



The challenges for geography in higher education in European universities

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Abstract

This article reports about a joint EUGEO/EUROGEO/IGU panel discussion at the EUGEO Congress in May 2019 in Galway, Ireland about the challenges for geography in higher education in European universities. Although the situation is different in the various European countries, the geography departments are facing several common challenges, such as limited budgets for teaching, university managers, politicians, employers and the general public that do not know what geography is and a gap between geography in primary and secondary education and in higher education. The article concludes that communication about the discipline of geography is a key factor and gives some examples of successful ways of communicating in order to make geography more visible.

Keywords: Geography in Higher Education in Hungary, France, Ireland, Netherlands, Croatia

1. Introduction

The *Journal of Geography in Higher Education* published in 2007 a special section on “The promises and prospects of geography in higher education”, edited by Lily Kong, with articles on past, present and expected future of the discipline of geography in eight countries across the

world (Kong, 2007). Although some authors are optimistic about the future of geography in higher education, all authors report several challenges for the future. Some of these challenges are external to the discipline of geography and driven by national educational policies and developments in society at large, other challenges re-

sult from developments within universities and within the discipline of geography.

In some countries, national cuts in budgets for education result in increasing student/staff ratio's and non-replacement of retired staff (Gibson, 2007). Priority for funding of research that contributes to the economic prosperity of the country deteriorates the budgets for teaching in geography (Sidaway and Johnston, 2007; Gibson, 2007).

Some authors emphasize the importance of the quality of geography and geography teachers in primary and secondary education for the viability of geography in higher education (Murphy, 2007; Gibson, 2007).

The allocation of budgets by universities and a "culture of managerialism" (Sidaway and Johnston, 2007; Gibson, 2007) are leading into mergers of departments and curricula in which geography is becoming increasingly invisible (see also Frazier and Wikle, 2017 and Garvin, 2019). Although geography is becoming more and more relevant for the understanding of the main global issues such as climate change, environmental degradation, natural hazards, globalization, urbanization, inequality, geopolitical conflicts and international migration, and a "spatial turn" has taken place in many disciplines, this does not automatically result in a growing importance and status of geography and visibility of the discipline. According to John Connell (personal communication cited in Gibson, 2007: 103): "The world has discovered geography, but apparently not geographers".

Geotechnologies are omnipresent and the job market prospects for GIS specialists are excellent, but this does not result in a growing popularity of geography (Tapiador and Martí-Henneberg, 2007). Murphy (2007) notifies the risk of fragmentation and the reduction of geography into a vocational training in geotechnologies (see also Garvin, 2019).

The articles in the JGHE section are mainly dealing with the challenges and prospects of geography in Anglophone, non-European countries. This article summarizes the outcome of a panel discussion during the EUGEO congress in Galway, Ireland, in May 2019, a joint initiative of the Association of Geographical Societies in

Europe EUGEO, the European Associations of Geographers EUROGEO and the International Geographical Union IGU, to discuss the challenges of geography in higher education in European universities. The panelists are (or were) responsible for geography programs or geography departments in a European university. The panel was chaired by Joos Droogleever Fortuijn. The next sections report the main challenges for geography in higher education in Hungary (Zoltán Kovács), France (Antoine Le Blanc), Ireland (Gerry O'Reilly), Netherlands (Leo Paul) and Croatia (Ana Pejdo). The final section summarizes the ways to dealing successfully with the challenges as suggested by the panelists and the audience of the panel session.

