Education for Sustainable Development Образование за устойчиво развитие

HEINNOVATE REVIEWS ON PROMOTING INNOVATIVE AND ENTREPRENEURIAL HEIS COUNTRY-LEVEL REVIEW BULGARIA (DECEMBER 2014)*

Organisation for Economic Co-operation and Development

Abstract. Across Europe and the wider OECD area there are growing signs of a transformation of the 'traditional' model of a university, which focuses its efforts on teaching and research, towards an innovative and entrepreneurial higher education institution (HEI), which is designed to empower students and staff to demonstrate enterprise, innovation and creativity in teaching, research and third mission, directs its activities to enhance learning, knowledge production and exchange, in the dedication of creating public value via processes of open engagement (HEInnovate, 2014).

The higher education system in Bulgaria is undergoing a significant change process. Access to higher education has been eased and has raised enrolment rates. At the same time, HEIs are confronted with multiple challenges: growing rates of graduate underand unemployment, attractive study options abroad, and largely underdeveloped links with businesses. These challenges are pressing HEIs to change.

To facilitate this change process, the Ministry of Education and Science of Bulgaria approached the European Commission Directorate General for Education and Culture and the Organisation for Economic Co-operation and Development in January 2014 with a request to undertake an external review of the barriers, challenges and opportunities in the higher education system. This started a one-year collaborative review process which included an in-depth peer-review of five case study universities in March and May 2014, an online survey of leaders and students in the period May to September, and a final workshop - involving all HEIs - to discuss the findings of the case study peer- reviews and the surveys, organised in Sofia in the end of September 2014.

This report summarises the key findings and recommendations resulting from this review process. It also presents international learning models, which provide exemplary illustrations of how to implement effective strategies and actions.

Keywords: entrepreneurial university, higher education system, Organisation for Economic Co-operation and Development

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Chapter 2 LEADERSHIP AND GOVERNANCE8

Introduction

Leadership and governance are two critical and challenging factors in developing an innovative and entrepreneurial HEI. Positive and responsive leadership is what maintains a dynamic and successful organisation, particularly in times of uncertainty, unpredictability and complexity.

Leadership and governance can stimulate innovation of all kinds in an organisation that is held

together by a shared vision and culture, not overloaded with managerial systems, constantly striving for its autonomy via the entrepreneurial management of its various interdependencies with stakeholders. In what follows, leadership refers to the ability of the rector, deans or heads of departments to conduct the institution and fulfil their duty. Governance is the organisational control and distribution of responsibility, power and authority for the purpose of decision making and action taking.

HEIs do not exist in isolation from their strategic networks and the local environment. The surrounding entrepreneurial ecosystem is fundamental to the capacity of HEIs for action and impact. Leadership exists and should be encouraged throughout the ecosystem both within and without the institution's organisational boundaries.¹⁾

Finally, and most importantly, the national framework for higher education plays an important role. It can enable or hinder organisational change in HEIs. Identifying barriers and overcoming barriers in the system is therefore crucial.

Findings

Entrepreneurship and innovation are buzzwords for the young generation ...

For Bulgaria's young generation, entrepreneurship and innovation have become buzzwords. These concepts have entered HE but not at the mission and leadership level. There are some 'outliers', amongst the private and public HEIs, which place innovation and entrepreneurship at the forefront of their strategies, but for the majority of academics, trained prior to 1989, entrepreneurship raises negative connotations.

...but not yet fully backed up by institutional commitment in HEIs

The in-depth review of the five case study HEIs confirmed that much depends upon the capacity of leadership to be proactive and forward looking, to engage the entire academic community into a change process, and, at the same time, to promote within and beyond the institutional borders an understanding that HEIs are not ivory towers, but one of the most fundamental assets a country has to build and nurture a knowledge society.

