

## IV

(Notices)

## NOTICES FROM EUROPEAN UNION INSTITUTIONS AND BODIES

## COUNCIL

**Conclusions of the Council and of the Representatives of the Governments of the Member States, meeting within the Council, of 26 November 2009 on developing the role of education in a fully-functioning knowledge triangle**

(2009/C 302/03)

The Council and the Representatives of the Governments of the Member States, meeting within the Council,

components of the knowledge triangle must all function properly and interact fully with each other,

## RECALLING

— the core values of the renewed Lisbon strategy, focussing on growth and jobs as the means for achieving a prosperous, fair and environmentally sustainable future for Europe and the key role of the knowledge triangle in that process,

— that the fundamental role of education is to provide for the development of individuals so that they may realise their full potential in today's society, and that, consequently, education institutions at all levels have a very broad range of functions and responsibilities. However, the specific function of education as the basis of the knowledge triangle needs to be further developed.

— the affirmation of the Brussels European Council of 8/9 March 2007 that 'education and training are prerequisites for a well-functioning knowledge triangle (education — research — innovation) and play a key role in boosting growth and jobs' and the call made by the Brussels European Council of 19/20 March 2009 for urgent concrete measures to 'encourage partnership between business, research, education and training' and to 'step up and improve the quality of investment in research, knowledge and education.'

CONSIDER THAT THE FURTHER INTEGRATION OF EDUCATION, RESEARCH AND INNOVATION IN A FULLY-FUNCTIONING KNOWLEDGE TRIANGLE WOULD

Strengthen Europe's innovative capacity and the development of a creative and knowledge-intensive economy and society through:

## AWARE

— that the prolonged downturn continues to have a serious impact on the global economy and that full use should be made of the renewed Lisbon Strategy — with its emphasis on the knowledge triangle — as the basis for an effective and durable recovery across the European Union,

— a much enhanced and constantly evolving knowledge base in universities <sup>(1)</sup> and research centres that could be quickly translated into innovative products, services, approaches and methods in the wider economy and society at large,

— that, if the European Union is to be equipped to meet the long-term challenges of a competitive global economy, climate change and an ageing population, the three

— promoting a creative, innovative and entrepreneurial mindset among pupils, trainees, students, teachers and researchers which would underpin the progressive development of a greater culture of enterprise through education and training together with a more dynamic European labour market and a higher skilled workforce.

<sup>(1)</sup> For the purpose of this text, the term *universities* is used to denote all types of higher education institution.

Contribute to achieving significant progress:

- in meeting the objective of the New Skills for New Jobs initiative to improve the employability of EU citizens in a changing labour market,
- in the modernisation agenda for universities <sup>(1)</sup>.

IDENTIFY THE FOLLOWING SPECIFIC CHALLENGES FOR THE EDUCATION SECTOR

- the need to bridge the cultural gap between education — in the sense of teaching, learning and transmission of socio-cultural values — and research and innovation in the commercial sphere,
- the need for a more innovative and entrepreneurial culture within the university sector,
- the need to improve communication and mobility between the teaching and research world and the world of business and the wider economy and to foster mobility and the exchange of ideas between different academic and research disciplines,
- the need to reform further the governance and financing structures of universities allowing for greater autonomy and accountability so as to facilitate a more diversified revenue stream and more effective collaboration with the business world and to equip universities to participate in the knowledge triangle on a global scale.

CONSIDER THAT THE FOLLOWING GENERAL PRINCIPLES SHOULD UNDERLY POLICIES SEEKING TO ADDRESS THESE SPECIFIC CHALLENGES

- the concept of the knowledge triangle relates to the need for improving the impact of investments in the three forms of activity — education, research and innovation — by systemic and continuous interaction,
- fully integrating the knowledge triangle requires more joined-up policy-making and cooperation between the fields of education, research and innovation at both European and Member State level,
- for education to fulfil its role in the knowledge triangle, research and innovation objectives and outcomes need to feed back into education, with teaching and learning underpinned by a strong research base, and with teaching and learning environments developed and improved through greater incorporation of creative thinking and innovative attitudes and approaches,
- the traditional academic culture in universities needs to be complemented by an awareness that it also has a key role in

delivering a more highly skilled, enterprising and flexible workforce which will form the foundation for economic growth and prosperity, as well as improved quality of life, in the years to come. The training of researchers and lecturers should enable them to better instill a culture of innovation into the organisations for which they work,

- the knowledge triangle must be taken into account when developing lifelong learning strategies at national, regional and institutional level so that universities become more involved in the upgrading of skills relevant for the knowledge economy and admission rules sufficiently recognise the value of prior learning and working experiences,
- new ideas and innovations are born from the coming together of different kinds of knowledge and through the curiosity-driven search for new knowledge. This is why, in addition to science and technology, it is crucial to recognise that quality education and research in social sciences and humanities play an important role in innovation,
- the pluralism among Europe's university and research systems should be considered to be an asset for the development of diverse approaches to a fully-functioning knowledge triangle.