2. Prospects of geography in higher education in Hungary

In Hungary one of the greatest challenges for geography in higher education has been the sharp decline of the number of students over the last decade. The shrinkage of the number of students nearly automatically means shrinking budgets and job-cuts, as universities and faculties are financed predominantly on a normative basis. The shrinking number of students is the result of three main factors, that influence the prospects of geography and other disciplines (especially classic natural sciences like physics, chemistry, mathematics) negatively. The reasons are as follows: (1) shrinking size of the age-group 18-25, due to ageing which is a general trend not only in Hungary but also in other post-socialist countries in East Central Europe; (2) the migration of Hungarian grammar school leavers after A-level exam to western universities for study purposes (classic brain-drain) (see Siska-Szilasi et al. 2016), which is a general trend also in other countries of the region, (3) the overall political climate where the value of a classic university diploma is systematically downgraded by politicians, government experts and some part of the media, who emphasize the growing relevance of technical skills (and thus vocational education) from the aspect of the labour market. This is related predominantly to the country's position in the European and global economy, where highly educated people with

sovereign thinking are not very much needed, consequently some part of government budget on higher education is considered unnecessary as the economic policy of the country focuses mainly on attracting subsidiaries of western firms (most notably German car-manufacturers and their suppliers). This fits also to other countries in ECE to a great extent. The massive propaganda for vocational (technical) skills diverts the interest of young people and their parents who have obviously a strong role in the final decision of the study, from university education and classic natural sciences. Non-classic disciplines at faculties of natural sciences like informatics or environmental management are not hit so hard by this trend.

Another challenge for geography in higher education is the legitimization of the discipline. What kind of profession geography can offer? In the present nomenclature “geography” is listed among university disciplines but the profession “geographer” has very little recognition (We must note that geographers have been trained in Hungary only since 1992. Before that geography at the university level was taught as part of teacher’s training). Lawyers, engineers, managers, medical doctors etc. are well-known professions in the country and everybody identify their role and prestige within society immediately. But what can a “geographer” do? In fact, the education of geographers is highly specialized in “geoinformatics”, “urban and regional development”, “tourism planning”, “landscape management” etc. with all sorts of very useful, practical knowledge, but this has not been mediated properly to the public. If parents ask their children: “Why do you want to study geography? This subject is about hills, rivers, towns etc., but what will you do with a geography diploma? What are your job prospects?” Children normally cannot give rigorous answers. We know that parents very often dissuade their children about studying geography, because they consider geography as a less useful discipline regarding future prospects on the labour market.

Thirdly, a great challenge for geography in Hungary is its weak position in primary and secondary education, even compared to other countries of the region. In the last two years of secondary education (which is crucial in the decision making process regarding futures studies)

geography is not compulsory, only optional (Table 1).

Other space related disciplines (most notably history and biology) have much more opportunities and they successfully integrate “geographical” topics, e.g. globalisation, geopolitics, migration (*history*), climate change, environmental hazards (*biology*), in their curriculum. History and biology teaching materials are full of maps and space related explanations and exercises what should otherwise be the competence of geography. Under such circumstances both history and biology take not only topics from geography but also potential university students.

Fourthly, the content of geography education at primary and secondary levels also does not support the viability of geography in higher education. It has changed a lot since the early 1990s and transformed from classic physical geography (e.g. geomorphology) and orthodox economic geography to a science of “human-space interactions”, yet, textbooks and teachers are unable to keep pace with the quickly changing approaches, concepts and methods of academic geography. Many relevant topics (that are otherwise present at university level) are missing in primary and secondary geography education. This has to do with further education of geography teachers and new textbooks, teaching materials.

	11	12	13	14	15	16	17	18
Austria	2	1	2	2	2	1	2	2
Croatia	1,5	2	2	2	2	2	2	2
Czech Rep.	2	2	1	2	2	2		
Hungary	n.sc.	n.sc.	1	2	2	2		
Poland	n.sc.	n.sc.	2	1	1	1	1	
Romania	1	1	1	2	1	1	1	1
Serbia	1	2	2	2	2	2	2	
Slovakia	2	1	1	1	1	2	1	
Slovenia	1	3	2	2	1,5	2	2	2
Ukraine	n.sc.	2	2	1,5	1,5	1,5		

Table 1 Weekly average number of geography classes in the countries of East-Central Europe (school year 2013/2014, n.sc. = general natural sciences). Source: Kocsis (2014).

