



Supporting the Contribution of Higher Education Institutions to Regional Development

Peer Review Report:

Valencia, Spain

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EXECUTIVE SUMMARY

The Valencia region has a rich history, distinct language, and unique culture. With the movement toward greater regional autonomy in Spain, as in many other parts of the world, the Valencia region has significant potential advantages in the current global environment. With the emergence of the global knowledge economy, the importance of education to the vitality of regions has become critical.

Background: OECD/IMHE review

This review of the Autonomous Community of Valencia, Spain is part of the OECD/IMHE project entitled "Supporting the Contribution of Higher Education Institutions to Regional Development" which embraces 14 regions in 12 countries in 2005/2006. The IMHE thematic review project was launched as a response to a multiplicity of initiatives across OECD countries seeking to mobilise higher education in support of regional development. The aim was to synthesise this experience into a coherent body of policy and practice to guide higher education institutions and regional and national governments. At the same time, the IMHE project was designed to assist with capacity-building in each country/region by providing an opportunity for dialogue between HEIs and regional stakeholders and clarifying roles and responsibilities.

Review process

The Peer Review drew on a self-evaluation process guided by an OECD template. This template asked HEIs to critically evaluate, with their regional partners and in the context of national higher education and

regional policies, how effective they were in contributing to the development of their regions. Key aspects of the self-evaluation related to: the contribution of research to regional innovation; the role of teaching and learning in the development of human capital; the contribution to social, cultural and environmental development and the role of the HEIs in building regional capacity to act in an increasingly competitive global economy.

The Valencian region self-evaluation was overseen by the Conselleria de Empresa, Universidad y Ciencia, the regional authority for business development, higher education and scientific research. Active participation from higher education institutions, government-related agencies and businesses was pursued.

The direct costs of the project were covered by the regional government. The OECD review visit took place from 27 February to 4 March 2006. The Peer Review Team - Mr. Enrique A. Zepeda (Mexico), Mr. Dewayne Matthews (United States), Mr. Martí Parellada (Spain) and Mr. Francisco Marmolejo (OECD) - met with more than 145 people from universities, government agencies, community based organisations and companies.

The Valencia region

The region of Valencia is situated on the Mediterranean coast with a surface area of approximately 23 000 square kilometres, representing 4.6% of the whole country, and more than 4.5 million inhabitants, representing 10.5% of the population of Spain. The region of Valencia is one of 17 autonomous regions which make up the Spanish State. It is divided into the provinces of Castellon, Valencia and Alicante.

Although in recent years the economy of Spain, and as a consequence, the Valencian economy, has continued to grow, there are some signs of a potential reduction in competitiveness. According to the latest available data, the Valencian economy grew by 3% in 2005, a figure that, albeit below the Spanish national average of 3.4%, was well above the European average for the 25 member countries which stood at 1.7% in 2005. Between 2000 and 2005, the GDP of the Valencian economy increased by 3.04% annually. This is slightly less than the GDP growth of the Spanish economy, which stood at 3.15% during the same period. Disposable income per inhabitant in the Autonomous Community of Valencia fell from 97.6% of the Spanish average in 2000 to 94.7% in 2005.

These changes have been accompanied by an increasingly sharp growth in the population. In 2004, the population reached 4.5 million inhabitants, which was 10.5% of the total Spanish population. This was mainly the result of immigration from abroad.

The productive sector is mainly made up of small and medium-sized companies in traditional industrial sectors, with a few knowledge-intensive companies.

Higher education institution's contributions to region building

The Valencian Higher Education System is made up of seven universities, of which five are public and two are private. Four of these universities are located in the city of Valencia, one is in

Castellon, another in Alicante and the other in Elche. Some of them have campuses situated in other towns. They all undertake research activities, but the intensity and quality of the research is different for each department, subject and institution.

There are approximately 146 000 students enrolled in the Valencian university system and of these, 13 000 are in the private sector.

In terms of direct and indirect effects on the Valencian economy, the university system in the region has figures higher than those of the Spanish university system as a whole.

