of higher education, we can establish quite a list of varied models of scenarios:

- The "continuity of trends" and "consolidation of recent policies and measures" scenarios: in the future, we are likely to have somewhat more of those phenomena which have recently showed a growth trend;
- The "breakthrough" scenarios: we succeed in counteracting problems in the past by convincing interventions that, eventually, will lead to a bright future;
- The "Great Expectations and Mixed Performance" (Cerych and Sabatier 1986) or "the glass is half empty and half full" scenarios: any efforts at improvements, such as the most recent ones, will have a certain degree of success, but, as a rule, do not achieve their ambitious goals;
- The "past was beautiful" and "back to the past" scenarios: recent changes and reforms have gone in a wrong direction; returning to the past will help to reconsolidate higher education;
- The "changing fashions" or "circular developments" scenarios: certain issues are in the forefront of public discourse for a period; they tend to be forgotten and substituted by old or new themes, after some changes have been made which cannot be viewed as the real cure of the problem;
- The "endemic crisis" scenarios: each higher education reform creates its typical problems; for example, if one tries to strengthen the research quality through indicator-based rewards, one creates both a weakening of teaching and biases of research according to the indicators chosen; therefore, the critical observer can easily predict the next crisis or crises programmed by current measures;
- The "completely new," "innovation," and "surprise" scenarios.

This list might be incomplete, but it might remind us that we have at hand a repertoire of various models which we can employ when reflecting on possible future states.

It makes sense to embark on a discussion of possible future development by *starting off from recent trends and issues* in order to ask what their "fate" will be in the long run. In the first decade of the twenty-first century, the following trends and issues are most frequently discussed:

1. Expansion and growth of higher education,
2. A growing expectation of the visible relevance of higher education ("knowledge society/economy"), possibly comprising a pressure for increased instrumental approaches in teaching and learning (cf. the discussion in Teichler 2009),
3. A growing multi-actor decision-making setting (rather than a "managerial" university),
4. Increasing assessment activities (evaluation, accreditation, indicators, rankings, etc.) and assessment-based decision-making, and, in this context, a growing "output," "outcome," "impact awareness,"
5. A growing "professionalization" of the actors in the higher education system (managers, higher education professionals, and scholars),
6. A trend towards internationalization and, possibly,
7. A growing incorporation of higher education into a system of lifelong learning.

For higher education researchers, it is helpful to *consider future developments in cooperation with actors* of the higher education system as well, because other actors and experts can enrich the scope of future scenarios. As will be discussed below, higher education researchers might put emphasis also on those kinds of future scenarios which the policymakers and practitioners are less likely to mobilize.

It seems to be preferable as well *not to concentrate completely on a single dimension of future development*. For example, one cannot understand issues of the structural diversity of higher education without addressing issues of the knowledge system, curricula, and work tasks. One cannot analyze issues of knowledge and curricula without taking into consideration the views and activities of the academic profession and of the students. Analyses of governance remain isolated phenomena if they are not linked with analyses of the function of higher education (see the lists of key dimensions of higher education in Teichler 1996b; Tight 2003).

In referring to the abovementioned possible scenarios, the author suggests that higher education researchers should initiate *future scenarios with a critical and compensatory thrust*. We know that the policy actors and practitioners in higher education are inclined to consider "trends and consolidation," "half full and half empty," and "back to the past" scenarios. As a counterbalance, higher education researchers should concentrate on endemic tensions as well as on just recently emerging and possibly surprising perspectives.

10.5 Quantitative-Structural Scenarios

10.5.1 Expansion of Student Enrolment

When we discussed trends in higher education in the past, we most frequently referred to a certain phenomenon: the expansion of higher education in terms of student enrolment. Many economically advanced countries experienced a substantial increase in the 1960s and early 1970s; in some countries, however, there was a stagnation of enrolment figures during the 1970s as well during the 1980s. Since about the mid-1980s, however, expansion has been seen again in the majority of economically advanced countries.