To sum up the challenges of geography in higher education in Hungary are immense. These challenges are partly independent from the discipline and its representatives, but some of them could be easily tackled with greater coalition. However, coalition among academic geographers is loosened up by centripetal forces within the discipline, separatism, and weakening cohesion (i.e. social geographers want to collaborate with anthropologists, GIS experts with representatives of information science, landscape geographers with ecologists etc.). Under these circumstances geography in higher education in Hungary faces poor prospects in the coming years.

3. Geography in higher education in France

In France, academic learned societies came together in 2018 to better understand the challenges facing current scientific research and education, and to try to make these challenges better known to politicians. These academic institutions and associations have carried out extensive surveys among the French scientific community and even more widely, all disciplines combined. From April to June 2019, a general survey was followed by four surveys touching on more specific issues: financial aspects, general organization of research, employment, relations with society. These surveys focused more specifically on research issues, but many questions dealt with education issues, both directly and indirectly. The context is one of constantly changing legislation, decrease of state financing, and wider debates about the place of science and education in society. The answers, analysed with rigorous methodology, highlight diversified and interconnected issues, among which the lack of money and the issue of scientific and pedagogic independence stand out.

In France, these challenges are complex, multiple and interconnected, at university and high school levels; they are particularly important regarding geography, which suffers from a general lack of recognition and remains an underestimated discipline, compared to its positive impacts on student employability and operational effects. However, the issue of money, which

is both the most highlighted and the most despised, remains perhaps the most crucial. The analysis of the answers to the surveys show that the issue of money is very narrowly linked to that of communication. According to these results, scientific research and education suffer from a lack of general knowledge within the wider public about scientific issues, methods, and impacts. It is clear that researchers, teachers, academics, learned societies, etc., are unable to communicate in a sufficient and efficient way towards the general public; a deficit that has repercussions on political action.

We should therefore think about spending money on communication. This is an expense to which many scientists, teachers, schools, and research institutions seem reluctant; and yet it is crucial, as the examples of the United States or Canada show with some successful stories. Some elements of controlled communication already proved how well this could work: for instance, the general public is now aware and supportive of the challenges of global climate change; the general public accepts the money spent on outer space research. Why do they not accept the money spent on research in the social sciences and humanities, which is incomparably lower?

We need money for trusted science. Research and teaching suffer from a lack of trust on the part of the general public and politicians. There is a general assumption that trust is earned only through concrete, real results: but results need to be publicized: hence, it is also a communication problem. We need money for independent science and education. When money is scarce, we are inclined to respond to project-oriented research and funding, thus leaving aside many other research options. But if we simply go on repeating this without being heard, nothing concrete will come out of it. On the other hand, if we manage to use money for better communication, it is possible to hit politicians twice, both directly and indirectly (via the general public and political repercussions). Therefore, spending money on communication may increase the amount of available money and consequently the degree of independence of scientific research and education.

We really need money for successful science and efficient education. Little money leads to obsolete equipment, insufficient staff, difficult research and education contexts... and poor communication. All of this generates even less trust and less money. It is quite difficult to get out of this spiral of decline.

This is particularly true for geography, since it suffers from a wide gap between its everyday usefulness and its academic and social recognition. True enough, there are various examples of geographers setting up actions towards the general public in order to improve its image. But let's look at the results of such efforts. In France, for instance, the French National Geographical Committee recently launched the Night of Geography and National Geography Olympiads.

The aim of the Geography Olympiads is to raise awareness of geography by showing its interest and variety while allowing a new type of articulation, both scientific and user-friendly, between secondary and higher education. These Olympiads are a tool to enable innovative pedagogical practices and to bring together teams, institutions and academies around original projects. They are also powerful tools for communication around geography, and for creating links between different sectors of education and research.

The Night of Geography aims to renew the link between geographers and the general public. Geography is shown as a participatory science, with an intrinsic link to everyday life. Various events are organized in a collaborative way and highlight the richness and diversity of the discipline; they make geographical research more accessible and more understandable.