Whereas entrepreneurship is mentioned in various national strategies and programmes, one has to search for it in the strategic documents of HEIs. Innovation and entrepreneurship are not yet considered as unique selling points and as something that attracts students and strategic partners. Communicating about existing activities to nurture an entrepreneurial spirit and culture seems to be not amongst the unconditionally demonstrated values and aspirations of Bulgarian HEIs. Even in the country's largest university of economics with an institute, a department and several dedicated courses, the word 'entrepreneurship' is absent from official presentations. Also those HEIs which offer entrepreneurship do not publish information about this on their main websites.

For a broad acceptance and buy-in for the innovative and entrepreneurial HEI strategy, from top management down to all key stakeholders, a common understanding of the HEI-specific meaning and relevance of innovation and entrepreneurship will need to be developed. The most difficult barriers to overcome are likely to be intellectual or ideological beliefs of academic staff, which can result from misperceptions and myths about the meanings, values and purposes of entrepreneurship. To overcome these, effective leadership will have to:

- engage different viewpoints;
- provide alternative interpretations that have resonance and meaning for teaching and research, especially across the different contexts of a university; and,
- fit all of this into a shared vision of the future, and a strategy for organisational and individual development.

Absence of a long-term national policy framework that guides and support innovation andentrepreneurship

Key to establishing and sustaining institutional commitment within HEIs is the existence of a long-term national policy framework that guides and supports innovation and entrepreneurship, which is not yet in place. Currently there is mention of research, development and innovation in various documents, but an umbrella strategy is missing. The new Strategy for Higher Education is expected to provide coordination for policies and measures. It will be important to take into consideration the findings and recommendations from this review.

Ample potential in HEIs to foster innovation and entrepreneurship

There is already ample potential to foster innovation and entrepreneurship in HEIs. When asked about the importance of five different aspects of entrepreneurship promotion:— promoting selfemployment and entrepreneurship and a viable career amongst students, developing the necessary competences and skills, supporting business start-ups, commercialising research results and generating revenues from spin-off activities, the surveyed HEIs rated all of these between moderately important and important. The highest marks received revealed entrepreneurship

as a viable career for graduates. Also, the comparison between private and public HEIs reveals little/no differences between mean values.

Entrepreneurship promotion through education activities and start-up support is a core part of the innovative and entrepreneurial strategy of a HEI. To be effective, a high level of commitment is needed – at the university management level as well as down into the faculties and departments. Many universities across the OECD area have established specific posts to take over the responsibility for entrepreneurship promotion. These can be at senior management level, within faculties, departments and other units. Initially this may be a part-time role and over-time moving towards a small team of dedicated individuals, including also externals.

More than half of the surveyed HEIs have assigned tasks related to entrepreneurship promotion to their staff (Figure 1). Most of the positions exist for entrepreneurship education activities, eleven at the level of department and faculties, eight in top-level management and six in the administration. Three HEIs have positions for both entrepreneurship education and start-up support within top-level management.

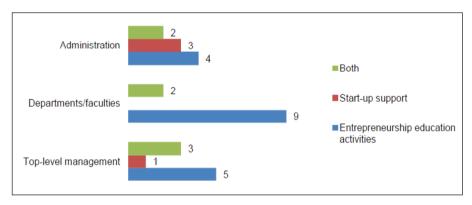


Figure 1. Positions in entrepreneurship promotion²⁾

Too much still depends upon the motivation of individuals

Currently, many promising initiatives are carried out by individuals. More needs to be done to build a common support framework that brings together individual initiatives and facilitates their upscaling. People who initiate activities that exemplify the innovative and entrepreneurial HEI agenda, such as interdisciplinary education activities, which allow students from different faculties/departments to learn, create, experiment, test and apply new technologies, should be publicly recognised and awarded.

The academic autonomy principle enables the rector to: define strategy, guidelines, and objectives for their institution development; make decisions, including decisions for promoting entrepreneurship in all its aspects and dimensions;

include entrepreneurship as one of the criteria in its system for assessing the quality of education, etc. In practice, this autonomy is, however, sometimes used as a shield against public pressure for change.