In talking about the expansion of higher education, we need some precision in regards to definitions in order to choose appropriate data:

- First, we have to define what we mean by "higher education," and we have to decide whether we want to opt for this or other terms. For example, as already pointed out, Martin Trow kept the term "higher education" when he talked about the stages of elite, mass, and universal higher education. In contrast, the most popular term in the public debate has been, for a long time, "university education," which referred in Europe to institutions equally serving teaching and research. Since about the 1960s, the term "higher education" has dominated

the international discourse; it comprises institutions with study program of a certain theoretical ambition, irrespective of whether the program are closely linked to certain professions or not (this corresponds to ISCED 5A in the terms of UNESCO). Since the 1980s, various international organizations have advocated using the term "tertiary education" (e.g., OECD 1998), whereby other tertiary education program (ISCED 5B) are—according to the UNESCO definition—"generally more practical/technical/occupationally specific" than higher education program.

- Second, we have to decide how to measure expansion. We note mostly the frequent calculations of rates. In comparative analyses, one often notes three rates: (a) entry rates or new entrant students rates of the respective age group, (b) enrolment or participation rates defined as the number of students divided by the population of the typical enrolment age, e.g., 20–24 years, and (c) graduation rates of the respective age groups (see, for example, OECD 2009; UNESCO 2009).

In combining Trow's stages with the preference of international organizations for tertiary education, a look at enrolment rates shows that *mass tertiary education* had already been reached in the European and North American countries around 1960 and *universal tertiary education* in the early 1990s. In Latin America, mass tertiary education was reached in the 1980s and universal tertiary education can be expected around 2015, if the trend continues. In East Asia and the Pacific, mass tertiary education was reached around the year 2000, and universal higher education is expected to occur approximately one decade later than in Latin America. In Africa, these stages are likely to be reached substantially later. Clearly, the stages of expansion vary dramatically in the various regions of the world.

The OECD (1998) predicted in the late 1990s that tertiary education entry rates of about three-quarters will be customary in the twenty-first century in economically advanced countries. Thus, *those not studying in tertiary education eventually will be a residual, obviously disadvantaged minority in society*. Most experts assume that the expansion of higher education will continue in the future. Two key issues are addressed most frequently in discussions about the future expansion of higher education: how will the relationship between higher education and the world of work change? How will the configuration of the higher education system change?

10.5.2 Higher Education and the World of Work

In the 1960s and 1970s, a lively debate about the *relationships between higher education and the world of work* emerged in economically advanced countries in the wake of substantial higher education expansion, which was *contradictory* from the beginning and remained contradictory until now:

- On the one hand, the expansion of higher education is depicted as beneficial: those with the highest level of educational attainment continue to be highly rewarded economically and socially, and there is a clear positive correlation among countries between graduation rates and economic success.
- On the other hand, concern has increased about "mismatch," "overeducation," and "inappropriate employment": that an increasing number of graduates end up in positions in employment that are lower than one would consider suitable for a higher or tertiary education graduate.

Most *economists* in economically advanced countries explaining the relationships between the expansion of higher education and graduate employment believe in the existence of *strong mechanisms supporting a balance* between the demand for a qualified workforce and the supply of graduates. Growing demand for an increasing number of highly qualified persons was seen as a pulling factor for the expansion of higher education. If supply surpasses demand, a decline of income advantage was likely to occur—and as a consequence, a reduction of the willingness to study and, thus, a decline of entry rates. And if "mismatches" on the labor market turn out to be persistent, causes for market imbalances are sought and recommendations made to counteract those imbalances.