The Geography Olympiads have long reached the international level, and so has, more recently, the Night of Geography. However, despite their success, these actions are insufficient and do not reach the political, fund giving, level. Therefore, once again: we need to spend money on professional communication.

4. Perspectives from an academic in Ireland

In a globalizing post-modernist Ireland, often academics and teachers in geography tend to complain about challenges faced in the discipline, and frequently with good reasons as outlined by other European colleagues. This ranges from removal of geography from the curriculum, or subsuming it into generic packages of studies, so losing its unique visibility, to a lack of adequate state funding; or commodification of education and its commercialization where Geography should be reduced to a functionalist skills-set servicing the flexible market. Such a discourse may become counterproductive leading to accusations of being whine-fest educators and so losing credibility in national, EU and international fora (O'Reilly, 2017; Hill and Kumar, 2012).

From a wider perspective, geography education and research can be regarded from at least two perspectives:

- (i) Informal geographical literacy and perceptions acquired in the home, local environment and community, media, and wider scales in socialization and cultural-acquisition processes of children at elementary level, but also at more intricate levels with the increase in age and into the lifelong learning progressions. From behaviourist perspectives, this relates to awareness of physical and social environments - finding a compass for one's way. In getting from one place to another safely so to speak, and also cognizance of one's place in the natural environment, family, community and social networks. This "geographical" perspective has been historically strong in Ireland regarding place and networks e.g. sporting associations such as the Gaelic Athletics Association (GAA) with parish, county and national competitions and international clubs / events especially in the Diaspora lands ranging from Boston to Melbourne, and also more recent immigrant destinations in the EU and Middle East. Of course awareness of the "North" of the island within the UK, and Ireland's island history and proximity to Britain is understood from a

very young age as being “reality” and “normal”.

- (ii) Formal geographical education as prescribed in curricula - primary school through to third level Higher Education Institutions (HEIs). Here, curricula have to balance ethical leadership requirements including sustainable development, SDGs and good citizenship with the economic realities of globalization and employability.

Transitivity between informal and formal geographical education may foster or not, greater interest and empathy with geography, depending on a range of factors and especially curriculum content, empathetic learning, quality of teaching. At whatever level, depending on the educational system, students may opt to drop geography as a formal subject due to lack of interest, or for strategic subject choice reasons regarding future training, higher studies, employability or career options.

At HEI level, society and government have yet to clarify if the student is really someone who is supposed to be immersed in study processes or simply the client buying a product in modern times; often having to hold down paid employment and pay off debts while still at college as often found in the USA, UK and Ireland, and possibly graduating with a “subprime degree” – whereby financial costs of it is greater than it’s worth on the “open employment market” – and the actual ability of the student to repay debts within a reasonable timespan with suitably paid employment (BBC, 2017). This ambiguity regarding citizens – who are supposed to be “anchored” in place and time regarding their rights and duties – is not unique to education but is found in numerous areas including social services and public health, as witnessed in many countries following neoliberal agenda. Like government, electorates also have to decide if they will fund education via their taxes, and to what extent, and how they perceive themselves as clients or not, or engaged citizens in electorates.

Ireland being physically and culturally located between Britain and the USA, promoters of neoliberalism especially since the late 1970s, has grappled with this challenge through a series of economic “boom and busts” including the

recent global recession starting in 2007 leading to collapse of the Irish economy as also in Greece, Portugal, Spain and Italy. Government statistics tell us that Ireland is out of recession, yet the emergency austerity ban on funding for education including geography has not yet been lifted, thus having knock-on effects including class sizes, teacher-student ratios, research and so forth.

