

Current and Future Trends in Higher Education

Summary

A study by HoF Wittenberg commissioned by the Austrian
Federal Ministry for Education, Science and Culture



HoF Wittenberg - Institut für Hochschulforschung
an der Martin-Luther-Universität Halle-Wittenberg

Published and Printed by: Federal Ministry for Education, Science and Culture (bm:bwk),
Minoritenplatz 5, A-1014 Wien

Translation: Michaela Ott-Spracklin, Wien

Graphic: Peter Sachartschenko, Wien

Current and Future Trends in Higher Education

Summary

**Future Forms and Systems of Study and the Challenges
for Teaching and University Management**

**A study by HoF Wittenberg commissioned by the Austrian
Federal Ministry for Education, Science and Culture**

Peer Pasternack • Roland Bloch • Claudius Gellert • Michael Hölscher
Reinhard Kreckel • Dirk Lewin • Irene Lischka • Arne Schildberg



**HoF Wittenberg - Institut für Hochschulforschung
an der Martin-Luther-Universität Halle-Wittenberg**



Summary

Medium- and long-term changes in the higher education framework

Historically and functionally, universities have always occupied an antagonistic position vis-à-vis social developments without simply conforming to them. By generating and transmitting knowledge, universities provide an opportunity to transcend the horizons of everyday theoretical problems occurring in the societies around them. By anticipating social change, they fully live up to their roles as players in the ensuing dialogue. The following processes are likely to affect universities in the industrialised countries of Western Europe in the medium and long term:

- Advanced societies are in a process of transformation from industrial to *knowledge societies*, i.e. social realities are being shaped by knowledge-based processes and reflective enlightenment. Society and the economy are concentrating more and more around knowledge. Reflective enlightenment is evolving from the tenet of unchallenged feasibility held by traditional rationalist enlightenment to a questioning of feasibility characteristic of post-modernity, which as yet only knows what lies behind, but not what lies ahead of it. Concurrently, having a knowledge lead is becoming a primary production factor in the international competition of locations. With this repositioning, knowledge generation and research take on added significance. Alongside new fields of knowledge (e.g. nano- and bio-technology) and new social issues (globalisation, environment, employment, demographics, migration, democracy, gender mainstreaming), application-oriented research within existing industrial structures will remain an essential focus. Participation in tertiary education will increase further. New information technologies could open the doors to new knowledge for a wider audience, if the current social stratification of access and usage patterns could be overcome. The non-university sector of education and other providers of lifelong learning in continuous education will equally gain heightened importance.
- The scopes for social action and control modes are changing. As one of its principal effects, *globalisation* will act as a framework and – viewed from today's perspective – a catalyst for European integration. Regulation via markets or surrogate markets will continue to establish itself as a control pattern. More strongly than in the past, other public institutions such as universities will be associated with competitive scenarios. *Europeanization* in the context of globalisation will lead to a more market-gearred control and to growing intercontinental competition, including changes in the international division of labour, which all call for specific national and even regional responses. At the same time, we will be observing phenomena such as isolated national and regional approaches, profiling, and the formation of niches. Countering economic fallacies, one should bear in mind that, both on the national and on the international levels, economic areas will only survive if they learn to master the interplay of at least three elements: (a) innovation, (b) sustaining and further developing social resources, and (c) a prudent use of natural resources.
- Globalisation is not just an economic process, but also implies the global generalisation of mankind-environment problems which harbour substantive potential for crisis and conflict. The resultant challenge consists in organising human co-existence on a global level by cooperation rather than competition. Human activity which used to be limited by local and temporal constraints now has universal and perennial effects. Growing disparities between rich and poor countries, regions that are integrated in or detached from the world markets, between modern and traditional sectors, skilled and unskilled work, needed and redundant labour, the globalisation of ecological hazards in tandem with regional problems such as water shortage, desertification, urban sprawl, declining soil yields, which compound into an ecological crisis scenario, the gap between winners and losers of globalised communication, all of this indicates the ambivalences to which universities eventually must react. Universities which take their calling seriously do not blindly follow the developments around them, but question them critically. The goal of asserting *sustainability* as a principle of action is expected to prevail in the course of this development.