Most *sociologists*, however, have argued that *an imbalance on the graduate labor market is endemic in the long run*. I have explained it in the following way (Teichler 2009): the status of a person in a traditional society was handed down by parents and determined by gender, while education was, at most, an attribute for some socially select groups. With the advent of industrialization, a new relationship between learning, competence, and work on the one hand and status distribution developed. Social advancement was promised to those successfully enhancing their competence, and the social inequality was justified as mirroring the varying competencies and the achievements of the individuals. The more open that educational success becomes for almost everyone and the more likely educational achievement is rewarded in society, the more persons will strive for success in higher education, even if the distinctions between education levels and the positions in employment contract. Consequently, the supply of highly educated persons beyond demand results. A stagnation of the quantitative development of higher education would not even have been likely if there was a stagnation of typical graduate jobs.

However, this *supply beyond demand has not caused such serious problems for the graduates* in recent decades, as some warning of a so-called overeducation claimed—at least not in economically advanced countries. Rather, additional graduates mostly found mid-level positions where their competencies were generally useful. A substantial proportion of graduates contributed actively to an "upgrading" of these positions, both in status and in the "enrichment" of the work tasks.

There are no signs that this contradictory situation will disappear in the foreseeable future, nor signs of a move towards a crisis. It would be of interest, however, and obviously an important task of higher education research to observe the

dominant trends of "adaptation" towards such an endemic high supply of graduates. In the past, we have often observed different modes of complex adaptations occurring concurrently, but, certainly, their composition could change in the future:

- "Overcompetition": The shortage of attractive occupational rewards does not discourage studying, but, on the contrary, can reinforce competition for scarce high-level positions. In such a case, the "rat race" for success might have negative consequences on the socialization of learners, on the substance of learning, and the life curves of intensive learning and recovery from exhaustion.
- "Relevance of minute educational differences": The more persons are highly educated, the more marginal differences in the reputation of higher education institutions or in the achievement of students may go in determining occupational differences. This can lead to an increasingly vertical stratification of the higher education system in the view of the persons involved, even though the differences might be small in substance, and to increased imitation behavior on the part of the universities who are not at the top of the hierarchy ("academic drift").
- "Increase of adaptive behavior": Students might become so preoccupied with their desire for professional success that they seek any opportunity to be successful. This may lead to their adapting themselves to the assumed wishes of their employers that any kind of creative, innovative, and critical thinking gets lost. Some experts argue that the frequent use of such words as "employability" indicate a "utilitarian drift" in higher education.
- "Revival of non-meritocratic criteria": The more similar the educational achievements of graduates become in the process of higher education expansion, the more important become those criteria for occupational success—ironically—that are not achieved, e.g., status and power of the parents, behavioral style, biological differences, etc.
- "Collapse of the reward system": The smaller the actual differences in educational achievement become, the smaller the rewards might be at the end of such a process. Finally, differences of income and status might be viewed as so small that the effort for educational success is no longer viewed as worthwhile. This might lead to substantial losses of learner motivation and diminished quality in higher education.
- "Dominance of postindustrial values": The more education expands beyond the immediate demands, the more graduates might be free to harbor "intrinsic motives," as well as motives beyond economic success, e.g., societal change, a better environment, and improved occupation–life balance, etc.
- "Upgrading and job enrichment": The jobs themselves change as a consequence of the high competence of the job holders. They find ways to utilize their skills in jobs previously held by non-graduates, thus, contributing to a flattening of the hierarchy of the job pyramid as far as the substance of work is concerned.

These scenarios make it clear that old notions of "match" and "mismatch" on the labor market are constantly challenged. They also underscore that occupational

motives might change substantially over time. Most importantly, they draw our attention to the less privileged graduates from higher education: what is happening to the "mass" and "universal" graduates?

10.5.3 Diversity of Higher Education Systems and the Popularity of Rankings

In addressing the consequences of these trends and policies for the patterns of the national higher education systems, we come across a lively debate about the *diversity of higher education* (cf. Teichler 2007b). In this framework, most attention is paid to *vertical diversity*, i.e., the extent to which study programmes, disciplines, individual higher education institutions, or types of higher education institutions differ according to "quality," "reputation," and possible impact on the future career status (e.g., income and position) of graduates. As a result, perspectives might vary whether we move towards a flatter or a steeper vertical diversity:

- In looking at the overall educational system and the overall employment system, we might argue that, in the process of expansion, the gap of cognitive competence between the fifth decile and the second decile of an age group is certainly getting smaller, when the former moves from vocational training outside higher education towards a bachelor degree, while the latter moves from a bachelor degree to a master degree.
- In looking solely upon the higher education system, however, we might conclude that the motives, competencies, and job prospects of students become more vertically diverse in the process of higher education expansion.