Despite this, due to the strong tradition of geographical studies in Ireland, with geography graduates finding employment at home and abroad in all economic sectors, plus the demographic increase, up to now student numbers in geography have remained high at second and third levels in contrast to other disciplines. It is strongly promoted by the Geographical Society of Ireland and Association of Geography Teachers of Ireland (Geographical Society of Ireland, 2019). This is especially due to the educational nexus geography provides between the environment and physical world, human activities and cultures¹. Paradoxically, this very strength has an inherent weakness when it comes to post-graduate studies whereby a HEI Geography School often becomes the “feeder school” for other disciplines, albeit within the remit of interdisciplinary approaches, with Masters and Doctoral students targeting employment career paths in such areas as environmental sciences, urban and rural planning, landscape architecture and engineering, geo-informatics, heritage and tourism industries, international development, humanitarian action and so forth – but not always available or not “recognized” as being from the Geography Department or School. In

¹ For details see: Bachelors in Social Science: Information about Geography Degrees.

View all Bachelor’s Degrees in Geography: <https://www.bachelorsportal.com/disciplines/75/geography.html>.

Subject Inspection of Geography Report 2015 – https://www.education.ie/en/Publications/Inspection-Reports-Publications/Subject-Inspection-Reports-List/report12_62693K.pdf.

Hotcoursesabroad. An IDP company: 13 institutions in Ireland offering physical geography courses.

<https://www.hotcoursesabroad.com/study/training-degrees/ireland/physical-geography-courses/loc/154/cgory/b4-3/sin/ct/programs.html>.

spite of this, there are approximately 25 (geography or geography-related) Masters programs in Ireland offered by HEIs that would not be running, if there wasn't the demand. Interestingly they range from geocomputation to development and the global south, peace and conflict studies, international development, refugee integration, marine and maritime law, applied geospatial analysis and so forth.²

At the root of the geography ecosystem, in the primary education sector; geography is part of the combined subject of Social, Environmental and Scientific Education [SESE]. While SESE includes significant amounts of geographical content, studies in other countries and Ireland suggest that the interests of the teacher concerned affect the focus of the course; pupils may or may not identify particular aspects as geography. Until 2019 in Ireland, when pupils moved from primary to secondary school (approximately 12 years old) geography was an obligatory subject throughout the 3-year Junior Certificate Cycle and associated examination (15 years old) and then optional for the Leaving Certificate Cycle (Baccalaureate). As of 2019, geography has become an optional examination subject for Junior Certificate and undoubtedly this will have knock-on effects on student numbers opting to take it not only at Junior Cert level, but also at Baccalaureate and HEI levels.

In initial ministerial plans for reforms in education at second level, history was also to be included as an optional subject. Due to much lobbying on the part of historians, politicians and public, the Minister reversed the decision and so history remains an obligatory subject. Removal of the student citizen's formal education in geographical awareness, and similar attempts regarding "time" with history, into a post-modernist generic melee curriculum package may yet seriously undermine positive citizenship. Formal educational engagement "rooted" in space, place and time is imperative, or else we run the risk of occasioning negative socio-political consequences and social malaise as has been witnessed in the USA, UK and elsewhere in the EU since 2016.

² For detail see: 25 Masters (Geography) programs in Ireland (<https://www.findamasters.com/masters-degrees/ireland/geography/?50g4y0&PG=2>).

As well as reaching out to students in T&L processes, geographers now have to communicate their work with the public - face to face, or increasing via social media, but in non-academic jargon with which "ordinary people" as well as political and entrepreneurial classes can connect.

5. Geography in higher education in the Netherlands

The panel discussion we had during the EUGEO congress in Galway made clear that the position of geography in Dutch higher education is quite good, compared to the situation in other European countries. Of course challenges remain, but in general we can be optimistic about the future of the discipline in the Netherlands. What are the reasons for this optimism?

For decades the number of enrolled bachelor students is more or less stable, at a level of about 675 each year for human geography and 195 for physical geography/earth sciences. This is remarkable, because the percentage of pupils in secondary education taking geography as their subject for the final exam dropped from 40% in 2007 (when a new curriculum was introduced) to 33% in 2019.

