

TAMÁS KOZMA

(Editor)

# LEARNING REGIONS IN HUNGARY: FROM THEORY TO REALITY

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# **LEARNING REGIONS IN HUNGARY**

Tribun EU

2016

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Editor

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*Károly Teperics*

## **Foreword**

This volume provides a summary of the latest findings of the research into learning regions conducted between 2011-2015 (LeaRn project), presenting the surveys and analyses comprehensively for the first time in Hungarian. LeaRn project was subsidised in the above period by the Hungarian Scientific Research Fund (OTKA) under no. 2011/K-101867.

The research, which has been conducted for almost half a decade, is interdisciplinary and interdepartmental, organised by two departments (the Department of Adult Education and of Pedagogy) of the Institute of Education Studies at the University of Debrecen, while it was backed by the university's Centre for Higher Education Research and Development as well as the Human Sciences Doctoral Programme (postgraduate programme for education and cultural studies) also operating at the university. The research team included, furthermore, colleagues of the Regional Department of the Institute of Geography and the Sociology Department of the Institute of Sociology and Social Policy at the University of Debrecen. Also, the team's work was assisted by the Institute of Education Studies at the University of Pécs and the Education and Society Doctoral Programme operating there. Further participants included the Research and Analysis Centre of the Budapest Institute for Educational Research and Development. The team was registered by the adult education and community learning department of HERA (Hungarian Educational Research Association) as an own activity.

Similarly to other research of this type, the LeaRn project is difficult to classify with regard to any one discipline, as surveys oftentimes walk the line between existing and clarified sciences, subverting and transgressing the limits of those. The list of participants and their departments already show that we have utilised the scientific repositories and research competences of several disciplines (the study of education and teaching, adult education, sociology, social geography, etc.). If we had to classify the LeaRn project in terms of existing disciplines in spite of all the above, we could call it the research of education and learning in the broader field of adult education, mostly in connection to municipal and regional development.

This volume is not a closing report in the traditional sense of the term, but rather a monograph collecting the studies, analyses and surveys conducted within the research toward its goals. The first chapter presents the literature and professional-scientific background of the research, while the second one delineates the key concepts of the LeaRn project (learning region, learning city, learning community). The next four

chapters deal with single ‘pillars’ (dimensions) of the study of the learning region, presenting the empirical research carried out in the appropriate field and proposing indicators for statistical-cartographic analysis). The closing chapter presents the learning regional map of Hungary, as it is being gradually extended – unravelling the problematic of each indicator of the ‘pillars’. The volume is closed by a short conclusion and is supplemented by appendices.

Our goal was to produce a monograph; therefore, we do not indicate authors specifically (they have done so in their own articles – see the references and the lists of publications). The editors and authors of the chapters as well as their colleagues have, of course, been listed (see the title page), but the research and the volume were joint responsibilities of the LeaRn team.

January 2016

The editor

## ***Chapter 1***

### ***Theoretical Backgrounds***

*Tamás Kozma*

The introductory chapter of the present volume deals with the theoretical backgrounds of the LeaRn Project. LeaRn is an acronym. It stands for the title of the project named The Learning Regions in Hungary, with a capital R in the middle, referring to the ‘region’ concept. Geographical spaces – regions, cities and other communities (habitats) – offer the territorial realities for human learning, since human learning, like other human activities, is always carried out under territorial conditions. Humans and the spaces they live in create a unique complex within which human processes occur, be they economic, social or political ones.

‘Learn’ has several meanings; it is used in various and sometimes very different contexts, as will be shown in the coming paragraphs. In the geographical context, ‘learn’ is used in the sense of a human or social activity. ‘Learn’ is applied here as one of the essential activities of human and social life; it is an activity without which no human life could be pursued in a given geographical place. The first part of the present chapter deals with this unusual characteristic of ‘learning’.

The second part of the chapter deals with the spatial frames in which ‘learning’ as a human activity takes place. Regions, territories and habitats are the actual spaces in which creatures live and where, consequently, humans live and develop their economies, societies and cultures. The opportunities presented vary, as the spaces (regions, territories and habitats) offer different possibilities for humans to live and to develop. The second part of the chapter focuses on these various opportunities.

The third part of the chapter concentrates on the *LeaRn Project*. It presents the background to empirical analysis of the Hungarian regions from the point of learning as a social activity. This endeavour is rooted in educational research. The *LeaRn Project*, however, is the first attempt to develop a *Map of Learning* – a cartographical presentation of learning as a social activity. As such, the initiative may be viewed as a contribution to the European Lifelong Index (see below) and a new approach to establishing the Map of Knowledge in Hungary.

### ***1.1. The New Dimensions of Learning***

***Learning as a Social Activity.*** In general educational discourse, ‘learning’ concepts relate to the ‘learner’ as an individual or to a group of individuals who ‘learn’.

The concept of ‘learning’ suggests – in manifested or hidden forms – that the learner is an individual and that learners are a group of individuals who exercise the same activity (that is, ‘learning’). In various ways of learning – e.g. school learning, distance learning, e-learning, online learning, blended learning and the like – the focus is on the individual, the learner who learns. It is also true for most of the ‘learning theories’. They concentrate on the individual who learns, examining the individual behaviour that changes in the course of the learning and interpreting the learning process in various contexts (behavioural change, neuroscience processes, information exchange, organisational and or system processes, etc.). It is also true that the word ‘learning’ has so many meanings that there is hardly any context in education where ‘learning’ is an unambiguous concept. But in most of the discourses the concept of learning relates to the learner who learns, that is, to an individual.

As we all know, however, the learner does not exist without a ‘teacher’ or without something to learn. Although we understand the learning process as an individual act, it is not really so. The learner is not an individual in himself / herself; rather, the learner always exists in a relationship with the teacher or in relation to something that has to be learnt. In this sense, learning is not an individual act but a process of mutual acts. The concept of learning as a mutual act leads to a more complex understanding of learning: learning not as an individual act, but an act performed in social contexts. Learning, rather than being an individual act, is a social act, an act performed by a human as a social being. Consequently, we could also call ‘learning’ a social process that always occurs in societal contexts.

The multiple meanings and miscellaneous uses of ‘learning’ reflect its use outside the educational area. ‘Learning’ has become an essential concept of such social theories as ‘socialisation’, ‘social learning’ and ‘community learning’. Applied to social processes, social change and social development, learning has become a powerful concept in social science (see Jarvis 2006, Jarvis 2007.).

Socialisation theories (e.g. Erikson, Cooley, Mead) deal with the dynamism between the person and his / her community – the processes by which the individual becomes a member of a given community, while they emerge from the community as an individual.

Learning provides the dynamism for these mutual processes. A person becomes a member of a community by learning the institutions, the forms of behaviours, and the values, norms and sanctions. And vice versa: the community develops its own culture by accepting the new member and learning his/her elements of culture. In earlier theories of socialisation, learning was always emphasized as an essential element of the socialization process.

It is an idea common to the various social learning theories (Bandura 1971, Bandura 1977). According to them, learning is not simply a cognitive process; nor is it a behaviour change. Rather, learning always happens in a social context, since all the elements of the process (cognitive, behavioural, modelling, reinforcement, etc.) occur in interpersonal settings. Social learning theories have developed through the integration of individual learning theories, becoming a core of social psychology.