- The industrialised countries of Western and Eastern Europe are seeing a *demographic trend of ageing societies* going hand in hand with declining birth rates. Conversely, societies in developing countries as in South and Southeast Asia, the Middle East and Africa, are young and growing. This might cause mounting pressure of migration in Europe, meeting with a demographically induced demand for immigration there.
- The *democratisation* of modern societies will progress in the countries of the enlarged Europe, developments to the contrary cannot be excluded at the global level, however. In education, democratisation will aim at integrating and promoting higher social participation of groups that are still disadvantaged – strata which are remote from education, elderly, migrant and disabled persons. Gender mainstreaming will have to be enforced as a social policy concern in national and international higher education policies, as the expansion of education of recent decades was borne to a disproportionately high extent by women, whilst the allocation of opportunities based on education lagged behind.
- Growing competition and fast-paced technological advances will give rise to more instable and random *labour markets and employment situations*. On the one hand, the share of high-skilled labour will grow further; on the other, work will become more individualised and flexible and give rise to more fragmented work and training biographies, in synchrony with changing life regimes. People will change jobs more frequently, interspersed by continuous education phases, family leaves, changes of positions, fields and places of work etc.

Major developments in higher education today

The following *global developments* can be identified in the activities by which universities are or should be responding to current societal transformation:

- *Expansion*: The share of highly-qualified persons is increasing. This is a world-wide trend not limited to economically advanced societies. Changing employment structures, increasing expectations of educational participation by the citizenry at large, and the academization of a growing number of professions, promote the expansion of higher education. Participation rates of over 50% for each age cohort in the tertiary sector, which are commonly recorded as the OECD average, are becoming a benchmark for all European countries.
- *Differentiation*: Apart from providing scientific training in a given subject, study programmes must meet differentiated social requirements and convey technical skills which higher education has not offered so far. Concurrently, higher education institutions are to respond to the differentiating demand for higher education by offering course programmes beyond the mainstream.
- *Greater flexibility*: The disappearance of traditional professional patterns and growing individualisation call for a multiplication of study options. Individual combinations of studies should be allowed; students should acquire self-organisation and self-upgrading skills.
- *Quality orientation*: Expansion, differentiation, and greater flexibility presuppose and bring about novel approaches to quality assurance in higher education. The need to generate general social and political acceptance for higher education services, stakeholder expectations, supply-driven control of demand for higher education, the requirements of curricular development, as well as performance assessment of teaching-learning processes result in new forms of quality assurance, quality documentation, and evaluation being implemented.
- *Standardisation*: The above developments are taking place in the context of the current European-wide introduction of modular and tiered study programmes that was prompted by the Bologna process.

Current study reforms are targeted at these global developments, relating specifically to the contents as well as to the organisation of study programmes.



In terms of *contents*, the emphasis lies increasingly on the transmission and acquisition of key competencies, or multi-functional skills. These skills comprise competencies to be acquired in addition to subject-matter know-how and are to enable students to cope with the requirements of different work settings and cultures, as well as with work-related crises. The following areas of higher education are concerned:

- *Employability* is to ensure a stronger link between higher education and practice, since higher education which is purely based on technical contents is no longer considered adequate to meet the needs of professional practice.
- *Internationalisation* strategies are designed to promote international mobility and convey intercultural skills.
- *Lifelong learning* stands for further qualifications which employed persons acquire independently and for which universities offer demand-driven qualification programmes, a process which increasingly blurs the borders to traditional subject studies. The notion of lifelong learning is to enable and widen participation in higher education regardless of age, status, or gender.