Geography in secondary education combines human and physical geography, but traditionally geography education at universities is split into human geography (in Utrecht, Groningen, Nijmegen and the University of Amsterdam) and physical geography/earth sciences or related studies (in Utrecht and the Free University of Amsterdam). This is a barrier for the collaboration of human and physical geography (Hudson and Hinman, 2017), but on specific topics like climate change, international migration or inequality interdisciplinary research is growing.

There are 27 Masters programs offered by the five aforementioned universities: 23 of them related to Human Geography, Spatial Planning, International Development Studies and Environmental Studies and four dealing with Earth Science or Physical Geography. Almost all

Master's programs are English-taught programs. The percentage of foreign students varies per program; the highest numbers are in Nijmegen with 26 percent at average.

This internationalisation of Master's programs is widely accepted, in contrast with the introduction of English in Bachelor's programs – a lively debate in society, politics and media. Only the Bachelor's program in Groningen is completely English-taught. In the other departments Dutch is still the language of instruction, but several courses are offered in English to enable students exchange (mainly within Europe). The most important reason to stick to the Dutch language is the labour market: most of the graduates find a job in the Netherlands. But also the endangered position of the Dutch national identity in a globalising world is mentioned.

The number of GIS students in the Netherlands is increasing, facilitated by a unique cooperation between four Dutch universities (Utrecht, Delft, Wageningen and the University of Twente).

Despite the high number of bachelor and master students graduating each year the prospects to find a job are quite good. The majority of graduates in human geography or spatial planning work as consultants or researchers in public or private institutions, dealing with all kind of subjects (not always related to geography). They are appreciated as generalists, able to talk and understand the language of specialists. Although in job descriptions the expression "geographer wanted" is rare, geographers are everywhere. This has always been the case.

Only a small percentage of university students is interested to become a geography teacher. Most geography teachers in secondary education took their teacher training at one of the seven universities of applied science in the Netherlands. A huge problem is the increasing lack of teachers because of demographic changes, and the low prestige of the job.

On the other hand: the yearly teachers conference organized by the very active Royal Dutch Geographical Society (KNAG) is attended by over 900 enthusiastic geography

teachers (with a decreasing average age). KNAG organises a yearly GeoWeek, giving about 5000 10-15 years old pupils the opportunity to visit the work place of a geographer, or to do some field research. A big success are the so called Geo Future Schools, dealing with the great challenges of the future. Part of the curriculum is interdisciplinary, with a leading role for geography. If they fit the criteria, schools can apply for this label.

Although the overall picture is positive, there are some concerns, or challenges:

- (i) For human geography and planning it is very difficult to acquire enough funding for research. Writing proposals takes a lot of time, and is often frustrating, with low chances of success (about 15%). This comes at the expense of teaching hours. This is a general problem. Recently the government decided to change this system a bit, with a transfer of some of the "national" research money back to universities. This was accompanied with the intention to increase the budget for "useful and profitable" beta sciences, and a decrease of the funds for alpha and gamma sciences (including human geography and planning). So far the universities decided not to implement this shift. For physical geography/earth sciences access to research money is easier, especially when the proposal is related to climate change.
- (ii) The increasing specialization and internationalisation of geographical research in human geography and planning, with a huge focus on the production of scientific articles, makes it difficult to have an academic career as a "generalist", writing books and academic articles for the general public and the community of geography teachers. Regional specialists are gradually disappearing. A group of alumni criticizes the "academisation" of the teaching program and is afraid that graduates will lose their "generalist" and "applied" skills and ability to deal with societal issues. On the other hand: the protocol for Research Assessments changed a bit, with more attention for research quality and relevance to society. Science communication and outreach were

added to the assessment criteria. For this purpose the KNAG launched a website *Geografie.nl*, co-financed by the geography departments in the Netherlands, visited by about 5.000 unique viewers a month.