Universities have satisfactory figures for overall research activity. While at national level, higher education institutions account for 33% of total Spanish R&D expenditures, in the case of the Valencian Community R&D expenditures are 47% of the community's total. Nevertheless, this high level of participation of the university in total R&D expenditures further distances Spain, as a whole, from the situation in other more developed countries, which have relatively higher levels of business R&D expenditure.

University R&D efforts have contributed to an increasing list of scientific publications, a growing number of patents, a proliferation of a variety of university-company relationships including spin-offs, offices for technology transfer and science and technology parks. Although such channels of collaboration are still not common, they are acquiring growing importance due to the policy of both universities and the autonomous government to support such activities. However, the new functions that universities are beginning to take on are still far from being perceived as essential by companies.

Taking into account the limitations of data, it appears that there is currently a dual situation in both the Valencian university system and, in general, the Spanish university system. On the one hand, it appears that public policies developed in recent years in the area of funds for research programmes, hiring of scientific staff, the creation and development of science parks and major scientific facilities, and the design of teaching staff careers are producing satisfactory results. On the other hand, there is evidence that the more direct aspects of the contribution of universities to development, such as continuing education and technology transfer, have not progressed enough. It could be said that there has been progress in the generation of knowledge but not in its dissemination. Thus, it seems that what is known as the "European paradox" is also present in the Spanish and Valencian university system.

In addition, local universities conduct a variety of activities aimed at fostering social, cultural and environmental development in the region.

The Spanish perspective

From the mid-nineties onwards, the Spanish economy has had particularly good results in relation to the other countries making up the Economic and Monetary Union (EMU). The Spanish economy has also had a high growth rate in comparison with countries such as Germany, Italy and France.

However, there are important risks to consider. One of them is related to the decrease in competitiveness of the Spanish economy. Possible evidence of a loss in competitiveness can be seen through the notable reduction in productivity growth. Despite limited salary increases, lowered growth rates in productivity have caused an increase in unit labour costs (salaries per unit of product). The decrease in competitiveness can also be seen in the shortage of Spanish exports in high tech markets. Only 9 of the 500 EU companies that invest the most in R&D are Spanish, while based on the relative size of EU countries, this figure should stand at 50. In addition, Spain produces less than a tenth of the patents produced by France or the United Kingdom. The percentage of GDP that Spain spent on research from 2000-2003 was little over a third of that spent by the European Union.

These measures may indicate that Spain is lagging behind in innovation and technology. Spain has greatly benefited from policies that have guaranteed budget stability and salary containment, but it also requires measures that improve its competitiveness, such as an increase in technological innovation, improvement in human capital and a boost in business investment. In order to accelerate progress toward these goals, the Spanish government has developed several strategies in which the participation of higher education institutions becomes critical.

There is no question that the system of higher education as a whole has achieved significant improvements in a relatively short period of time, but at the same time, some problems remain, and new challenges have emerged. As Spain faces the need to play a more effective role in the knowledge-based society, the higher education system must adapt to current and foreseeable new challenges. In other words, the imperative for change provides an invaluable opportunity for the higher education institutions which must be taken advantage of. As a consequence, higher education institutions in the Autonomous Community of Valencia, with the support of the regional government, are in a unique position to engage in a constructive dialogue with the central government and the key ministries involved, as well as with the broader Spanish higher education community, the business sector and other relevant stakeholders, to further review and implement necessary changes on important issues such as funding mechanisms, regulations for quality assurance, institutional governance, levels of flexibility in the offering of academic programmes, contracting of academic staff, and internationalisation of institutions, among others. The Peer Review Team considers it important for the regional government of Valencia, together with its higher education institutions, to take the lead and press ahead with specific proposals for development, and where these are barred by central law or regulation, to bring this clearly to the attention of the central government.