‘Community learning’ – in its traditional and modern senses – combines community with learning (Wenger 2006). In the older sense, going back to the progressive education of 1930s’ United States, community learning means simply learning in a given community. The stress here is on the given community – a neighbourhood, a habitat, a village or a town — rather than on the class or school. Instead of being an analytical concept, community learning is understood in this context as a concept of educational development, or a new type of educational system. It takes the community as a training field for students, applying, intentionally or unintentionally, the idea of learning to a social context. Community learning in the newer sense is used not only as learning outside school, but also as adult learning within the community. Community learning in this wider sense is a social activity that includes all members of a community, regardless of age, sex, status and occupation. Being a member of the given community means, therefore, taking part in the lifewide and lifelong learning that is occurring in the community.

To sum up: the concept of learning refers not only to school, education and psychology. It can also be understood in a much wider sense as the main element of all socialisation processes. Learning in its various forms – intended and spontaneous, autonomous and directed, lifelong and lifewide – is the underlying and essential process of all societal activities. As we use the word today, ‘learning’ is an essential activity of human life; it is an activity that keeps society alive even as the generations pass.



***Learning as a Political Concept.*** The flexible use of the word ‘learning’ and its loosely defined meaning have given rise to its use in the political arena.

The political understanding and usage of ‘learning’ relates to its use in the discourses of the economics of education in the late 1950s and early 1960s as well as in the sociological debates on social structure, social mobility and education in the 1960s and 1970s. Economists and sociologists usually did not apply the concept ‘learning’. Instead, they regularly used ‘education’, as the names of those disciplines also suggest. However, ‘education’, as they applied the term, was also loosely defined in the discourses – loosely enough to cover the activities of students, teachers and politicians. In other words, ‘education’ stood also for ‘learning’, if we accept the arguments of the economists and sociologists of education that education is, ultimately, for children, students and the new labour force (which provides a reason for dealing with it as an economic and social phenomenon).

One thing was characteristic of the early use of the terms ‘education’ and ‘learning’. ‘Education’, even when loosely defined, referred to a top-down approach, while ‘learning’, in accordance with its core meaning, referred to a bottom-up approach. The difference between the use of education and learning – a top-down vs bottom-up approach – made it possible to apply the concept of learning to earlier and former political statements and documents on education.

The political interest in education shown by transnational organisations is linked with its rapid expansion. Such ‘expansion’ is usually understood as expansion on both the supply and the demand sides. It is still an open question as to whether growth originated on the demand side or on the supply side. In any case, the expansion of demand and supply resulted in a new situation. The system grew in all of its sectors. Where formal education (school and higher education) levels were raised, the level of non-formal education (that is, adult education, learning and training) increased, too. Indeed, there seems to have been an almost unlimited spiral of demand and supply in education and learning, whereby the growth of formal and non-formal structures and organisations contributed to the expansion of education and learning. Those who have received more education would like to have even more, and are ready to go even further.

In an era of educational expansion, learning receives new dimensions. The activities that we called ‘learning’ now go beyond the formal organisations; they influence non-formal settings, too (workplaces, cultural institutions, leisure time activities). They also go beyond special age cohorts. As UNESCO documents (see below) began to call them in the early 1970s, learning activities have become ‘lifelong’.

A prior signal of the changes in the realm of organised education and educational research was made by Latin American philosophers and educators as early as 1970. Freire, having been influenced by Marxist theory, turned to the ‘oppressed’, emphasizing the political role of education in the social liberation process (Freire 1970). Meanwhile, Illich pointed out that institutionalised education may well not be the perfect tool for political liberation; on the contrary, schools can be a means for social oppression (Illich 1971). He suggested the ‘deschooling’ of society and argued that organised teaching should be replaced by autonomous learning.

Freire and Illich were only the harbingers of a shift from education (institutionalised teaching) to learning (an autonomous and liberal act). The idea – if not the term – of ‘lifelong learning’ emerged from a UNESCO publication known as the Faure Commission Report (Faure 1972), becoming a milestone marking both an essential shift in term usage and a political change (Tuijnman, Boström 2002). Earlier documents had generally used the term ‘education’ to describe a top-down and mostly government-directed vision of schooling. The Faure Report, however, replaced this notion with a bottom-up approach. Although the report related primarily to the realms of schooling, education and training, it also carried a major political message, namely the need to democratise institutionalised schooling and learning.

The conceptualisation of learning as an autonomous and liberal decision of the individual (and its community) may be regarded as a major step forward towards establishing political democracy and human freedom. In the course of subsequent decades, what had been merely a ‘prophecy’ became a philosophy exerting a pervasive influence on current political ideas about school and higher education. Indeed, the ideas now form part of a ‘political correctness’ in educational policy discourses.

The shift from ‘education’ to ‘learning’ that accompanied political democratisation and the democratisation of the education systems (systems of learning, as Tuijnman would rightly say) did not reach the Central European region, including Hungary, until the political transition of 1988–1992. Educational policy discourses under the totalitarian regimes of the Eastern Bloc countries preferred to use the term ‘education’, reflecting the top-down party politics of the system. ‘Character formation’, as it was called, and the creation of

‘Socialist man’ stood at the centre of education philosophies. Such ideologists as Freire and Illich were denounced and their works banned, while the World Education Crisis (Coombs 1968) was portrayed as an educational crisis afflicting the ‘capitalist world’. The Faure Report was translated into Hungarian, but copies were disseminated only to a limited readership under the title ‘Let’s Learn How to Live!’ ‘Permanent education’ – not lifelong learning – happened to be closer to party ideology, since it expressed the communist intention to shape the human character in perpetuity (amid various settings: in schools, workplaces, cultural settings and during leisure activities). It was only after the political changes of 1989-90 that ‘learning’, as opposed to education (the intended and organised formation of the human character), received greater emphasis in the Central European region.

***The Four Pillars of Learning.*** The Faure Report was, it seems, the first time, in the international setting, that ‘learning’ was used in place of ‘education’ (at least in the report’s rather unusual title: “Learning to be”). The Faure Report still talks about ‘education’, but does so in a wider sense, one that addresses the new dimensions of learning. In this wider sense, the Faure Report identifies four new dimensions: ‘horizontal integration’ (in the sense of ‘lifewide learning’); ‘vertical integration’ (what we call today ‘lifelong learning’); democratization (new social groups coming into the education systems); and the ‘learning society’ (by which it meant the restructuring of the systems of education). With this philosophy, the Faure Report positioned itself at the boundary of two worlds. In the old world, ‘education’ – that is, its structures, organisations, providers and maintainers – was at the centre. In the new one, learners became the main focus. This development is one of the unforeseen outcomes of the massification and democratisation of education. Revolutionary as it was, this significant shift tended to be ignored until the publication of the report of the Delors Commission, “Learning: the Treasure Within”.

Noting that “formal education systems tend to emphasize the acquisition of knowledge to the detriment of other types of learning” (Delors et al 1996, 37), this latter report proposed several new dimensions of learning. These dimensions were referred to as the four ‘pillars’ (learning to know, learning to do, learning to live together, and learning to be). Idealistic as they may sound, the four pillars have nevertheless provided a structure for various new philosophies of learning, symbolising the victory of the ‘learning’ approach over the ‘education’ approach.