Reforms in the *organisation of study programmes* focus on the following aspects:

- The *re-structuring of study programmes* is a dominant trend, though with mixed objectives: tiered study programmes are being introduced to allow for higher participation rates in higher education, but also to dampen educational aspirations. They are designed to reduce the number of study courses offered, but also to multiply the different study options (in particular through modularisation), as well as to make studies more flexible (e.g. part time studies), and to provide a certain extent of “virtualized” teaching, as well as other new form of teaching and learning.
- *Quality assurance* is to guarantee a certain standard of higher education in spite of the multiplication of study programmes offered (accreditation). Higher education processes are assessed (evaluation) and positioned competitively (profiling). Credit systems are to make educational achievements transparent. Operationally, two novel approaches have emerged: one, quality orientation is no longer governed by the minute requirements and surveys imposed by government bureaucracy, but transferred to the universities themselves; two, universities are under an obligation to make their traditionally implied quality assurance explicit and thus transparent.
- *Internationalisation strategies* aim at the compatibility of degrees/certifications, transferability of educational achievements (ECTS), and the internationalisation of the curriculum to ensure international competitiveness of both, institutions and graduates.
- With *lifelong learning* relating to educational processes beyond traditional educational biographies, new systems of recognition and certification are required which include educational achievements attained outside a higher education context, as well as informal learning. In addition to mainstream study programmes, universities are to provide for flexible continuous education.

An analysis of the current developments in higher education reveals the following *problems and challenges*:

- The *link between academic quality and employability* still needs to be defined. It is therefore important to specify what employability, non-academic requirements and meta-technical competencies mean. Employability should not exhaust itself in adding portions of practice to a given course of study. Rather, it implies research-driven teaching, which at the same time heightens individual transferability – either in the form of university-type teaching which thrives on the participation of teachers in the generation of the state of basic research, or as *Fachhochschule*-type teaching as a manifestation of teaching and learning which appropriates the given state of research.



- *Multifunctional skills* (or key skills) are already being conveyed partly by higher education today. The transmission processes need to be made visible, enhanced by novel forms of teaching and learning, and the skills to be acquired need to be determined more specifically.
- The still existent evaluation hierarchy between *research and teaching* must be overcome. Teaching must be given adequate status in the reputational logics of professors, i.e. it must be brought on an equal footing with research.
- Organisationally, universities must *open up to new target groups*. Primarily, this has to do with greater flexibility and differentiation of access to higher education, study programme structures, degrees and certifications. To widen participation in higher education, *non-traditional students* need to be integrated more strongly than in the past, not least by creating better opportunities for reconciling family life with university studies, or employment and higher education.
- *Lifelong learning* is a notion referring to individual *learning pathways* which are the result of new, less uniform life regimes. Amongst others, higher education is to enable such individual learning pathways. To this end, it is necessary to identify ways of recognising informal and non-formal educational achievements.
- In the quest for *quality orientation*, it is essential to determine more specifically the value of study tiers, cycles, and modules, up to individual educational achievements. Quality standards need to be defined, accreditation and evaluation procedures introduced. Avoiding the insipid establishment of a quality bureaucracy will be a crucial challenge in this context. It must be assessed whether quantitative measuring units such as the *student workload* suffice to assess educational achievements, or whether qualitative procedures such as individual portfolios or *transcripts of records* are needed.
- Further-reaching *internationalisation strategies* aim at higher international student mobility, the integration of international study programmes, the transmission of intercultural competencies, and at enabling *internationalisation at home* for mobility-impaired students. In order to strengthen international competitiveness, appealing study programmes paired with better marketing are needed to attract international students. Studying abroad should also become possible for students originating from countries with poorer economic structures.
- It is a widely held belief that selection procedures should differentiate *access to higher education* and must accommodate a bipolar spectrum from inclusion to excellence. At the same time, selection procedures should ensure that applicants and higher education institutions are better matched. Rejected candidates should be offered compensatory options.
- All reforms will have to be implemented against the backdrop of tightening public *resources*. As reforms such as selection procedures, counselling/tutoring, evaluation or grants frequently tend to absorb extra funding, the financing structures need to be reviewed.