In any event, *we cannot be surprised to note that smaller differences* than those of the major levels of educational attainment (graduating from higher education or embarking on employment with a secondary education background) *become increasingly more important* as determinants in the process of higher education expansion. For example, grades or "personality" might play a more important role in the job search. This has to be expected irrespective whether vertical diversity in higher education grows, remains stable, or declines. We might argue that one could expect a steeper symbolic vertical diversification of higher education – no matter whether actual quality differences grow, remain constant, or shrink.

In recent years, we observed a dramatic increase of so-called *rankings*, i.e., a growing number of publications comprising vertically sorted lists of universities—overall or according to specific disciplines. What had existed for decades in some East Asian countries and, to some extent, also in the USA, has spread globally in the last two decades, and much attention is now paid to global lists of "world-class universities" (cf. the overviews and critiques in Sadlak and Liu 2007; Marginson and van der Wende 2007; Kehm and Stensaker 2009; Shin et al. 2011).

It should be noted that the quantitative growth of such rankings is certainly not caused only by this tension between the dramatic expansion of higher education and less impressive increase of traditional graduates' jobs. We also note an increasing belief that privileged research resources should be concentrated within a few top universities. Moreover, there is an increasing trust in fierce competition as a source of quality in academia. Finally, the view is spreading that the "wealth of nations" might come to depend on successful competition in the race for top talent in research and elite occupational positions in general.

The producers of such rankings lists—journalists, consultants, and some higher education researchers—often *claim that they just care for transparency* and that this is useful for any "customer," for rational political decision-making in the support of higher education, and as an information basis for healthy competition among higher education institutions and scholars. A closer look, however, reveals that the producers and advocates of ranking are *missionaries of a specific and controversial concept—or we might say: ideology—of higher education*, according to which: (a) *vertical diversity is highly relevant*, while horizontal diversity—varied substantial profiles—is negligible, (b) a *steep vertical diversity* is beneficial for the overall quality of the higher education system, and (c) the *best talent and the highest resources should be clustered in a few universities*, because the quality of scholars, research units, and study program depend primarily on a *homogeneous institutional environment* and the *physical vicinity of highly talented peers*.

A glance at the publications of the rankings' proponents shows that they are—as a rule—typical representatives of the above-characterized *Zeitgeist*: the strong belief that the future of societies depends on the development of top knowledge and that fierce competition is a successful driver of academic quality.

There are good reasons for a *critique of the ideologies spread by the proponents of rankings*. A glance at countries with fierce competition for enhancing or preserving a rank shows that "overcompetition" undermines potential virtues of higher education. High local concentration of talent seems to be a carryover from a much earlier period, but seems to be outmoded in an age of worldwide virtual communication. Homogeneous academic environments are not necessarily the most creative ones. Academia and society need horizontal diversity in higher education nowadays more than ever before.

But what does this mean for higher education research? We could argue that the public dispute about the virtues and dangers of a steep vertical diversification of higher education reinforced by rankings is really an ideological war and that improved evidence with the help of higher education research would hardly have any impact; as a consequence, higher education research should focus its limited resources more strongly on issues of higher education where the actors are more likely to take evidence seriously. Or should higher education research *hope that good research might succeed in "undermining" highly ideological confrontations in the area of higher education?*

10.6 Functional Scenarios

Two "functional" themes—knowledge generation, preservation, and dissemination, as well as the role these activities play within and beyond higher education—are quite popular in debates about the future of higher education. First, there is discussion as to whether knowledge becomes more "utilitarian" and what such changes imply, and, second, what the meaning of the trend towards increasing internationalization of higher education means. The following discussion will be limited to these two themes.