## ***1.2. The Spatial Networks of Learning***

One way to reconcile the idealism of the Delors Report with realities was to interpret the notions contained in the report as philosophies and policies of socio-economic developments. From this perspective, a major question was the contribution of learning to the socio-economic development of a given organisation or territorial structure. As an OECD (1996) document stressed, learning is an essential tool for personal development, social cohesion and economic growth. The statement is not new; what is new is the phraseology. Economists of education had been stressing the essential connection between education and economic development for decades. The OECD document (ibid) connects learning with economic development, showing how individuals and their activities are major sources of development. The question arose as to whether investment in ‘human resources’ might well be a feasible development policy alternative to traditional investment policies.

During the last two decades, various cases have been studied to give reliable answers to this essential dilemma (Benke 2007). Various territorial units and their development policies have been analysed to show similarities and differences, in the hope of obtaining generally applicable answers. The target population and the spatial frames of a feasible alternative policy varied from the regions to the cities to the communities. Though it seemed as though they might create a chain (regions embracing cities and their areas, communities creating cities and / or regions), they turned out to be fashions of the time. Indeed, by the 1990s, regions had emerged as the most important frame for case studies, while communities emerged in the debates on learning regions as their possible democratic alternatives. Finally, cities – as the densities of social and economic innovations – are now generally viewed as the focal points of innovation networks.

***The Learning Region Movement.*** ‘Learning region’ emerged, in the early 1990s, as one of the most powerful development strategies. The idea and concept were drawn partly from the new understanding of learning and partly from the shift from the neo-liberal philosophy of globalisation to a new approach of localisation. In this new approach, innovations and inventions, rather than knowledge and skills, provide the power for development, while the globalisation of the economy has to be made complete by means of the local forces of growth and development.

- *History.* Looking back to the beginning of the ‘learning region’ movement, Nyhan (2014) mentions the situation of the German states of former East Germany and their need for innovation and cooperation. The main question was a practical rather than theoretical one. That is: ‘... how could all actors

sharing the same local context learn to cooperate with each other in addressing economic and social innovation”? (Nyhan, *ibid*). Using developmental needs like this, many publications contributed to the creation of a new concept, the ‘learning region’ (e.g. Putnam 1993, Lundvall, Johansson 1994; Asheim 1996; see also Nyhan *ibid*). The phrase ‘learning region’ and the approach it signified initially appeared in the English and German literature on regional development in the first half of the 1990s (see Illeris, Jakobsen 1990; OECD 1993; Lernende Regionen 1994). The studies made clear the impact of networks as social capital on regional development.

- *The quest for definitions.* In the endeavour to understand and develop regional networks of learning and innovation, various interpretations have arisen. It is true, as Boekema (2000) points out, that the development of a ‘learning region’ does not need a precise definition; on the contrary, a formal definition would just hinder the necessary policy actions. Hassink (2004) talks about alternative interpretations. A ‘learning region’ can be understood as ‘the relationship between entrepreneurial learning, innovation and spatial proximity at the micro level (theoretical, actor-related perspective)’. It can also be interpreted ‘as a theory-led regional development concept from an action-related perspective at the meso level’. Or ‘a learning region can be defined as a regional innovation strategy in which a broad set of innovation-related regional actors... are strongly, but flexibly connected with each other...’ According to an OECD (2001) report, a learning region constitutes ‘a *model* towards which actual regions need to progress in order to respond most effectively to the challenges posed by the ongoing transition to a “learning economy”’ (OECD 2001: 24).
- *Approaches I: regional developments.* The representative reader of the ‘learning region’ movement was edited by Boekema and Rutten, two leading scholars of regional geography (Rutten, Boekema 2007). The volume, however, is more than a geographical endeavour. It shows the many-sided character of the ‘learning region’ with its social geographical, sociological, economic, and educational dimensions. The ideas of the crucial authors (Florida, Morgan etc) of the beginning of the movement are given space in the introductory part (Rutten, Boekema 2007: 15-125). Florida (1995: 530) summarises his conception of learning regions as follows: ‘Regions are becoming focal points for knowledge creation and learning in the new age of global, knowledge-intensive capitalism, as they in effect become *learning regions*. These learning regions function as collectors and repositories of

knowledge and ideas, and provide the underlying environment or infrastructure which facilitates the flow of knowledge, ideas and learning.’ For his part, Morgan (1997, see also Rutten, Boekema *ibid*) seeks to link two concepts and approaches: economic geography and innovation studies. In this endeavour he developed, interpreted and applied the term ‘learning region’, which he viewed as a special network of innovations, that is, as social capital that is either present or absent in a given region and the creation of which may necessitate the development of policies and strategies. Hudson (1999) writes about hidden knowledges embedded in culture, adaptation and learning behaviours. Every enterprise is a social organisation at the same time; therefore, production and all related learning are social activities. Erdei talks about three stages of the development of a region in becoming a learning one (step 1: the density of educational institutions; step 2: the networking of those institutions; step 3: the geographical appearance of those networks, see: Erdei, Teperics 2014).

- *Approaches II: Adult learning.* The learning-centred interpretation of learning regions took shape in the 2000s. Baumfeld (2005) lists three characteristics of a learning region: comprehensive adult education, the networking of educational institutions in order to refresh and enhance the knowledge of the population, and investments in teaching and learning facilities (resources spent on and investments into education). Nyhan (*ibid*) constructs the types of learning region projects according to the actors (educational, enterprise, civic) involved and according to the ways they connect to each other. Since 2000, the term ‘learning region’ has become increasingly popular in the EU and has been combined with lifelong learning strategies. It became a tool for various LLL-initiatives (Bellini, Landabaso 2007).

***From Regions to Communities: A democratic turn.*** The above approaches attempted to link regional development with the study of innovation and introduced the concept of learning regions. They searched for an alternative to the view that related enterprises to the market alone. In regional approaches the dominant factor of economic development was the social environment of enterprises. As a result, a new concept of economic and social development evolved. Governments and regional policy gained a more significant role again, whereby the meaning of ‘learning regions’ gradually shifted from regional geography to political economy.

- *From regions to communities.* A 2003 conference publication of CEDEFOP (*ibid.*) formulates a new view of ‘regions’ and puts a different stress on the local networks of ‘learning’: ‘The word “region”... may refer to small scale

communities, localities, towns or villages involved in collaborative learning activities. The important feature is that development is a collective process...'