Involvement of externals in governing boards

A truly innovative and entrepreneurial HEI is perceived as such also by its external stakeholders. Achieving this is the result of a long term iterative process, potentially with many ups and downs. In many countries HEI engagement with society has been promoted through the involvement of external stakeholders in the governing boards of HEIs. Although well intended, such changes have in many cases, not fulfilled the expectations, either because the external members are not fully informed and motivated, consequently losing interest, or because their appointment results from motives (political partisanship, financial interests etc.) that are not related to the best interests of the university. Hence, it requires a clear strategy, proactive leadership, incentives for externals to contribute to HEI core matters, and control mechanisms for effective engagement.

The majority of surveyed HEIs in Bulgaria reported to have multiple external organisations represented on their governing boards. Mostly involved were company representatives and owners and senior managers of large firms, followed by the business representative organisations (e.g., Chambers) and banks. Technology parks, venture capital providers and business angels were represented only on the board of one to two HEIs (Figure 2). Key actors in the emerging start-up ecosystem in the country, such as, for example co-working space initiatives such as betahouse, and venture capital funds, such as LUNCHub and ELEVEN, have only little or no contact HEIs.

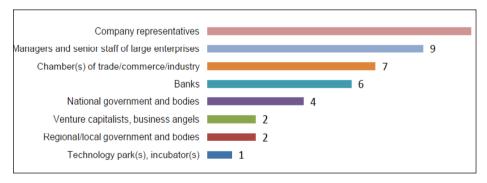


Figure 2. Involvement of externals in HEI governing boards Notes: Questions: ST15; (n=13, one response per line). Source: OECD HEI Leader Survey Bulgaria (2014).

It is important to recognise and reward external stakeholders for bringing in human (skills and knowledge), financial, and social (networks) resources which are not (sufficiently) available inside the university. This could follow a three-stage process, which includes the identification of potential external stakeholders, the evaluation of their contributions against criteria established by the university, and the creation of different kinds of status and awards to recognise and sustain their contribution to the entrepreneurial university. This process is institution-specific, depending upon the overall strategic focus of the university and its financial resources.

All HEIs offer rewards and recognition for external stakeholders that provide significant contributions to university development. Honorary doctorates and professorships and use of facilities either at reduced or free rates were amongst the most offered types of recognition (Figure 3). Many have also established boards of trustees, which are involved in the design of study programmes, provide financial and material resources (laboratories and equipment), and help the HEIs to reach out to strategic partners.

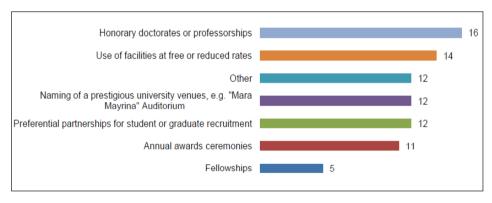


Figure 3. Types of rewards for significant contributions by externals *Notes*: Questions ST16, ST17; (n=20, one response per line). *Source*: OECD HEI Leader Survey Bulgaria (2014).

Further education, lifelong learning and collaboration with industry and business partners to design training programmes according to firm needs can be an effective way to establish strategic partnerships with key local actors. Many of HEIs in Bulgaria have established such centres. The Continuing Education Centre at the University of Ruse is an example (Box 1). It is part of the University's wider approach to steer local development. Part of this has been the establishment of a board of trustees, which includes key local players, and has a say in the definition of the strategic directions in teaching and research.

Box 1. Continuing education at the University of Ruse

The Continuing Education Centre (CEC) at the University of Ruse (RU) emerged from the Faculty of Qualification Improvement, which was established in 1977. Since 2005, CEC has offices in RU's local branches in Silistra and Razgrad. Four staff members and a varying number of ad-hoc included experts offer further education and training courses to enrolled students, PhD students, staff members, alumni of higher and secondary education. There are education activities that promote employability but also professional career development. Several preparatory courses are offered for new students.

Fundamental to CEC's work is the close collaboration with local firms. Often, alumni contacts help to establish these relationships. Tailored training programmes are co-developed and offered for firm employees. Training of vocational education teachers has been one of the key activity areas of the CEC, with international exchange activities with Germany and other countries. Also, various applied research projects have been carried out to improve the quality of courses and the attractiveness of lifelong learning activities. Courses are also offered in foreign languages. To date, the CEC has organised more than 100 long-term courses for specialists. On average 1,000 people participate per year in CEC courses.