10.6.1 A Continuous "Utilitarian Drift" of Higher Education?

Terms such as "work society," "achievement society," or "leisure society" suggest that a certain feature—in this, case work, achievement, or leisure—has become or is on the way to becoming the most central feature of society. The term "knowledge society" suggests that knowledge becomes highly important or even the major driving force in society. But there is a flip side to this: the more relevant knowledge becomes for society, the more higher education is *expected to demonstrate its relevance for society*, in this case, to produce knowledge which promises to be useful for society.

There are many voices complaining that the basic character of the university is getting lost, namely, the search for previously unknown knowledge and, thus, possibly for knowledge which we, only afterwards, can classify as useful, irrelevant, or even dangerous. We are told in the name of the "knowledge society" that *research* should be so much "finalized" to certain purposes that the "innovation" at the end of the process is more or less predictable from the outset. Research priorities attract money to research where economic growth seems to be the most likely outcome. Many advocates of the knowledge economy are proud that basic research might eventually trigger applied research and even lead to practical innovations such as a doubling of fuel injection in cars, a reduction in credit card cheating, and a more efficient way to identify explosives carried in or on the bodies of air passengers. However, research continues to be viewed as helpless vis-à-vis the big crises of mankind and nature.

Similarly, "employability" has become a catchphrase in Europe and elsewhere when we talk about reforms of study program. The term is misleading in various respects (cf. Teichler 2009). In labor market research and labor policies, "employability" calls for undertaking measures for those who can barely cope with organized work at all. Moreover, this term refers to the means of getting jobs, salaries, vacations, etc.—i.e., not to the relationships between curricula and work tasks. But the frequent use of the term is revealing: many universities draw the conclusion that they should do whatever they can do to maximize the future

employment opportunities of their students. If we listen to the most ardent advocates and the most pronounced critics, we note that they have a common understanding of the term: "employability" means that study programmes have to be subordinated to the presumed needs of the employment system. The author has argued that a term such as "professional relevance" of study would be more appropriate: such a term highlights the necessity of reflecting in curricula, teaching, and learning the likely consequences of study in the graduates' future work and other life spheres, but calls for an open search of solutions rather than hinting at the direction for solutions.

There is a third element of "utilitarian drift" in higher education. The strategies of the universities are expected to be driven by *competition*, and the students and academics are supposed to be increasingly steered by incentives and sanctions. The underlying ideal is that managers, academics, and students should behave like a "homo oeconomicus," an "economic animal," a "status seeker," or, in the language of David Riesman, as an "outer-directed personality." Intrinsic motivations might not completely fade away, but they seem to be viewed as secondary these days.

In contrast to these critics of a loss of a traditional character of the university, *we could consider the prevailing trends as natural*. If systematic knowledge gets increasingly relevant for society and economy, as the terms "knowledge society" and "knowledge economy" suggest, we should expect the emergence of strategies to make systematic knowledge even more useful than just relying on the trend. If a study programme no longer serves only the managerial and professional ranks of the top 10−15 %, professional preparation is more often viewed as primarily serving professional routine rather than a skeptical questioning of the usual rules and tools. And if economic progress is viewed as resting increasingly on useful knowledge, academics resembling "economic animals" will be considered to be the most suitable species.

As a consequence, a "utilitarian drift" in higher education can be viewed as irreversible. The question remains, however, as to whether this is a trend which destroys anything that does not fit into the mainstream. We could imagine that there will be some "Humboldtian-free zones" for research without predetermined ends in the otherwise "finalized" research world. And we could imagine that, in a process of diversification, some universities proudly present their mission to *socialize students for both proper professional functioning according to the usual rules and tools, and to be skeptics and critics*. Some universities might be proud to help their students to become proactive members of society or "change agents."