Some of the key trends in higher education have conflicting goals. Smart trade-offs will be called for to bring about a constructive rather than a destructive effect. In theory, a positive outcome is possible since these conflicting goals mutually enable one another. Three salient examples of *conflicting targets and implementation* will be singled out in the following:

- *Greater flexibility versus standardisation*: Two logics need to be balanced when it comes to implementing study reforms. One, there is a need for multiple options and more flexible structures; two, the quality and comparability of new options needs to be structurally assured. Rather than promoting innovation, quality assurance measures are partly feared to have a levelling effect.
- *Differentiation versus harmonisation of contents*: If structural reform is geared to shortening the duration of studies, this may (but need not) lead to a standardisation of contents, to regimentation in the sense of a canonized transmission of knowledge, if there is no scope for innovative programmes and individual combinations.



- *Expansion versus selection*: Participation in education may be factually restricted if the expansion of higher education is limited to the baccalaureate stage and if access to the master stage is restrictive, even though the aim is expansion. In the final analysis, a restrictive access policy may breed excellence by quantitative shortage instead of specialised programmes. The relevance of individual stages in education for professional activities will have to be ascertained, as well as acceptance of the new degrees by employers.

Future trends in higher education

Any assessment of future trends is fraught with prognostic uncertainties. There are two ways of ascertaining future trends in higher education: one, the *extrapolation of present trends into the future*, based on an assessment of the dynamics of the developments which can be empirically observed today. Two, there is reason to assume that higher education will accommodate certain, socially immensely relevant *concerns that are desirable as norms*; not every desirable concern, however, will become an issue of higher education for a trend to consolidate.

To illustrate the prognostic uncertainties, the *polarities* within which higher education needs to position itself in the future can be highlighted. Some are traditional, but gain a new significance, others are recent or even nascent:

- The *traditional trade-offs* in higher education are those between theory and practice, research and teaching, between the research and teaching function of higher education institutions, between natural science and the humanities/social sciences, between education and training. These polarities will have to be balanced also in the future.
- *Trade-offs* which are equally *traditional*, but subject to *extensive remodelling*, are those between academic freedom and social responsibility, or between stakeholder claims, tradition and innovation, autonomy and state monitoring, fundamental versus application orientation, offering an educational experience versus generating employability, mass versus elite education, specialisation versus generalisation.
- This harbours or will harbour *further fields of conflict*: academic self-control – government (framework) control – market control, disciplinarity versus interdisciplinarity; regionality versus internationality; research versus transfer orientation, vocational training – higher education – continuous education; differentiation of contents versus harmonisation of study forms; full-time versus part-time studies; delimited phases of education versus in-service learning; presence learning versus distance learning. Institutionally and procedurally, the challenge will lie in moving from “versus” to “and”.

The following challenges are likely to become *characteristic trends* in higher education: shaping the knowledge society, generating employability, integrating the dimension of sustainability, internationality, quality orientation and competitiveness, development and use of new forms of teaching and learning. In concrete terms, this implies:

- *Shaping the knowledge society and generating employability*: In a knowledge society, the principal mission of higher education graduates is that of players who must make consequential decisions in complex and risk-fraught action systems which in turn are embedded in complex and risk-fraught environments, and who should be able to boil down complexity in a way for which technical know-how alone would not suffice. Students of today will in all likelihood be under pressure to decide complex matters and will have to act dependably in such situations. Higher education must prepare students for these demands. Institutionally, high participation rates will continue to be a higher education trend, complemented by the mounting dynamics of lifelong learning. Structurally, horizontal and vertical differentiation must be a vital response.