ESTABLISH THE FOLLOWING SEVEN PRIORITIES FOR ACTION:

### 1. **Developing more coherence between policies in the fields of education, research and innovation**

There is a need for more coherent policy-making at European and Member State level fully integrating the three components of the knowledge triangle. Policies within the fields of education, research and innovation should be mutually reinforcing to ensure the development of a fully functional knowledge triangle and to speed up the transition towards a true knowledge-based economy and society. In the framework of existing reporting processes in the open method of coordination, the Commission should report back to the Council on measures taken in the areas of education, research and innovation to support the integration of the knowledge triangle. The report should include identifying obstacles and suggestions for further development.

### 2. **Accelerating pedagogical reform**

Member States should encourage education and training institutions to ensure that curricula, as well as teaching and examination methods at all levels of education, including doctoral level, incorporate and foster creativity, innovation and entrepreneurship. One way of doing this is to develop curricula on an ongoing basis in cooperation with research institutions, industry and other stakeholders, as appropriate.

<sup>(1)</sup> See Council Resolution of 23 November 2007 on modernising universities for Europe's competitiveness in a global knowledge economy (doc. 16096/1/07) and the Commission's Communication 'Delivering on the Modernisation Agenda for Universities: Education, Research, Innovation' of May 2006 (doc. 9166/06).

### 3. Partnership between universities and business and other relevant stakeholders

Member States and the Commission should respond promptly to the invitations for action set out in the Conclusions of the Council and the Representatives of the Governments of the Member States, meeting within the Council, of 12 May 2009 on enhancing partnerships between education and training institutions and social partners, in particular employers, in the context of lifelong learning. In the context of developing closer links between universities and the communities which they serve, particular attention should be given to the development of incentives for staff mobility between the university and business sectors, including staff exchange programmes. University-business cooperation should be enhanced as part of universities education, research and innovation strategies.

### 4. Measures to develop an innovation culture in universities

Member States should encourage universities to accelerate their efforts to develop an 'innovation culture' through, inter alia, more dynamic and interactive learning environments and incentives to staff to engage in projects with an innovation dimension. Funding arrangements and incentive structures at institutional level could be developed to foster a 'cultural change' so that cooperation with industry is recognised as an important factor for career advancement. The crucial role of higher education leaders in supporting the effective development of an 'innovation culture' should be acknowledged.

### 5. Creating incentives for universities to develop transferable knowledge

Member States should examine whether there are adequate incentives for universities to develop knowledge which can be transferred to the wider economy for development into innovative goods and services. Where legal provisions, governance structures or financial provisions prevent institutions from making a profit from such knowledge development and transfer, Member States should seek to adjust the framework within which their institutions operate so that such barriers are removed and universities are given sufficient autonomy. Universities should develop specific strategies for knowledge creation, development and transfer.

### 6. New approaches to quality assessment

In particular for higher education, Member States should work together to develop 'knowledge triangle' criteria for assessing the quality of their institutions, which should focus on how successfully research and innovation have been integrated with teaching and core educational functions and how successful the institutions are in creating learning environments that stimulate creativity and

entrepreneurial approaches to harnessing knowledge and in preparing its students for their future social and economic lives.

### 7. Developing the EIT as a model for the future

The European Institute of Innovation and Technology (EIT), being the first EU-level initiative to focus on coherent interactions between all actors of the knowledge triangle, should be developed as an example of good practice for Member States, higher education and research institutions and the business sector with regard to integrating all three sides of the triangle.

The future Knowledge and Innovation Communities (KICs), the EIT's main operational entities, should have the potential of showing new ways to tackle economic and societal challenges (e.g. sustainable energy and climate change mitigation and adaptation) via holistic and multi-disciplinary approaches, as well as via new models for governance and funding aimed at stimulating innovation of the highest standards. The EIT should disseminate these models, which should inspire the creation of other joint initiatives at various levels and across borders, paying special attention to the need to develop the role of education within the knowledge triangle.

Within the Strategic Framework for European cooperation in education and training, the Commission should ensure that Member States are made aware of the best practices with regard to these seven priorities and that progress can be compared across these areas.

ADDITIONALLY STRESS THE IMPORTANCE OF

- ensuring that the post-2010 Strategy for Growth and Jobs establishes education as the basis of the knowledge triangle, and underlines the necessity for all three sides of the triangle (education-research-innovation) to mutually support and feed into each other. The whole education and training system has a role to play in fostering the key competences necessary for a well functioning triangle,
- ensuring full cooperation and coordination between the strategies for the development of the European Higher Education Area, the European Research Area and initiatives in the innovation area, notably the broad based Innovation Strategy and the future European Innovation Plan,
- the Commission taking full account of the needs of the post-2010 Strategy for Growth and Jobs in the preparation of its proposals for Community programmes in education and other relevant areas for the period covered by the next Financial Framework, and, together with the Member States, also reflecting on how the Structural Funds could be used to support initiatives linked to the full development of education as the basis of the knowledge triangle.