10.6.2 Internationalization of Higher Education

Higher education is, in many respects, not constrained by borders. The knowledge system in various disciplines is completely or partially universal. Search for new knowledge all over the globe is seen as a "must" in the academic world. The international reputation of academics is usually seen as a good indicator of

academic quality. And many scholars adhere to cosmopolitan values. However, the regulatory systems shaping the governance of higher education, the curricula and degrees, the academic careers, the funding of higher education, and many other features of higher education tend to be national.

The internationalization of higher education seems to be a matter of procedure in some respects, but has remained exceptional in others. International globe-trotting for research-related purposes expanded with the affordability of national and international air flights. An increasing number of publications coauthored by academics from more than one country suggests that international research cooperation is on the increase. Growing numbers of internationally mobile students are often referred to as the most obvious indicator of the internationalization of higher education. But, for several decades, the growth in the number of foreign students has paralleled the overall growth of student numbers, with the rate of foreign students remaining fairly constant at about 2 %. The international professional mobility of academics is by no means rare, but the mobility rates of academics have remained more uneven in economically advanced countries than has international student mobility. Finally, temporary international mobility for teaching purposes remains a marginal phenomenon (cf. the overviews in de Wit 2002; Altbach 2007; Teekens and de Wit 2007; Teichler 2007a; Knight 2008).

A close look reveals that the internationalization of higher education might be held together organizationally by international offices, as well as possibly by international vice presidents and international committees within universities, but it is shaped by two contrasting principles. On the one hand, we note a wide arena of *vertical knowledge transfer*. One seeks newer and qualitatively superior knowledge abroad, or knowledge is exported from the top to the less favorable layers of higher education in other parts of the world. Student "degree mobility," i.e., mobility for a whole study program, from low-income and medium-income countries to advanced countries, as well as "brain drain" of academics, is the most visible phenomena of this principle; adaption to the advanced country is expected in order to maximize knowledge acquisition. On the other hand, there is the arena of *horizontal mobility and cooperation*. Learning from contrast by partners of equal terms is viewed as a source of academic creativity. Schemes of short-term student mobility (e.g., ERASMUS), junior researchers mobility (e.g., Marie Curie), and the cooperation of researchers from different countries of the European Union are the most visible flagships of this principle.

The Bologna Process in Europe is a typical example of this coexistence of activities and of the division of principles: convergent systems of the study programmes and degrees ought to be established in order to increase the attractiveness of higher education in Europe for students from other parts of the world (inward mobility primarily for degree study) and in order to facilitate intra-European student mobility (reciprocal mobility of a semester or a year). In contrast, some Anglo-Saxon countries put prime emphasis on the former principle, i.e., the combination of "knowledge export" and "people import."

"Internationalization" has been a theme in the public discourse in recent years, by and large viewed favorably. Moreover, we note that there are more future

predictions in existence regarding internationalization than regarding other key issues of higher education. A future growth is often predicted, notably of student mobility from middle-income countries to advanced countries.

But there are other factors which might sound a note of caution. The more "virtual mobility" expands and the more curricula take care of "internationalization at home," the less the need might be felt for "physical mobility," which can be viewed as a relatively primitive and costly mode of knowledge transfer. The value of "learning from contrast" might lose its importance, because daily life internationalizes in more or less every respect and because national higher education systems converge as far as the substance of teaching, learning, and research are concerned. Further, the international openness of the academic system might decline the more universities are driven by "knowledge economy" imperatives. Finally, the future of the internationalization of higher education will be strongly influenced by the worldwide political pattern: do we move towards "globalization," a "global village," increasing national competition for international influence or even hegemony, or towards increasing international conflicts?

10.7 Organizational Scenarios

There are two organizational themes that have been on the agenda in recent years and which can be expected to play a role in the future. These are the systems of governance and decision-making, and the systems of assessment of the processes and results of research and teaching. Although there are some others which might play an important role, e.g., the professionalization in higher education and the funding of higher education, the subsequent discussion will focus on these two themes.