Source: University of Ruse

Only few examples of strategic partnerships with institution-wide impacts

In general, society in Bulgaria does not have a high opinion of the societal contributions of HEIs. The review team was confronted with strong views that graduates had only few of the competences and skills needed by the current job market. Nevertheless, many of the engineering graduates find jobs abroad, or in big international IT companies in the country. The very negative opinion of Bulgarian employers about universities also affect the latter's capacity to establish knowledge exchange partnerships (see below). The idea that universities should train people only according to the current needs of the job market is, however, dangerous and should be carefully examined. In the next decades the global economic landscape will change drastically and so will global and local job markets. There is a need to equip students with the capacity to learn and adapt to change or, in some cases, to lead change.

Some of the case study HEIs work on the establishment of strategic mechanisms to steer knowledge partnerships towards more sustainable contributions to graduate employability and employment and competitiveness of the local industry. However, knowledge exchange partnerships with external stakeholders are left up to individual academic staff, with little or no institutional reference framework. Although having a highly centralised way of dealing with external relationships may be stifling, an approach of total decentralisation is not an answer as it prevents the university from developing common policies for fostering interaction. The currently practiced 'decentralised approach' seems to also point towards the absence of common indicators to measure and incentivise innovative and entrepreneurial behaviours in HEIs (see Chapter on Knowledge Exchange).

Autonomy and quality assurance in higher education

The Higher Education Act of 1995 introduced a new structure for higher education. The Act, which has seen several amendments, of which the latest one is currently pending, provides a wide- range of autonomy to HEIs, including the postulation of procedures and activities, selection and appointment of academic

staff, student admission requirements, teaching methods, curricula development, definition of research projects and signing of collaborative research contracts, collaboration with state, local, and foreign organisations, international cooperation and educational franchise agreements with foreign universities.

The national evaluation and accreditation agency (NEAA), established in 1998, monitors quality in higher education through institutional and study programme accreditation. Depending upon the assessment result, accreditation lasts between three and six years. It always includes a follow-up accreditation process. HEIs perceive the accreditation process as too bureaucratic, quasi like a permanent process which increasingly requires resources (time, personnel, and money). The composition of evaluation panels, mostly professors working at other HEIs in the country, is criticised as presenting potential conflicts of interest. There are proposals to include representatives from businesses and industry, and academics from abroad in the evaluation panels. This is also a request by the European Quality Assurance Register for Higher Education (EQAR), of which NEAA has been a full member since 2008.

Currently efforts to tailor study programmes to the needs and arising opportunities in the local economy are burdensome and costly. Adjustments during the accreditation time are difficult to organise, and there is a tendency to apply with study programmes that are similar to programmes already accredited at HEIs elsewhere in the country. There is some collaboration on co-designing curricula, and results seem to be better for private HEIs, but there is no systemic approach to it. The focus seems to be on lifelong learning activities and not on study programmes. Activities to promote entrepreneurship as a key competence are not considered in the accreditation process.

Recommendations

Establish a national-level HEInnovate committee and a HEInnovate Fund.

The **HEInnovate committee** should include senior representatives from the ministries of education and science, economics, and labour and social affairs, the Rectors Conference, and the main economic actors. It is suggested to create an advisory board with key national and international experts in higher education reform, innovation systems, and entrepreneurship promotion in HEIs. The establishment of thematic working groups, involving HEI representatives should be considered to ensure expert knowledge and know-how and a wide involvement of the HEI community. The objective of the national-level HEInnovate committee and the advisory board is to (i) promote the concept of the innovative and entrepreneurial higher education institution, (ii) identify key national challenges and opportunities in the higher education system with regard to the seven dimensions of HEInnovate, and (iii) monitor and evaluate the pilot projects and review their potential for mainstreaming.