- *Integrating sustainability*: Societies which are geared to performance and growth need to be oriented towards sustainability in order to safeguard the very bases of their existence. Overwhelmingly, students are trained for professions in which they need to make consequential decisions in complex settings. Therefore, they must become key stakeholders of sustainability. Higher education of tomorrow must, in a manner of speaking, socialise its students “into” sustainability.
- *Living internationality*: Internationality is taught in the context of globalisation, Europeanization and regionalisation. The European dimension of internationalisation is characterised by a move towards a European higher education area for which reforms in the structure of studies will be the decisive project for the immediate future. Materially, internationalisation means developing interculturality. In terms of the educational function of higher education, the target group is a three-fold one: students who wish to spend some time of their studies abroad need preparation and support for their endeavour; students who lack the possibility or inclination to spend time abroad are in need of domestic programmes to learn interculturality; and (prospective) students from abroad who need preparatory and support programmes for the duration of their stay.
- *Acting with a view to quality and competitiveness*: Trends which are making themselves felt already today will be prolonged in a quest for quality and competitiveness. The challenges of tomorrow will consist in preventing a quality bureaucracy from emerging, without foregoing the explicated effects of quality development i.e. higher acceptance and a competitive edge, and in ensuring the specific functional logics of science which is founded on competition for reputation rather than on an evaluation of market rates for the core delivery areas of higher education, i.e. research and teaching.

There is widespread consensus that higher education in the future needs forward-looking teaching and learning approaches and techniques. *New forms of teaching and learning* can be grouped as follows:

- On an elementary, technical level, these are first and foremost *new teaching and learning aids*, such as the use of media (transparencies, posters, flipcharts) to visualise interrelations, and beamers including related software applications, electronic media for large-scale projections and video-conferencing, digital libraries for further learning in “classical” media such as books or magazines without the need for media conversion;
- *Exemplary learning by experience*, i.e. forms of knowledge transmission which consist in effective guidance towards a self-reliant acquisition of knowledge and a rational and critical handling of information using simulation and exercise studies in lectures, project work and project-oriented learning (POL) to replace structured ex-cathedra lecturing;
- *Study programmes which integrate different places of learning*, e.g. dual study programmes which combine company-based training with university studies, or integrated study programmes for students with a professional background which combine three places of learning: the university, professional practice, and self-studies in a private setting;
- *Mobile learning* (“ubiquitous” learning), i.e. exploiting mobile technologies which enable learning at any place, such as CD ROM-enabled learning, and
- *Web-based teaching and learning*.

Web-based learning and project-oriented forms of learning hold the greatest promise:

- *Web-based learning* refers to the fusion of training and the internet. The programmes on offer are extremely heterogeneous, ranging from a web-based provision of teaching material to lectures with online support, such as online meetings, and fully online study courses; the increasing number of *blended-learning* arrangements is a response to the experience meanwhile gathered in higher education didactics. Pure e-learning cannot always convey contents adequately and heavily



disregards the social component of learning. Blended learning is a combination of conventional presence learning with a range of different virtual components of e-learning. Blended learning uses a mix of media and methods, combining the advantages and trying to make up for the disadvantages of the different forms of learning. With regular presence events being maintained, students retain their social contacts to the group. At the same time, the individual may work on virtual course elements at his or her own pace of learning, at any place and time.

- *Problem-oriented learning* (POL), which employs teaching and learning methods for working on issues in small-size groups, is currently used in blended learning arrangements. POL wants to lead students to study specific issues independently in selected steps that are characteristic of a profession. Typical of POL, an exemplary learning process with a specific link to practice that is geared to interaction and self-reliance is triggered in small groups, and prompts different forms of student cooperation. By exemplary learning from experience, students are empowered to cope with tasks during their studies in a problem-oriented and interdisciplinary approach.

What are the consequences for the skill building of teachers, the organisation of higher education, and university management?

Several demands result from the foregoing with regard to the *skill building of teachers*. They relate to the way in which favourable settings are designed, as well as to the teaching qualifications of staff.