10.7.1 Multi-actor Decision-Making

In previous decades, there have been many *attempts to find the best model of governance and decision-making*. Although professors were likely to claim that a university based on academic freedom in the pursuit of knowledge and collegial decision-making would be the best, one could note an erosion of trust as regards to the collegial university. Governmental planning and decision-making experienced a revival in the process of the expansion of higher education, but, soon, a crisis of trust with regards to governmental planning emerged. In the 1960s and 1970s, some economically advanced countries established participatory models of decision-making, which had already existed for some time in Latin American universities, but this model faced a crisis as well and a loss of public trust. This would also adequately summarize the experiences in Europe up to the 1980s.

The American higher education researcher Burton Clark (1983) depicted higher education decision-making differently in the 1980s. According to his "triangle of coordination," the state, the market, and the "academic oligarchy" were the main powers. As an American, he took the power of the university president so much for granted, that he even did not name it as the fourth corner in this context.

In the 1990s, calls were widespread for concurrent simplification and efficiency gains in the management of higher education. No matter whether terms such as "new public management (NPM)" or the "managerial university" are preferred, clearer patterns of responsibilities and a greater power of key actors were longed for.

One does not have to be a prophet, however, to predict that the crisis of trust in the *managerial power* will be equally visible as soon as the prior crises of trust in the preceding decades as regards to the predecessor model. First, more power does not guarantee more creativity about the future of higher education, Second, we have not really moved towards less complex settings of coordination, but, on the contrary, to more complex settings—in the language of Clark, towards a *heptagon or octagon of coordination*, where, additionally, managers, participatory actors, external stakeholders, and boards have come into play. Moreover, various actors try to be players three times: as members of collegial or participatory modes, as citizens through governmental influence, and as "stakeholders" putting their stamp on higher education.

Given the low predictability of quality and innovation in higher education and the growing relevance of systematic knowledge for society, as the terms "knowledge society" and "knowledge economy" suggest, one should not be surprised to find a continuous substitution of one fashion of "optimal steering" of higher education by the next. What will be the next model? What will it promise? And why might it be short-lived again?

10.7.2 Increasing Assessment Activities

When, in the mid-1980s, a national *evaluation system* of study program was introduced in the Netherlands, many experts believed that this could be a convincing model for improvement through reflection. The combination of self-reporting and peer review site visits suggested a thorough but feasible procedure. The emphasis on advice for improvement combined with a relatively soft control function seemed to serve the reflective university. And an "evaluation culture" seemed to be acceptable in such a framework, i.e., a permanent reflection not only of the subject matter on the part of the academics, but also on the potential effects of one's activities. This was certainly a parting from the Humboldtian idea, i.e., the expectation that the academics' concentration on the subject matter itself would yield the best results, but the new type of the reflective academic and of the reflective university was widely viewed as compatible with the traditional missions of the universities.

In the mean time, universities are *flooded with varied assessment activities* (cf. the overview in Cavalli 2007). Already before the first systematic evaluation systems were established, the work of the academics was assessed frequently if they wanted to be professionally mobile, to have research grants, or to publish their research findings in prestigious publication outlets. Evaluation was a step further from occasional assessment, mostly initiated by the persons themselves who ought to be assessed, to periodic (regular timespan), systematic (based on a publicly stated methodology), and comprehensive (covering all persons, program, or institutions) assessment.

In recent years, there has been a *multiplication of systematic evaluations*: research evaluations, institutional evaluations, internationalization evaluations, accreditations, audits, performance assessment of staff as a basis of promotion, and resource allocation, etc. Second, we note the enormous *spread of "Mickey Mouse" assessments*, i.e., indicator-based funding, "university rankings," etc. The latter are not only shocking as far as efforts of measuring the highest academic quality in such a superficial way are concerned, but they are also closely linked to either subversive or outspoken intentions to change the character of higher education, as has been pointed out above, e.g., to create a more steeply vertical diversity of the higher education system and to penalize high-quality academics who are not located at the famous universities.