- *From global to local.* According to Morgan (1997) the learning region is not only a new kind of cooperation between economic and social policies but also a new kind of (decentralised) public administration. Local-regional markets complete and even correct the globalising market. They are mainly served by small and medium-size businesses. The system requires special types of learning and there is a need for new public administration to coordinate various special administrative departments at the local level.
- *From central to local.* Lukesch and Payer (2009) stress that the work of local-regional 'development agencies' gradually shifts towards local-regional administrative tasks. It is necessary because local administration shows a growing tendency to centre around development opportunities. The national government intervenes from outside (from above) by providing the conditions for development. In other words, local-regional public policy is becoming the sum of special policies such as policy of education, health care, transportation, etc.
- *From governing to administering.* Geenhuizen és Nijkamp (2002) analyse their field work in Belgium. In their view, learning regions require such local governments that are capable of solving local problems locally, learning from their solutions and establishing a new kind of administration on the basis of their learning. Not only are learning people and organisations (market-oriented and NGOs) necessary for the existence of learning regions; an additional requirement is the presence of a local government that coordinates all learning parties in order to solve local problems. In the meantime, learning people and their organisations also acquire the skills of preventing problems.
- *From competition to cooperation.* The policy that theories of learning regions are grounded on is a theory of cooperation which overcomes conflicts. (Lukesch, Payer 2009) It is inherent in the idea of learning regions that political actors collaborate or at least aim at collaboration. They are unified by common goals. The actors of a learning region (or a learning city or community) meet challenges together and search for answers together. Good governance is guaranteed by common learning. Learning – not in the sense of being taught by somebody from outside but in the sense of an inner urge to learn – is a prerequisite for the formation of a learning region.

A democratic turn took place in the learning region movement during the early 2000s. There was a major shift from ‘learning regions’ to ‘learning communities’; that is to say, the important factor was no longer the size and density of the innovation networks but rather the political dynamism that transforms a territorial unit into a ‘learning community’. A learning community arises, not as a consequence of the networking of learning industries and learning organisations at the highest levels, but rather in the form of collaborative learning and action – the social learning processes underway within existing organisations (be they small-size or large-scale organisations). It is not the connection with global market places but local market forces that provide real opportunities for cooperation and competition (in the original rather than the neo-liberal sense). Instead of the ‘new managerialism’ that might take place in large-scale learning regions, a bottom-up administration is necessary for the emergence of a learning region. The learning region of that type – the learning region as it was suggested by the democratic stream of the movement – must be based on collaborative actions. Collaborative actions create the necessary social environment for lifelong learning within the learning regions.

***Learning Cities: Closer to the realities.*** The ‘learning city’ movement, which emerged around 2010, might be understood as a step towards the realities of the ‘learning community’. While the learning region movement did not spend much time locating the forces that would transform a region into a learning one, the ‘learning community’ specialists (and also its activists) identified the political activities of the inhabitants of a specific territorial unit as the leading force for creating ‘learning communities’. The learning region experts did not clarify the driving forces; rather, they usually referred to the socio-economic factors which somehow automatically develop networks of learning and innovation. Alternatively, they referred to globalized organization, which, by means of its effects on regional processes, force the emergence of those networks. The development of learning regions is spontaneous, meaning that outside (political) powers do not interfere; if something does interfere, it is one of the socio-economic factors themselves. The role of the expert in this development is to observe, describe and analyse – the classical approaches of a scholar who stands outside of the processes (see Rutter, Boekema *ibid*).

The vision of a ‘learning community’, meanwhile, is about how to create ‘community learning’. This vision focuses on political processes and political powers. The emphasis shifts from the existing networks of learning and innovation to political will, a factor that can dynamise the learning processes and institutions as well as existing creativities, thereby organising the networks within the communities (even in small-scale habitats). The role of the expert in this concept is not only to observe, but also to



proactively research and seek involvement. His/her ambition is less scientific and more political (more often, this role may move from one to the other). The emergence of a learning community is not a socio-economic process that occurs in isolation. Rather, it forms a historical development with shifts, tensions, actors, powers, crises and advances (or setbacks).

It sounds like a drama, though the reality is less dramatic. A community needs local forces for developing its networks of learning and creativity; those local forces in turn need political power and leadership. Communities with local governments are able to create their local networks of learning and creativity – but only in places where a certain density of these networks already exist. The density and intensity of information and learning, reinforcement and feedback, together with organised political force (governance), is traditionally called a ‘city’.

Thus the ‘learning city’ initiative is a necessary compromise between the interpretations of the ‘learning region’ and the activist approach of the ‘learning community’. The ‘learning city’ is a territorial unit which has both the necessary networks and impacts of a ‘learning region’ and the necessary power and political dynamism of a community. The ‘learning city’ is the operationalisation of the ‘learning community’ vision with the potential to become a reality.

Various activities have supported the emergence of ‘learning cities’ since 2000. Eighty European cities were examined statistically (TELS, 1998-2000); the stakeholders of the learning cities were identified and connected with each other (PALLACE, 2002-2005). Learning materials for learning cities were developed (LILLIPUT, 2002-2005); the local actors of learning communities in Scotland were trained (INDICATORS, 2004-2005). Learning processes within the local administration were initiated and guided in the LILIARA Project (see Erdei et al 2012; Osborne 2014).

Urban centres of learning are not new to experts in Central Europe and Hungary (see Erdei et al 2013). Meusbürger (1990) distinguished between the areal study of learning processes as social activities and that of the learning organisations (i.e. schools and the school system). Kozma (1987) discussed urban centres of culture (with culture interpreted as multidimensional learning). Concerning higher education in ‘urban centres of culture’, Kozma (ibid, 129) wrote the following: ‘Centres of culture can only be established if they rely not only on educational and cultural professionals but also on the wide human potential available in the given area.’

The actual (2013) formulation of ‘learning city’ comes from a UNESCO document (Unesco 2013a). According to this, as Osborne notes, a city becomes a learning one if it ‘invests in quality lifelong learning for all’. This means, in turn, a need to ‘promote inclusive learning from basic to higher education; invest in the sustainable growth of its workplaces; re-vitalise the vibrant energy of its communities; nurture a culture of learning throughout life; exploit the value of local, regional and international partnerships; and guarantee the fulfillment of its environmental obligations’ (Osborne, *ibid.*).

Cities with dedicated municipal administrations can monitor their progress towards becoming ‘learning cities’. A list of key features has been suggested by UNESCO experts (UNESCO 2013a). They reflect the list mentioned above: inclusive formal learning, informal learning within the community, non-formal workplace learning, modern learning technologies, a culture of lifelong learning. An international network of research and development has also been established to exchange ideas, research results and policy progresses in the process of developing learning cities (PASCAL). All these present the characteristics of a movement that links research with development and connects experts with policy makers. One step forward is the realisation of the necessary conditions: ‘strong political will and commitment, governance and the participation of all stakeholders and utilisation of resources’ (Osborne, *ibid.*).

*To sum up:* the ‘learning city’ concept is a practical and viable operationalisation of the former ideas of ‘learning region’ and ‘learning communities’. While experts in the 1990s described the spontaneous emergence of ‘learning regions’ in three steps (Erdei, Teperics 2014), the democratic turn from regions to communities has revealed political will and commitment as major drives. The ‘learning city’ actions – as cited in a recent UNESCO project (UNESCO 2013b) – combine vision with will, thereby forging expertise with policy-making. Learning regions, communities and cities are not only elements of a logical chain that creates the geographical space for learning networks. They are also links in the chain of modern history rendering multidimensional learning a reality.