- (iii) Student/staff ratios at universities are high (in human geography about 35:1), leading to a high work load. In theory good teaching is as important as good research, but in practice ones research performance is more important to get a permanent job or an academic career.
- (iv) The gap between academic geography and school geography is growing. It is difficult to transfer new scientific knowledge (like on climate change or urban/economic transitions) to geography classes in secondary education. This is a general problem according to the government in all subjects. A new national curriculum will be developed for primary and secondary education, with more attention for new societal issues and modern skills. According to the first ideas relevant topics like globalisation and sustainability will be addressed in several main broad domains, but according to KNAG this would lead to a fragmentation of geography disappearing as a recognisable subject/course. This would be a negative development, losing the "holistic" character of geography. According to critics the focus of the proposed new curriculum is too much on "skills" instead of "knowledge". They find it worrying that the idea exists that geographical topics can also be taught by teachers from other disciplines.

6. Geography in Croatia at higher education institutions

Regardless its enormous potential as a subject dealing with a vast number of both physical and social issues, geography is not always existent and visible as a standalone subject or university course around Europe. Some of the problems facing geography in Croatia at higher education institutions nowadays is how to attract students and how to adapt its University programmes to the needs of society. Geography as a subject on all education levels is one of the rare

ones dealing with practically all everyday situations and challenges and therefore must be included in the national curriculum. In Croatia, two Geography Departments comprehensively changed their programmes during the last decade. Due to numerous changes affecting Croatian educational system but also in accordance with the needs of the contemporary labour market, four new study programmes have been taught in Zadar since 2016/2017. The Department of Geography in Zagreb besides the Undergraduate Research Programme in Geography and Integrated Studies in Geography and History, offers five programmes at the graduate level. In comparison with the Netherlands for example, where university geography education is decidedly split into human and physical geography (Hudson and Hinman, 2017), in Croatia like in North America this is not the case. This is why collaboration between these two branches of geography in Croatia can easily be achieved. Geography in general or some of its branches is also included as one of the obligatory and/or optional subjects at some other higher institutions aside University of Zadar and University of Zagreb (Magaš, 2007) but this is less and less so during the last decade. Because of emigration of recent graduates' attainment rates continue to decline and Croatia's system of admission into higher educational institutions is leading to market issues and inefficiencies (European Commission, 2018).

Some enrolment quotas need to be changed so often there are too many students finishing Programmes with weak labour marker prospects and on the other side, the lack of some professions due to insufficient enrolment quotas. So far, quotas for geography are adjusted to the market needs, with special reference to the decreasing population and therefore school children that would eventually lead to greater number of unemployed geography teachers. In Croatia geography is an obligatory subject in primary and secondary schools. In comparison to other European countries where the number of geography classes is decreasing during the last decades, in Croatia this is not the case. Geography is one of the obligatory subjects thought for four years of obligatory schooling during 263 lessons. Around 85% of all pupils after obligatory primary education continue their secondary edu-

cation, and 30% of them enrol gymnasium programmes where geography is an obligatory subject with 274 lessons. This can be considered as an ideal situation but there is the question of vocational schools where the number of classes is considerably lower and geography is included in the curriculum only for one or two years of schooling with the tendency of completely eliminating it. In addition, there is the issue of number of pupils in regular basic schools at the beginning of the 2017/2018 school year which decreased by 15.5%, compared to the beginning of the 2007/2008 school year. In academic year 2019/2020, for the first time, the number of enrolled geography students decreased.