It is difficult to imagine that these assessment activities will persist in the future, because they *absorb so many resources*. The extremely simple measurement of academic achievement with indicators and rankings has popular appeal in that it seemingly uncovers the usually hidden quality gaps and is so much out of the control of those playing responsible roles in the higher education system that its persistence seems likely; yet, one cannot imagine that such measures survive in the long run as legitimate tools for steering sophisticated knowledge production.

Rather than indicating future scenarios of assessment, we have chosen to formulate a few questions:

- Is the loss of working time devoted to teaching and research as a consequence of the increase of time bound by reporting for accountability, applications, reporting for being evaluated, evaluating others, etc. compensated by the corresponding increase of productivity, or is academic productivity increasingly undermined by an assessment inflation?
- How does higher education cope with the dramatic dichotomy of precision and accuracy in our search for truth within the individual discipline on the one hand and, on the other, the relatively primitive measures of quality assessment in higher education and research?
- Are assessment and incentive measures successful in fostering "quality," or do they promote "overhomogeneous" aims and criteria?
- What safeguards "healthy competition," and what leads to "destructive competition?"
- Will the faking of research results and the faking of statistics and reports on higher education remain acceptable, or will it become so endemic that we have to multiply the measures of control of the research and the independent data collection?

Certainly, the wave of evaluation and indicator construction has caused a major change which might be called *a growing "output," "outcome," or "impact" awareness*. One no longer believes in the truth of "just do it" leading to creativity. Rather, an evaluation culture has emerged. Academics can no longer exclusively concentrate on the substance matter of academic work, but we also reflect concurrently: What do I do? Why do I do it in that way? What is the expected consequence? Could I improve it? One cannot imagine that these features of an evaluation culture will disappear in the future.

10.8 Concluding Observations

Higher education research is a very peculiar kind of research. It examines *the views, the activities, and the work context of highly intelligent and reflective persons*. Many of these persons—scholars, students, as well as administrators and policymakers in this domain—have very elaborate actors' theories. Many are convinced that they know the problems they are exposed to, that they understand the causes of the problems, and that they are in the position to develop and pursue concepts for improvement. Not surprisingly, the high level of intelligence and reflections reinforces their views that they "know"—and, thus, might not need higher education research.

Higher education research is *very successful in calling into question and demystifying the actors' theories in higher education*. Therefore, higher education research is often perceived as a threat by the actors in the higher education system—even if some of them pay lip service to the claim that evidence-based policies and strategies in higher education would be desirable.

Higher education research is expected to be relevant, i.e., to provide analyses that are eventually helpful for improvement. But higher education research—as other fields of behavioral and social research as well—is most successful in calling into question the appropriateness of the theories, while ideas for improvement might be inspired but seldom deducted from analysis. *Higher education researchers who work in the academic sphere* can survive this state of affairs, because they do not necessarily have to draw practical solutions. However, many higher education researchers tend to draw practical solutions which cannot be deducted from their analyses. The analytical work undertaken by *institutional researchers* is more closely linked to decision-making; they might even be tempted to emphasize the immediate practical value of higher education research, thus, "selling" the certainties higher education research delivers and hiding the uncertainties caused by the deconstruction of many actors' theories.

Certainly, it is helpful for the quality of the analytical work of academically based higher education researchers, and even more so for the work of institutional researchers, if they are freed occasionally from the pressure to transform analytical insights immediately into improved solutions. *Future scenarios* are a good domain for this purpose: nobody would expect future scenarios to deliver perfect analyses

and perfect practical answers, but future scenarios can be *stimulating as well improving the conceptual basis of analyses and to increase the fantasy needed in the search for improvements in higher education*. Future scenarios make it easier to accept the fact that in-depth knowledge, as a rule, raises even more questions than it provides responses, and that researchers, who try to flee into the havens of simplistic knowledge in order to have more responses than questions, might be the wrong advisors for efforts towards improvement.

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