### ***1.3. From Theory to Reality: The LeaRn Project***

The LeaRn Project (*Learning Regions in Hungary, 2010-2015*) has been based on two theoretical backgrounds (Kozma 2010): first, a consideration of the new dimensions of learning or, in other words, learning as a social activity; second, a consideration of the spatial distribution of learning as a social activity. The aim of the project was to

analyse the existing territorial units of the country (various habitats, towns, urban centres, etc.) on the basis of their learning activities, and then, using the data collected, to describe types of territories in terms of their learning activities. The main aim was to explore and ascertain the spatial distribution of learning in the country, that is, to identify the learning regions in Hungary.

The LeaRn Project has some antecedents, including various endeavours to evaluate ‘the spatial structure of social learning’ (Erdei et al, 2011). The LeaRn Project was modelled on the Canadian *Composite Learning Index* (Canadian Council of Learning 2010) and the German Atlas of Learning (Schoof et al 2011).

***The Canadian learning index.*** Canada’s ‘Composite Learning Index’ is one of the most important publications (probably the most studied) of the Canadian Council on Learning. The Council (formerly the Canadian Learning Institute) was established in 2002 and remained active until 2014.

The institution was established by the federal government with the aims of monitoring the learning processes in the country; giving information about learning developments; and suggesting possible changes in areas where the learning processes were not developing appropriately. The philosophy behind the establishment of the Council relied on the new understanding of education (created and stated by a National Summit in 2002). While the constituting provinces and territories were (and are) responsible for all levels of institutionalised education, the multidimensional learning processes remain as targets for a federal institution to monitor and to give advices. Various reports have been accomplished on the learning successes across Canada and in territories (e.g. ‘First Nations’ and their learning successes). The major accomplishment among them is the Composite Learning Index (launched in 2006) by which territorial units could be classified and monitored annually across the country.

The philosophy of Canada’s Composite Learning Index (CLI) goes back to the Delors Report. In line with the 1996 UNESCO Report on Lifelong Learning (Delors et al 1996), the CLI also has four ‘pillars’. The four pillars of the Delors Report have been operationalised with a view to ensuring that the lifelong learning progress could be statistically monitored. The four pillars in the CLI became:

- *Pillar I* involves skills of literacy, numeracy and ‘critical thinking’.
- *Pillar II* has been interpreted as computer skills, managerial skills and other occupational skills for the given apprenticeships.

- *Pillar III* has been identified as interpersonal and social skills and related values.
- *Pillar IV* covers activities which contribute to personal development, enrichment and creativity.

The pillars have been measured using indicators (17) as part of the statistical operationalising process, with the indicators then being evaluated by 26 measures. At the end of the process, each of the country's territorial units was given a score based on the CLI. In this way, a comparison of Canada's territorial units could be made in terms of annual learning (education) progress or stagnation.

While probably not being the first exercise of this kind, the Canadian CLI happened to be the first nationwide endeavour to establish evidence-based monitoring of the lifelong learning process. Even more importantly, it provided a model for policymakers and experts with regard to monitoring decentralised systems of education – which, in theory, could also be the case in the European Union – from the centre without damaging local (territorial, regional) government autonomies.

### ***The European 'lifelong learning index' and the German 'Atlas of lifelong learning'***

The ELLI index (ELLI: European Lifelong Learning Indicators, see Hoskins et al 2010) has been initiated by the Bertelsmann Foundation. The original idea was an adaptation of the Canadian CLI (this is also the origin of the acronym) with the idea of characterising member states of the European Union on the basis of their learning processes, just like the Canadian provinces. It worked to a certain extent.

Although supported by massive media coverage, the ELLI did not receive the same attention as the CLI endeavour (partly as a result of the OECD PISA Programme and its profound influence on educational policy making). Even so, ELLI remains the lifelong learning statistical tool for the European countries and an important addition to the many official statistics for comparative use in Europe. ELLI is today a hybrid between an educational and a social statistical tool. (Explaining the reasons for this development would require us to explore the social and historical factors influencing European policy-making in education and the functions of such programmes as PISA.)

In line with the model provided by the Canadian CLI, the ELLI Report also covers four dimensions. Reflecting the statistics collected by the EU member states, the four pillars had to be operationalised differently from the Canadian ones. Accordingly, the original pillars of the UNESCO Report have been interpreted by ELLI in the following way (Hoskins et al *ibid*: 21-36):

- *Dimension A* comprises the formal education systems of the European states (school and higher education being predominant in the European heritage)
- *Dimension B* is interpreted as learning underway at vocational education and training institutions; predominantly, adult continual learning but also the professional (ongoing) learning of young adults outside or after leaving school (e.g. workplace or work-based learning).
- *Dimension C* comprises the attitudes and behaviours of social cohesion, community actions, political engagements and the competences of group activities (different kinds).
- *Dimension D* is understood mainly as ‘autonomous learning’, that is, self-initiated and self-directed learning activities.

Using the ELLI index as a measurement tool, the 2010 report on the state of lifelong learning in the European countries shows that three of them were far above average (the Nordic countries, with scores of 69-74), while seven of them were far below the statistical average, with scores of 17-27. They are mostly the new EU member states in Central Europe, as well as Greece (Hungary received a score of 27). A more detailed analysis revealed that the differences were mostly in Dimensions (pillars) C and D rather than in Dimensions (pillars) A and B. The Central European countries (including Germany) were found to be relatively strong in formal education, while the Nordic states were far above the European average with their scores in those dimensions too. The European average was 45 in the ELLI index, see: Hoskins et al *ibid*, 37-61).

*The German Atlas of Learning (Deutscher LernAtlas, DLA, Schoof et al 2011)* represented a follow-up and more elaborate version of ELLI. Its philosophy was the same, but the published results were far more elaborate. Further, the DLA reflected a situation that was much closer to the Central European one than to the Canadian forerunner. While the Canadian data collection represents a model of regional statistical research and the analysis of lifelong learning statistics, the DLA constitutes a model of the operationalisation of the four pillars, the essential basis for all current empirical data gathering on the topic of lifelong learning. Turning to the LeaRn Project, these two – the Canadian CLA and the German DLA – were the closest models followed in the creation and analysis of the ‘LeaRn Index’ of Hungary.

***The Hungarian ‘LeaRn index’*** The Hungarian ‘LeaRn index’ (HLI) has been based on the earlier two indices (CLI, ELLI). Table 1 compares the indicators of the three indices. (For a detailed list of the various indicators and measures of the HLI as well as their statistical sources, see Chapter 6 of the present volume. For a more detailed analysis see Kozma et al, eds. 2015)

**Table 1.1.**

*A Comparative Overview of the Canadian, European, German and Hungarian Indicators*

<i>Pillars or Dimensions</i>	<i>CLI</i>	<i>ELLI</i>	<i>DLA</i>	<i>HLI</i>
<i>Pillar I Dimension A</i>	Learning to know	Learning through education	Learning in the school	Formal learning
<i>Pillar II Dimension B</i>	Learning to do	Learning at work	Work based learning	Non-formal learning
<i>Pillar III * Dimension D</i>	Learning to live together	Learning in the community	Learning in community settings	Community learning*
<i>Pillar IV Dimension C</i>	Learning to be	Learning in privacy	Learning in private settings	Cultural learning*
<i>Together</i>	17 indicators, 24 measures	17 indicators, 36 measures	4 dimensions, 36 measures	4 dimensions, 24 measures

*Table 1 has been developed on the basis of Kozma et al 2015*

*\* The initial order of Pillars III and IV has been changed in the HLI.*

**The Forerunners.** A number of Hungarian forerunners were found during the preparatory phase of the LeaRn Project. Some of them could be used as theoretical as well as empirical considerations for formulating the LeaRn Project.