The **HEInnovate Fund** should provide co-funding of pilot projects proposed and implemented by HEIs in Bulgaria. The allocation of co-funding will be competitive. Key areas of fundable projects should be defined by the national-level HEInnovate

committee, taking into consideration the findings from the HEInnovate country-level review. The establishment of a HEInnovate network of HEIs in Bulgaria could prepare and facilitate the establishment of a HEInnovate Fund. Further, it should be considered to include HEInnovate in the key performance indicators, applied by NEEA and the University Ranking.

HEIs should review and reformulate their vision statements and missions, and adapt these in light of current challenges and possible responses.

HEIs are recommended to undertake an analysis of the strengths and weaknesses, opportunities and threats, involving the entire university community, including students, alumni, and key external partners. This will also imply, on the one hand, defining and building a common understanding of what entrepreneurship means to the university, and whether this understanding can/should be linked with the socio-economic situation of the surrounding local economy. On the other hand, such an approach will require the allocation of sustainable human and financial resources, provision of adequate support infrastructure (e.g., entrepreneurship centre, incubation facilities, etc.) and/or the establishment of effective links to external business support organisations.

Regular exchange and consultation meetings between academic and administrative staff and senior management can be a good starting point. Examples are get-togethers with informal updates by different groups, formal information meetings, and thematic retreats. The objectives are (i) to create an environment which promotes awareness of what an entrepreneurial organisation entails, (ii) to enhance exchange and collaboration, and (iii) to identify and address barriers, which will lead in the long run, to the emergence of an entrepreneurial culture in the university.

In all this, it will be important to establish ways of how to increase graduate retention in the university's surrounding economy. To this end, and in order to offer more interdisciplinary learning environments, which allow students to practice research with real-life applications, collaboration between HEIs should be sought.

Establish a senior management post in charge of the innovative and entrepreneurial agenda.

To steer and sustain the innovative and entrepreneurial agenda, HEIs should establish the position of a senior management post or Vice-Rector who will be responsible for entrepreneurship, organisational change and interaction with the local community. It is suggested that a "Strategy Council", which includes members from local/regional governments, key business and industry partners, and civil society, is established to advise and support the HEI in building trust, achieving its mission and vision and design a roadmap to become one of the drivers of entrepreneurship and development in the local/regional economy.

The HEI should, to the best of its ability, respond positively to the suggestions of

the Strategy Council. Meetings every trimester should be prepared in the fashion of the corporate world, i.e., based on concrete proposals and information including budgetary implications. It is important to ensure that the entire organisation engages into the process of building an entrepreneurial institution. Interaction with senior representatives of external stakeholders should, however, be the remit of the rector and the vice-rector for entrepreneurship, organisational change and interaction with the local community.

Learning models EXIST (Germany) Approach

EXIST is a support programme of the German Federal Ministry of Economics and Energy which aims at (i) fostering the entrepreneurial environment at universities and research organisations, and (ii) at increasing the number of technology and knowledge based business start-ups. EXIST is co-financed by the European Social Fund.

EXIST started in the late 1990s with a selection of HEIs in Germany. It initially provided funding for research projects that carried spin-off potentials and students and graduates who wanted to start their own business with a technology-based idea. In 2005 EXIST opened up to all German universities and universities of applied sciences. The project management of EXIST is carried out by Projektträger Juelich (PtJ) at the Research Centre Jülich GmbH. All the "work on the ground", such as informing students, supporting applications, training and the provision of physical infrastructure and access to laboratories is provided by the HEIs.

Today, EXIST has three distinct project lines:

- Culture of Entrepreneurship (*Gründungskultur*)
- Business Start-Up Grant (*Gründerstipendium*)
- EXIST Transfer of Research (*Forschungstransfer*)

Culture of Entrepreneurship

The EXIST programme "Culture of Entrepreneurship" supports projects at universities to build up an infrastructure for providing skills and support for technology and knowledge-based innovative ventures. In support of these activities, universities receive an allowance from the German Federal Ministry of Economics and Energy over a three-year period. In the period 1998 to 2012, the government supported a total of 72 projects for a total amount of approximately EUR 104 million. This included co-financing of entrepreneurship centres, regional outreach initiatives, such as HEIbusiness interface structures, curriculum development to anchor entrepreneurship education in technical and science subjects, and coaching and mentoring initiatives for new entrepreneurs (students, graduates and alumni).