In short, the demands on the *design of settings* are as follows:

- Broad and up-to-date *research-generated knowledge* has always been the fundamental requirement for teaching in higher education. A comprehensive technical know-how of teachers is still the grounding for any form of teaching. Consistent with the skills approach, this includes motivation and (methodological and social) skills or abilities of teachers to convey such know-how in a viable manner, to apply it in theory and in practice in an interdisciplinary approach, and to expand it together with learners (students) in research and teaching.
- The various demands which teachers in higher education are increasingly facing will lead to a more *differentiated distribution of their tasks over the research – teaching continuum*. Practically, it seems more sensible and realistic to assign a (fairly heavy) teaching workload to all professors initially, with deductions for other workloads (paperwork, research project management, but also e.g. the number of students to be tutored), instead of the much-debated separation of teaching and research professorships. Equally it would be conceivable to set up a pool of standard teaching workloads for each department or faculty. The dean would then allocate the units the individual would have to accomplish according to a fixed scheme of categories, as a function of the individual's overall workload. On average, professors should not be burdened with a higher workload than today.
- In the future, quality teaching in higher education will be (all but) possible only if *university teachers have their own experience* in using and applying new sets of knowledge to practical requirements in complex social settings. Therefore, university teachers should not only find genuine opportunities for a temporary leave to work on their professional biographies, but require adequate support and recognition.
- Ultimately, teachers will have to *act professionally in teams*, engage in curricular design and (self)evaluation, whilst researching and teaching autonomously.

The demands as to the *teaching qualifications* of staff can be summarised as follows:

- The primary postulate is that of *individual teaching and tutoring motivation*. Post-facto continuing education cannot breed the underlying pedagogical ethics, particularly if an attitude of indifference prevails due to overburdening by understaffing. Nurturing the required level of motivation is a task for academic socialisation. Motivation is key if teaching is to be placed on an equal footing with research in the reputational hierarchy of university teachers.



- University teachers are not only called upon to act as technical experts, but on a *methodological and social level* also as facilitating tutors and moderators. They need professionalism to ensure e.g. a viable methodological design of seminars, project work, exercise studies etc., and last but not least they must be able to employ new forms of teaching and learning competently.
- At the same time, some know-how in the different forms of study (presence studies, distance studies, basic and further studies etc.) will be acquired by *electronic means*. In the future, university teachers will act as technical, subject-matter and didactic coordinators in this context. Conversely, electronic learning can only be successful if university teachers moderate and coach this independent work in a direct dialogue with students.
- Acquiring *gender skills* has been found to be an indispensable requirement for a gender-specific design of teaching, junior staff promotion and human resources development. Gender-specific design relates to the design of study programmes offered, curricular structures, forms of teaching and learning, and the integration of women's and gender research in teaching from the angle of the specific outlooks, needs, and life scenarios of young women and men. The aim is to heighten young people's inclination to study, to make better use of the potentials of those eligible to enrol in studies, to reach a more balanced higher education access in terms of subject structures, and to lower the rate of students changing their major subjects, or dropping out altogether. All this could be achieved by diversity management, though it is sometimes argued that conventional diversity management is not actually aimed at gender equality and at harmonising differences, but designed to profitably exploit the diversity of human capital.
- More than in the past, university teachers will have to *coach* students in developing the *skills* which tomorrow's graduates need to design and cope with social change. These skills are already in demand today, but poorly developed by higher education. The process implies applying technical and methodological know-how to solving complex practical problems for which professional/operative and social/interactive competencies are of the essence.
- The changing social framework calls for future graduates who are able to independently identify the changes affecting them, reflect on and take part in shaping this framework in the sense of lifelong learning. Higher education can make a contribution by empowering students to identify, analyse, and respond to, developments both independently and in teams. In this process, *basic higher-education didactical qualifications* are quintessential.
- Apart from joining forces with practice, university teachers will need to promote interdisciplinarity and internationality. This requires appropriate attitudes and self-competencies, as well as broad knowledge across other disciplines, cultures and methods, alongside language skills. *Qualifying teaching staff* (from university teachers to academic staff and tutors) in higher-education didactics courses and independent supplementary continuing education (formal and informal) is indispensable. Higher education didactics centres and networks are a means to achieve this end.