- *The interdependence of the urban network and the education system.* A series of studies were conducted around the turn of the 1980s to examine the links between community structure (both urban and rural) and the educational system in Hungary. An interdependency of the two structures became clear. The levels of the existing systems of education were (and still are) created as the educational provisions meeting the various demands of the communities (elementary education in the neighbourhood, lower secondary for the communities, upper secondary for the town centres, higher institutions for regional centres. And vice versa: the delegated type of institution contributed to the position of the given community. In this way the system of education contributed to the status of the community in the hierarchy of habitats, while

the hierarchy of habitats also determined the system levels of education. (Forray, Kozma 2011)

- *Urban centres of culture.* An alternative educational reform strategy was formulated in the late 1980s. The so-called ‘urban centres of culture’ can be regarded today as an early precursor of the learning region movement. This is particularly so, given that the concept of ‘culture’ were applied in the sense of the Faure Report, while the expression of an ‘urban centre’ has the dual meaning of a geographical centre of a town and of a region (Kozma 1987: 43).
- *Local society and its autonomy.* Those ‘urban centres’ would have been designated not only for education but also for learning processes of various kinds, including learning as a political activity. The ‘urban centres’, although designated as centres of ‘culture’, would also have provided fora for local/regional policy-making. In this way the idea of ‘direct democracy’ sneaked into the discourse concerning educational reform at the time of the political changes between 1988 and 1993 (Forray, Kozma 2011).
- *Learning regions across borders: The TERD Project.* Making case studies in cross-border regions goes back to the aforementioned political transition. The results of the first research project were summarised by Priberski and Forray (1992). This study was soon followed by other similar cases which revealed unexpected facts as far as the changing types of socio-economic and cultural cross-border cooperation were concerned. Based on earlier findings, the TERD Project (*Tertiary Education and Regional Development*, see: TERD) assumed the emergence of networking and cooperation among five higher educational institutions in a cross-border region of Romania, Ukraine and Hungary. In our present discourse we assumed the emergence of a learning region in this cross-border setting. Contrary to our previous assumptions, however, the emergence of that region was not caused by the usual networking of higher education, innovative economics and creative technologies (mostly ICT). Instead, the networking of cultural and educational institutions was essentially influenced by the political transition (democratisation) and efforts to achieve EU membership. It is a clear sign of the importance of political will in the emergence of a region that otherwise would not have the chance to become a ‘learning region’. It shows why researchers and experts in East Central Europe are more sensitive to political changes and find economic growth relatively less important while discussing the realities of learning regions, cities and communities.

**Approaches, considerations, research tools.** The LeaRn Project defined a ‘learning region’ as an objective for territorial development. As an objective, it had to be operationalised (dimensions, pillars) and assessed (values for measurement). The following points may highlight how the LeaRn Project worked:

- *Dimensions.* Based on the background literature, the LR was operationalised in four dimensions (the four ‘pillars’). Pillars III and IV represented community engagements and personal enrichments in the original documents; their order has been changed in the LeaRn Project for philosophical reasons (see further details in Chapters 4 and 5). *Dimension A* consists of the existing infrastructure of formal learning (including the possible infrastructure of knowledge production and innovation). It can be called the infrastructure of learning in a given territorial unit. *Dimension B* covers the non-formal learning settings. It is mostly understood as the frames of the adult continuing activities of vocational learning. *Dimension C* means the learning side, that is, the chances and possibilities that the people living in the given territorial unit (habitat, community, local society) are able to learn and to develop by spontaneous, autonomous learning. It may be called the learning potential of an area under investigation. *Dimension D* is the political dimension. The actors of various types of learning (Dimensions A, B and C) are studied as political actors; their learning activities are considered to be social activities. Two sub-dimensions of dimension D can be differentiated: top-down and bottom-up political actions for a growing LR.
- *Indicators* of the four dimensions of the HLI were formulated and their statistical values collected (the measures). Dimension A comprised the statistical indicators of formal educational organisations. Dimension B has been measured using indicators of adult professional education as well as continuing VET activities. Dimension C has been operationalised as ‘cultural learning’ and has been measured with the help of leisure-time statistics. Dimension D has been understood as civic and political engagement and measured with the help of existing statistics of NGOs, activities in the political elections, and religion-based processes as well as other existing statistics of volunteering. (A detailed list of existing databases is provided in Chapter 6.)
- *Regional units* were the habitats in Hungary. Although it is not sufficient for a direct analysis of the regions, they may suffice for an investigation of emerging learning communities. It was expected, based on the theoretical backgrounds (see the earlier section of the present chapter), that regional analysis would indicate clusters of learning communities where these



communities would create territorial clusters and would, therefore, produce regions (although formulated in this manner, the learning regions in Hungary were finally presented as a set of regions, urban centres and emerging communities of learning; see the concluding Chapter 7).

- *Statistical sources* were the institutional and census data of the Central Statistical Office of Hungary. Additional data have been used or calculated on the basis of the forerunners of the LeaRn project. *Statistical analyses* have been conducted by descriptive as well as multi-dimensional methods. The results of the regional analysis in those areas where communities created clusters showed, therefore, the emergences of types of learning regions.
- *Case studies*. The function of these case studies was to provide knowledge and understanding of the political actions and processes that might or might not lead to the emergence of learning communities and regions. Two of them have been selected for detailed analysis, one from the Transdanubian region (*Dunántúl*) and the other one from the Trans-Tisza region (*Tiszántúl*). They were identified on the basis of the regional analysis. The outcome of the case studies was a better understanding of the mechanism and dynamics of the local policy-making that would or would not lead to the creation of a learning community. (The case studies mentioned here were presented in Chapter 5, which deals with Dimension D.)

\*

Most of the recent publications on learning regions (learning communities, learning cities, etc.) are more development- and policy-centred and less based on empirical research (see, e.g., PASCAL *ibid*). The learning region concept is not a scientific one – in terms of academic research; rather, it is a political concept which initiates movements, leads the actors of change and gives an alternative background for social transformation. As a vision for political action and social transformation, the ‘learning region’ may not require empirical analysis. If experts do undertake such analysis, they do so only in order to establish realistic backgrounds for future visions. Most of the expert analysis relies on official (governmental) reports and statements as references for their future visions or their assessments of the potential future of the era of a ‘learning society’.

The present study of the learning regions in Hungary is different from those reports and visions. Its purpose has been research-oriented: to discover more about the realities of the ‘learning region’ concept. Those who joined the research team were more academic oriented and less oriented toward developments; they shared mostly

academic rather than policy values. They were sceptics rather than ‘believers’. They raised more questions and made fewer statements; and even if they did draw conclusions about the learning regions, they stated them as findings rather than as considerations.