Another issue we need to address is the position of geography as a scientific discipline. According to the Croatian Regulatory Act (2009) outlining scientific and artistic realms, fields and branches, geography belongs to the interdisciplinary scientific realm as a scientific field consisting of physical, human, regional and applied geography. Numerous other acts and regulations still do not recognize this field as a separate one therefore making application to funds for further scientific research sometimes very difficult. On the other hand, this interdisciplinarity is the reason why geographers can easily be included in numerous other research projects dealing with broad range of topics. This act also influences geographers employment prospects. When looking for employment outside educational system, they still face numerous obstacles and their field of expertise is not recognised even if they are more skilled for the applied job. According to Eurostat, one in sixteen university graduates in the Republic of Croatia is unemployed. Compared to other European Union countries Croatia is ranked third according to the unemployed number of population with a university degree. After completing the single-major graduate university study of applied geography students can do professional, scientific and research work in scientific institutions, institutions for regional planning, cartographic institutions and companies, in local and state administration, publishing companies, etc. Even though they have the necessary competences for the above mentioned jobs, labour market still does not always recognise their abilities. In recent years the trend is changing but the pace is still not adequate.

Another important area geography in higher education institutions needs to confront is the visibility of geography not only as a subject in schools and standalone or integrated university programme, but in society in general. Geography Departments in Zadar and Zagreb together with the Croatian Geographical Societies organize public lectures, workshops, especially for younger students, field trips, congresses and publish scientific journals. All this and much more needs to be done in order to make geography and its importance more perceptible to the wider public. The future of geography at higher institutions very much depends on whether geography study programmes will adapt to present globalisation trends. One of the ways to adapt and preserve geography and make it more visible and attractive for students is to become involved in EU projects in which partner universities share a common vision with regard to a new form of transnational university, which issues common European degrees and common European diplomas. Joint actions, study programmes, initiatives, congresses, events such as Geonight and popularisation of geography can ensure better position of geography within the European education system and raise awareness of geographical knowledge.

7. Discussion

The country reports in this article demonstrate that the situation of geography in higher education is different in the different European countries. Some countries struggle with decreasing numbers of geography students; others have a stable or growing student population. Geographers in some countries have a strong tradition with good employment opportunities, in other countries students are confronted with limited employment prospects. Nevertheless, in line with the situation of geography in higher education in Anglophone countries (see special issue of *Journal of Geography in Higher Education*, edited by Kong, 2007), we can see some common challenges. First, all European countries struggle with limited or decreasing budgets for research and education, resulting in high student/staff ratios and a priority for research instead of teaching in a highly competitive re-

search funding system. Many countries are confronted with an anti-elitist political climate with decreasing trust in scientists and universities and a low priority of investments in higher education.

Second, all countries struggle with the legitimization, recognition and visibility of the discipline of geography. For many university managers, politicians, employers and society at large it is unclear what geography is and what geographers “do” and they are not convinced that society needs more geography and more geographers. Geography is an inherently integrative, flexible and interdisciplinary field. This is the strength of geography and weakness at the same time. Geography is fragmented in specialisations or “disappears” in broad interdisciplinary topics in many countries. In some cases, geography is at risk of developing into a technical, skills centered vocational training instead of an integrative academic discipline.

Third, geographers struggle in many countries with the gap between geography in primary and secondary education and academic geography. Geography is no longer an obligatory subject in primary and secondary education in several countries or is part of a broader interdisciplinary field in which geography is invisible.

The panel discussion at the EUGEO congress resulted in a lively debate with several positive examples and solutions for the challenges. Communication was seen as key factor in tackling the challenges. Geographers should communicate better with university managers in order to prevent budget cuts, closing of geography programs or program mergers in which geography becomes invisible. More important, however, is communication outside universities: with employers, politicians and the general public. Strong national geographical societies are necessary to make geography visible and to convince politicians, employers and the general public that society needs more geographers and that geography should have a firm and stable position in the curricula of primary and secondary education.

In recent years, we have seen the emergence of new and promising initiatives for better communication: geography festivals (for example the Festival International de Géographie in St

Dié, France), nights of geography, days of geography, geography weeks (for example the GeoWeek for secondary school students in the Netherlands), tv programs about geographical topics, GeoFuture schools and a growing number of participants at the International Geography Olympiad. These initiatives are potentially powerful instruments to convince people that geographers are the *experts-par-excellence* in the main world problems, now and in the future, and that geographical knowledge is indispensable to understand and solve these world problems.

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