The regional perspective

A successful insertion of the region of Valencia in the knowledge economy and the achievement of integrated regional development make it necessary to establish solid and effective partnerships between key stakeholders, the building of consensus among them in identifying strengths and weaknesses, as well as defining the threats and opportunities faced by the region. Higher education has an essential role to play in this. This implies that the different institutions which exist in the Valencian region must work much more effectively,

both separately and collectively as a system. This can only happen if there is a firm lead and direction from the regional government in establishing a higher education plan and system, and in creating an appropriate regulatory framework, funding mechanisms and rewards systems (institutional and individual) that align with these purposes and needs. On the one hand the Valencian regional government must use its influence to persuade and require universities to adapt in this way. On the other hand, the regional government, together with the universities and other regional stakeholders, must lobby and persuade the central government to make the required legal and regulatory changes that will allow the region and its higher education institutions to address the challenges ahead more effectively.

Higher education in the region must magnify its central role as a key player in fostering a more integral development of the region of Valencia. Otherwise, opportunities for the Valencian region may be missed. This means that higher education institutions both public and private must find ways to work in a more coordinated way to maximise their impact and potential.

The OECD review has stimulated a dialogue in the region of Valencia about the significance of their higher education institutions in the development of their region. This opportunity could be seized to develop a stronger consensus and a working agenda for higher education action in and for the region. The key element for success is the recognition that this is a process not to be left to higher education institutions alone, but a participatory process in which interested stakeholders should be actively engaged. This will lead the region and its main actors to further appreciate the importance of higher education, to better use the talents and capacity of the higher education institutions, to refine the work that related government agencies conduct, to engage the business sector in a more responsive way, and to foster the necessary change in the higher education sector by abandoning some old attitudes and habits, creating the channels and means for working together.

The HEI perspective

It is essential to better connect and engage universities with the various sectors and stakeholders in the region of Valencia, but also to connect them in productive synergy with each other and with the related levels of the educational sector. In other words, higher education institutions in the region can work more effectively and can create strong on-going connections with society by being part of an effective higher education system, rather than just a cluster of institutions.

There appears to be a sense of complacency about things going well. HEIs do not feel compelled to look for collaborative opportunities, but would rather compete. While the HEIs in the region have achievements, potential and human capital, communication between them is very limited. Ignorance, and in some cases misunderstanding, about what each other is doing is evident.

New models for coordination and collaboration among universities, government and industry should be conceived and adopted to improve the conditions for the development of region of Valencia as an innovation region. Key stakeholders such as the business sector and even the universities still require additional explanation and convincing of the

benefits of policies and programmes being implemented by the regional government to position higher education as a central element for regional development and to include the region of Valencia more effectively in the knowledge economy. There is a measure of scepticism among stakeholders on these initiatives.

This new environment will allow institutions - public or private, large or small - to more rapidly, creatively and responsively address the work that must be done immediately in their academic, research and extension functions. This includes, but is not limited to, improving coordination and collaboration between HEIs and between HEIs, the government, the business sector and other relevant institutions; measuring the economic impact of higher education institutions in the region in a systematic manner; designing and implementing strategies to increase interest in and encourage university students to enter the Science and Engineering areas; optimising the use of the space already created in science parks and incubators; reinforcing the strategic services that Offices for the Transfer of Research Results provide and developing new ones; introducing changes in the culture of the higher education institutions aimed at promoting and strengthening activities related to innovation, technology transfer and commercialisation of knowledge and the creation of high-tech companies; making changes in management procedures and performance measures of universities to allow and enhance interaction with industry and government; conducting regular joint and comparative studies of labour market needs and employability of university graduates; making academic programmes more effective; moving towards a more student-centred model of instruction and delivery; and developing new ways for diverse stakeholder groups to participate in lifelong learning.

Conclusion

The Autonomous Community of Valencia is facing major challenges which have profound implications for both higher education and territorial development. If the key stakeholders address regional capacity building as an urgent task, the region and its universities can turn the region of Valencia's features to their advantage. The reflection initiated due to the OECD review may serve as a good basis for a comprehensive process aimed at further improving the interface between higher education and the wider society regionally. It is up to the region and its main stakeholders to move ahead.