The hypothetical audience of the present volume is, therefore, the research community. Learning regions, however, do not belong to the sole competence of any of the existing academic disciplines. Rather, they are studied in an interdisciplinary manner, that is, from different academic perspectives. Various methods are used and many conditions and hypotheses raised. To study the learning regions in Hungary – raising questions of their existence, composition and realities – may challenge, or even damage, many existing hypotheses. To talk about the realities of the learning regions may, therefore, pose a risk. The authors of the present report on the realities of the Hungarian learning regions (communities, cities, etc.) have to keep this risk in mind.

The structure of this volume is the following. Chapters 2-5 present theoretical considerations regarding each of the dimensions (pillars) of learning in Hungary, and they also provide up-to-date summaries of the research findings. The purpose of these studies is to create statistical indicators of the measurement of the dimensions (pillars). Chapter 6 and 7 then introduce the statistical analyses of the measures and create the Hungarian LeaRn Index (HLI) on the basis of the multipurpose statistical analyses. The spatial distribution of the HLI is presented as the summary of the book. It shows the reality and present state of the development of the learning regions (communities, cities) in Hungary.

## **Note**

The author of this introductory chapter expresses thanks to the colleagues and co-editors who participated in the *LeaRn Project* and in the publication of this present volume. In the absence of regular academic seminars attended by the team, the present chapter would not have come into being. Special thanks are also due to *Gabor Erdei*, who initiated the studies and research on the learning regions and who also reviewed, criticised and completed the initial work on them. The author is also indebted to *Magdolna Benke*, a member of our ‘theoretical sub-team’ for her dedication, her constant support and her determination to publish a special issue on the Learning Regions (see Benke 2014). However, the author holds the sole responsibility for the thoughts expressed in the chapter. The chapter also contains parts of an earlier publication by the author (Kozma 2014).



## ***Chapter 2***

### ***Pillar I: Formal Learning Learning in the School System***

*Ágnes Engler and Zoltán Györgyi*

The chapter on formal learning gives a brief overview of the Hungarian educational system, then it deals with ‘traditional’ and ‘non-traditional’ learners, referring to the main findings of the empirical research conducted in the framework of this project. The field of our empirical research is higher education. The reason for this is the fact that the LeaRn Project focuses on the adult population, which is represented in the highest proportion in higher education. The focus area was chosen with respect to the characteristics of the learning regions – the intertwining of education, economy and society.

#### ***2.1. Pillar I and the Learning Region: Theoretical Considerations***

This subchapter discusses the theoretical connections between Pillar I (formal learning processes) and the evolution of the learning regions. Furthermore, the chapter will describe the Hungarian educational system so that even readers who are not familiar with Hungarian school education can understand the processes of formal learning.

Among the different ways of learning, it is formal learning that is traditionally related to the evolution, maintenance and development of the learning region. This is predominantly because the institutionalised, well-known participants of formal learning form a system that is easy to follow. Secondly, both the system and its participants have entry and exit characteristics and are embedded in a process that can be measured, described and traced. Thirdly, the numerical and statistical data gathered in this way can be considered as objective, thus suitable for comparison, and their assessment can be repeated periodically.

Obviously, connecting the educational processes of a region only to the indicators of formal learning, or emphasising these while pushing the other ways of learning into the background, has several dangers. For instance, in a number of cases, under-achieving individuals who are not integrated into the school system and are reluctant to take part in traditional ways of learning yield excellent ‘performance’ in non-formal or informal learning activities.

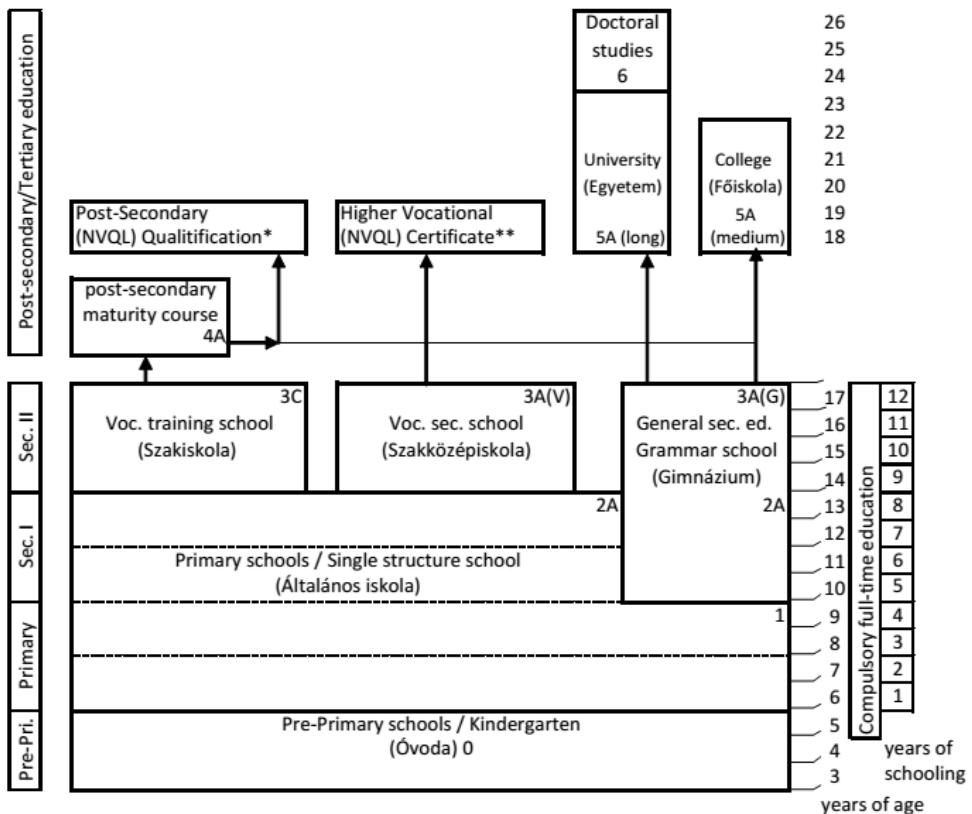
The quotation marks are intentional, as the assessment and evaluation of such ‘performance’ cannot be the same as in formal learning activities. This causes another problem as the knowledge and competences acquired through non-formal learning cannot be objectively compared to those acquired through formal learning. This feedback provides information not only for the individual and the outside world, but also has a selective function, for example, in the labour market or in the learner’s further education.

This poses a complex problem and there have been many attempts to end the ‘monopoly’ of formal learning. The various validation processes in continuing education or in the labour market take into consideration not only the knowledge and competences acquired through formal learning but also the skills acquired through practice which cannot be proven by a certificate. These skills can be assessed through a theoretical or practical test before a committee, but the employers (or education authorities) can decide to accept the candidates’ claim without any tests. Naturally, the regional importance of educational institutions is based not only on the transfer of knowledge but also on their cultural mission carried out in their given regions. However, measuring the impact of such a mission is even more difficult. In our discussion of the relationship between the learning regions and formal learning, following in the narrow channel of institutionalised learning, we explore its entry and exit characteristics as well as the processes in between.

Figure 2.1 depicts the structure of the Hungarian educational system. ISCED 0 is the stage preceding primary school education. Children at the age of three start pre-primary school/kindergarten, which offers day care and prepares them for primary school. This is the reason why kindergarten attendance is regulated by law. Attendance in kindergarten used to be compulsory from the age of 5. In 2015 this age was lowered to three.