In 2010 a new phase started: the entrepreneurial HEI competition. In April 2010, 83 HEIs submitted project proposals and 24 received a short-term funding to prepare

a full proposal for a funding period of three years. In July 2011, ten HEIs were selected by a jury of national and international entrepreneurship experts. The three winners – the Technical University of Berlin, the Carl-von-Ossietzky-Universität Oldenburg and the Munich University of Applied Sciences – received the label "EXIST- Gründerhochschule" (entrepreneurial university). A second round of the competition was completed in 2013.

EXIST Business Start-Up Grant

EXIST Business Start-Up Grant supports the preparation of innovative business start-up projects at universities and research institutions.

The grant aims to help scientists, university graduates and students developing their business ideas into business plans and to advance their ideas for products and services. To cover their living expenses, the entrepreneurs receive a grant between EUR 800 to 2,500 per month, depending on their degree, for a maximum period of 12 months. In addition, they receive materials and equipment (worth EUR 10,000 for solo start-ups and EUR 17,000 for team start-ups, funding for coaching EUR 5,000 and, if applicable, a child benefit of EUR 100 per month. The university or non-university research institution offers infrastructure during the pre-start-up phase and provides technical and start-up related assistance.

EXIST Transfer of Research

EXIST Transfer of Research promotes technology-based business start-up projects in the prestart- up and the start-up stage. EXIST Transfer of Research" complements the broadly targeted EXIST Business Start-Up Grants with an excellence-oriented measure for high-tech start-ups.

The purpose of the first funding phase is to support research teams at universities or research institutes so as to enable them to provide proof for the technological feasibility of their product idea and to prepare the business start-up. The funding includes staff expenses for up to three staff members and EUR 60,000 for materials and equipment. After one year, funding is available for another person with managerial skills to become a member of the start-up team later. The maximum funding period is 18 months in the pre-start-up phase.

During the second funding phase, the newly founded technology oriented companies can be supported with up to EUR 150,000 to continue the product design, for instance up to the prototype realisation and to solicit external funding for their company.

What can be learned from EXIST?

Most relevant for the Bulgarian context is the EXIST project line Culture of Entrepreneurship. It is a very effective approach to stimulate organisational change and to promote the innovative and entrepreneurial HEI, because of the:

- Involvement of all HEIs into a competition and coordination process EXIST organises twice per year thematic workshops and conferences, hosted by different HEIs
- Creation of a network of "doers" and researchers various conferences are organised every year and various informal platforms and communities of practices are offspring results
- Institutional commitment in HEIs which is a core prerequisite to be successful in the competition, and the mid-term evaluation

Knowledge Antennas in southern Catalonia 11 (Spain)

The approach

The Rovira i Virgili University (URV) is a comprehensive, research-intensive and globally linked university, contributing to innovation and sustainable growth in Catalonia's core industries - chemical, energy, tourism and agro-food. URV was founded in 1992 as a public university for southern Catalonia, a region with 800,000 inhabitants, with the aim to unite existing higher education faculties and schools in the Tarragona area under a joint institutional umbrella. Today, URV has 13,500 students across six campuses, and around 2,000 graduates per year from 52 study programmes (2013). Annually, URV spends around 27% of its overall budget of EUR 105 million (2013), on research and development and innovation (RDI) activities. Two-third of this RDI budget comes from Spanish and Catalan competitive funding programmes.

URV is deeply embedded into the regional economy, and is considered a driving force for sustainable regional, social and community development. There is wide and active local interest in establishing close links with URV. The establishment of "knowledge antennas" (KA) in 2007 has been a strategic response to this, building on the prior establishment of five campuses spread throughout southern Catalonia. In response to the requests of the other municipalities in the region, URV started the Extended Campus initiative with a network of 13 KAs (2013).

