

Prof. Erich HOEDL

Vice-President, European Academy of Sciences and Arts

*Educating Youth for the European Knowledge Society**

Discussing the future of National Academies with reference to youth concerns not only Academies, but also the national educational systems, especially higher education institutions. As most of the young researchers were educated in Universities and the large majority of Academy members are affiliated to them, there have been always strong links between Academies and Universities. By further developing the European Research Area all knowledge producing institutions will move closer to society and cooperation by networks between them will be intensified. Although more openness of Academies and Universities will be to the benefit of society, both institutions have to take care of their basic missions. National Academies as the outstanding scientific organisations might have an increased responsibility to influence the European Research Area by its important political advices and by responding to necessary adaptation of their own activities. In this context, I will raise the questions of a growing orientation of education toward economic targets, the need of inter-and trans-disciplinary research, the importance of attractive researcher carriers and finally on the contribution of youth to intergenerational equality in aging societies.

(1) Further development of the European Knowledge Area aims both at higher professional qualifications for employability and at strengthening scientifically based European values for all citizens. Whereas higher professional qualifications derived from European Qualification Standards are mainly the target of the public – and growingly private – educational systems, less attention is given to citizenship and European values, especially for youth. Irrespective,

* The paper is printed as submitted.

if National Academies are primarily „learned societies” or research organisations, they might pay more attention to cope with an overboarding orientation toward employability. Although Humboldtian University needs considerable modifications, its kernel to combine research and education and by this develop individual personalities is a major European invention and globally well received. Within the long tradition of the Academies as „think tanks” for objective political advice, some clarifications about the general orientation of the future educational chain starting from primary education up to Universities would be to the benefit the actual and coming new generation. The future European research and education should not be dominated by economic targets, but needs a strong orientation toward societal goals.

(2) Youth is actually prone to many divergent influences from different interest groups and is partly lacking perspectives on the future of the society. This concerns especially democratic values and a rational understanding of market economies, including social, ecological and ethical questions. Growing complexity of the technological society cannot be grasped by disciplinary research, but by interdisciplinary and problem-oriented approaches under the participation of different stakeholders. Educational systems does actually not respond sufficiently to this overlapping questions, because of fragmentation into increasingly specialised study courses with narrow methodologies and without references to some broader vision of the future. Therefore curricula at all levels of education should be enriched by systemic and holistic dimensions of the disciplines and generally there is a lack of a rough outline for youth which role they may take over within a further integrated Europe. As National Academies bring together eminent scientists from all disciplines, they might in cooperation with Universities discuss possibilities to reintegrate disciplinary knowledge. Furthermore, they might enhance their concerned activities and demonstrate how interdisciplinary research is organised efficiently and by this contribute to the dissemination of good practices.

(3) Europe lacks vis-à-vis its global competitors an enormous amount of graduates, especially in natural- and engineering sciences. Preventing further brain drain within the European Union and beyond and integrate Europe into the global brain circulation need competitive opportunities for young researchers and professionals, which motivates to select the demanded disciplines. No doubt, informing youth about the fascination of science by media, science days, children Universities etc. can contribute, but a more sustainable change can bring qualified teaching with well educated teachers in secondary schools,

fellowships, awards and later on attractive carriers for young researchers. National Academies with experienced researchers and adequate research equipment might be poles of attractions for talented young people to choose a researchers carrier within research organisations or in private firms with units for applied research. Young Academies could be an organisational device to bring together excellent talents and to develop a young national researchers community and its European and global integration.

(4) Evidently, the future of countries which have limited natural resources depend on high qualifications and productive societal values of the next generation, or otherwise regarded: the next half century depends mainly on the present youth. Although educational policies have only limited access to youth unemployment more awareness of its mid-term consequences on social behaviour and economic losses is needed. In aging societies public budgetary constraints tend to divert political priorities away from „human capital” formation of the young generation. However, it is well known, that research and educational investments result in more welfare of the whole population than other public and private spendings. In rapidly changing societies, where radically new knowledge – in many cases discovered by younger scientists within innovative centers – research investments will sustainably augment intergenerational equality. National Academies could beyond their primary focus on excellent (frontier-) research, nationally and within their European networks as well as by virtue of its reputation create more awareness of the increasing tensions in aging societies and the possible contribution of youth to level out inequalities between generations by research and education.