The demands resulting from the foregoing in terms of *organisational development and management of universities* can be summarised as follows:

- *University administration* neither follows a standard model, nor will it develop towards a common international model. Cultural specifics and traditions in the different national contexts stand in the way of such a model. Generally speaking, many institutions enjoy a high degree of autonomy, especially in the Anglo-Saxon university models, which are exemplary in a variety of manners for the process of university reform on the European continent. This is fundamentally important, as many reforms in Europe should no longer be seen as government-initiated or imposed processes. Here as well, the guiding principle of the autonomy of higher education is gaining ground. Seen from this angle, Austria's universities have covered more ground than their German counterparts. Still characteristic of both is a high degree of regulation, which tends to weigh down the autonomy principle.



- University organisation and management in the future calls for a devolution of decision-making powers from government institutions to increasingly *autonomous universities*. Of necessity, universities will have to be more ready to take on responsibility in all matters of research and teaching so as to control all resulting university affairs (i.e. organisation and management) on their own. Greater demands (especially with respect to quality management) must be met by a further *professionalisation* of the functions responsible for the operations of a university (deans of study, heads of administrative departments). Professionalisation in this context has a two-fold meaning: one, full-time commitment, and two, training of function holders that is geared to their specific tasks.
- The organisation of selection and admission procedures places an additional workload on the supporting administrative apparatus, as well as on teachers. The new study programmes, with their modules, in-study examinations, and higher tutoring need, require a *higher degree of administrative organisation*. This affects student and examination management as much as the administration of timetables, lecture halls, and schedules.
- As the study programmes offered are diversifying, *transparency of what is being taught* vis-à-vis students is becoming all-important, in particular if an international clientele is to be attracted. It depends on how well information technology is used in the process of implementation, but also on how students are counselled by the university administration and the departments/institutes.
- *Accreditation and evaluation procedures* will have to be coped with on a growing scale to ensure the quality and appeal of the various new study programmes. Here is where teachers in particular are affected. At any rate, the insipient establishment of a quality bureaucracy and the mastering of accountability requirements by academic staff alone should be avoided. It may become necessary to step up or re-allocate the administrative capacity of universities and/or faculties, an idea which many universities take getting used to, as it has been largely assumed until now that administrative reform as a part of university reform could reduce administrative capacities.
- The structure of the European study system which has been announced on a preliminary basis is to heighten transnational *student mobility*. University management and, ultimately, the academic staff in self-governance, need to cope with a growing number of student candidates from abroad (and with administering their applications and studies) in order to handle the anticipated wave of internationalisation.
- Higher mobility in general will lead to a massive *enlistment of students* from regions with high demographic growth rates (education import), but also to the establishment of university annexes and/or bi-national universities in densely populated areas. Universities offering bilingual programmes will enjoy a competitive edge. All universities, in particular smaller or lesser known institutions, will be facing new and high-input demands as to professional marketing.
- Altogether, the question arises how the wealth of new and exacting administrative tasks in *human resources development* will add weight (also) to *university management*. Greater administrative needs and student demands for a transparent programme of studies and lectures place greater demands on *university management software*.
- In the years ahead, new challenges for teachers and the university management will be added to the existing ones. This may cause a *capacity problem* for universities: if capacities for self-governance within the academic staff are fully exploited, administrative capacity will have to be stepped up or shifted to the deficient areas; alternatively, admission rates will have to be curtailed so that students receive a level of service that is consistent with academic standards given the available funding and staffing. In how far this can be a (realisable) aim remains a matter of debate, given the general trend of expanding education. Another conceivable, yet hardly realistic scenario would consist in raising tuition fees to a cost-covering level.

Strategic areas which call for priority action can be determined against this background. Geared to target groups, these fields of action should be formulated as the core goals of university development and then broken down by sub-goals.