The KAs have been established in partnership with municipalities and other local stakeholders. These partners offer buildings to host teaching, research and third mission activities. Each KA has a coordinator, appointed jointly by the local host and the URV, whose task is to guide the participatory design process of the annual programmes, in liaison with the URV's vice-rector for external relations, and to oversee their implementation. Several exchange meetings are organised per year to bring together the 13 KAs. The activities of the KAs are tailored to local contexts. The programmes offered can be very diverse in terms of their format and thematic focus.

All KA have become platforms of dialogue and exchange for academia, businesses, industry representatives and civil society. They serve as regular meeting points for members of the university community, students, alumni, researchers, teaching and staff. Two key areas of KAs activities are (i) Accelerating capabilities in businesses:

Through deeper conversations with industry and business representatives, URV is increasing the alignment of their higher education courses, training and further education programs with current regional and future skills needs; (ii) Promoting local-global connections: URV has been successful in attracting international students and researchers to southern Catalonia. By making its international links available to regional businesses and community stakeholders, URV enhances the region's role in creating a leading knowledge and innovation ecosystem.

What can HEIs in Bulgaria learn from this example?

The knowledge antennas have been key facilitators of the emergence of a viable interface between URV and the local communities, especially given the socio-economic differences in the region and the variety of actors and interests. It is a relevant example for the Bulgarian context because of the:

- Effectiveness in building closer links with industry and businesses through skills development efforts (further education and training) and knowledge exchange (research, conferences)
- Introduction of global links for local businesses through the sharing and cocreation of international contacts via URVs research and teaching networks
 - Encouraging of third mission activities amongst the URV community.

Council for Entrepreneurship at the Universidade Nova de Lisboa (Portugal)

The Universidade Nova de Lisboa (NOVA), created in 1972, is a decentralised University, with 5 Faculties, 3 Institutes and one School located in three different municipalities: Lisboa, Oeiras and Almada; it's academic and research units enjoy a great deal of autonomy. NOVA has around 19,000 enrolled students, 1,450 academic staff, 769 non-academic staff and 237 researchers. Nowadays it is one of the best Universities in Portugal recognised for its capacity for entrepreneurship and performance in research.

NOVA aims at developing a true entrepreneurial ecosystem in partnership with region. Towards that objective it established in 2006 a Council for Entrepreneurship³⁾, this is chaired by Mr. Buchannan, since 2013. All the units (Faculties, Institutes and School) of the university have a seat at this Council, so participating in all decisions related with activities of entrepreneurship, ensuring the involvement of the whole university and fostering a true multidisciplinary work. Connection with the university leadership is guaranteed by Vice Rector João Crespo responsible for this area in the rector's team.

NOVA and its Council for Entrepreneurship are an example of how to ensure the existence of shared knowledge on what is going on inside the university in terms of new developments related to entrepreneurship. The fact that there is the participation of different disciplines enables an interdisciplinary approach. A relevant fact is the novelty of having this Council chaired by a personality from outside the university

and having at the same time the Vice Rector in charge of the area establishing the liaison with the leadership of the university.

In support of the entrepreneurial ecosystem within the university, NOVA has an entrepreneurship office headed by Dr Joana Mendonça. A major responsibility of the office is the promotion of an entrepreneurial attitude amongst NOVA community members. Within its remit is the coordination and dissemination of information relative to all the initiatives related to entrepreneurship as well as reporting on those.

The role played by the Council for Entrepreneurship is extremely relevant in supplying the support and follow-up of the initiatives. An annual report is also published and submitted to the university governing board.

Having as Chair of the Council for Entrepreneurship a personality from outside the university, with an important and recognised contribution at national and international level, in support and development of entrepreneurship, has been key in attracting the interest of key players in the entrepreneurship and innovation ecosystem.

What can HEIs in Bulgaria learn from this example?

- The Council for Entrepreneurship is reaching out to all faculties at NOVA.
- Having as Chair of the Council for Entrepreneurship a prominent personality has attracted key players in the entrepreneurship and innovation ecosystem.

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