**Figure 2.1.**

*The Hungarian educational system*



Source: Bukodi et al. 2008, 204.

Children from the age of six have to be enrolled in school. School maturity, however, is not strictly determined by law and thus pre-school education can be lengthened by one or two years on advice of the pre-primary schoolteachers or other teaching professionals. In Hungary primary school education comprises eight years. This can be shortened alternately to four or six years with entry into institutions offering secondary education for eight or six years, which appeared after the change of regime. ISCED 1 is the lower stage of primary education where the basic skills are acquired. Here children receive education for the entire day and stay in the institution until 4 p.m. In the lower forms schooldays are either organised on a day-care basis (all-day

education with breaks) or are divided into two parts with students attending classes in the morning and practicing and writing homework in the afternoon. In the higher forms afternoons are filled with PE lessons, extracurricular activities, coaching, and preparation for secondary school.

Primary school children can enter the next stage (ISCED 2) at three different points. After the completion of the fourth form students can enrol in eight-year grammar schools, while after the completion of the sixth form they can apply to six-year grammar schools. Finally, students can decide to complete their primary education in primary schools, where the higher forms comprise ISCED 2. In all these cases, entry into secondary school education is determined on the basis of students' primary school results and/or a central written examination (with an additional oral examination in some institutions). Approximately a third of the students in the given age group attend eight- and six-year grammar schools, which were founded at the beginning of the 1990s.

In Hungary, secondary schools are classified into three types: vocational training schools, vocational secondary schools and grammar schools. The lower forms of grammar schools belong to ISCED 2, while the higher forms belong to ISCED 3. The two other institutions belong to ISCED 3. In vocational training schools, which comprise three years, vocational subjects are taught from the first year, within the framework of a dual education. Grammar school education, after four, five, six or eight years, is completed by a school-leaving examination. The five-year grammar school education begins with a so called 'form 0', which is a preparatory year with students learning a language intensively (in 15-18 lessons per week), while their knowledge in other subjects is only kept on the previous primary-school level. (This option is available in a half of the grammar schools.) Vocational secondary schools traditionally comprise four years, but a third of these institutions offer a language preparatory year and also additional training courses following the school-leaving examination. The latter counts as training based on secondary education, and thus belongs to ISCED 4. It is also available for students coming from vocational training schools.

## ***2.2. Traditional Learners (School and Higher Education)***

This subchapter continues the description of the Hungarian system of school education, higher and adult education by tracing the routes of 'traditional' or 'average' learners. Figure 2 presents the changes in student numbers from the 1960s. The graphs showing the number of full-time students present two different tendencies.

One is related to the demographic trends. The people born in Hungary during the demographic boom at the beginning of the 1950s generated another demographic boom in the mid-1970s. In the number of children attending kindergarten this tendency appears only somewhat later, as due to the increased demand for places children whose mother was on childcare leave with their younger child were only accepted in the last (school-preparatory) year of kindergarten. This baby boom generation started primary school at the beginning of the 1980s. From this time, student numbers grew year by year (sometimes with as many as 5 or 6 parallel classes in average town schools). In the mid-1980s there was another dramatic decrease in the number of primary school students. However, the expected new influx of children (people born at the beginning of the 1970s were old enough to start a family) did not arrive.

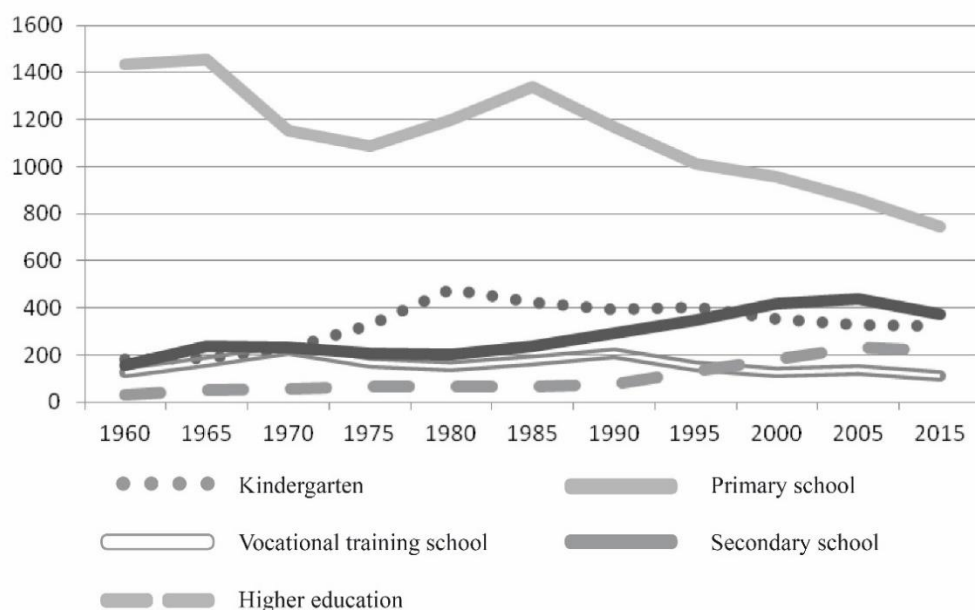
The effects of the population decrease, which is observable all over Europe, are also felt in the educational system. Schools have been closed or merged with other schools. In the competition for attracting more students, many schools have altered their profiles. In addition, there has been a significant change in the composition of students in the institutions. This is especially true for secondary schools, which aimed to maintain student numbers by changing their structure of education and by adapting their courses to social needs.

Figure 2.2 also portrays the different waves of expansion hitting the Hungarian educational system. On the level of secondary education, massification started in the 1970s. Then, at the beginning of the 1990s, the numbers of students accepted to higher education started to grow as well. (This means that the increase in student numbers had started before the baby boomers reached the age of eighteen.)



**Figure 2.2.**

*The number of full-time students (1000 students)*



*Developed on the basis of the statistical data provided by KSH*

Most educational institutions are state-funded, but the proportions vary according to school types. 88% of kindergartens, 84% of primary schools, nearly a half of vocational training schools and grammar schools and 55% of vocational secondary schools are state-funded (KSH, 2013). From 2013, according to the law on public education passed in 2011, the primary and secondary schools funded by the state or by local governments were placed under the authority of the Klebelsberg Institution Maintenance Centre. The local authorities of the Centre are the school districts (with the same centre as that of the district authorities), which govern the primary and secondary schools within their jurisdiction. School districts operating in county towns govern the vocational institutions within their jurisdiction.

Non-state schools are funded by ecclesiastical legal persons, business entities with legal personality, foundations, associations and other legal or natural persons. Of non-state institutions kindergartens, primary schools and grammar schools are typically church-funded, while the maintenance of other types of institutions is characteristically performed by foundations and private institutions.

**Table 2.1.**

*The number of students according to maintenance and institution type (full-time, 2013)*

Institution type	State-funded institutions	Non-state institutions	Non-state, church-funded institutions
Kindergarten	310.898	29.306	20.264
Primary school	643.633	99.298	85.843
Vocational training school	91.790	25.753	10.371
Grammar school	136.421	53.105	41.090
Vocational secondary schools	170.426	53.788	16.138
Higher education	208.278	25.400	12.565

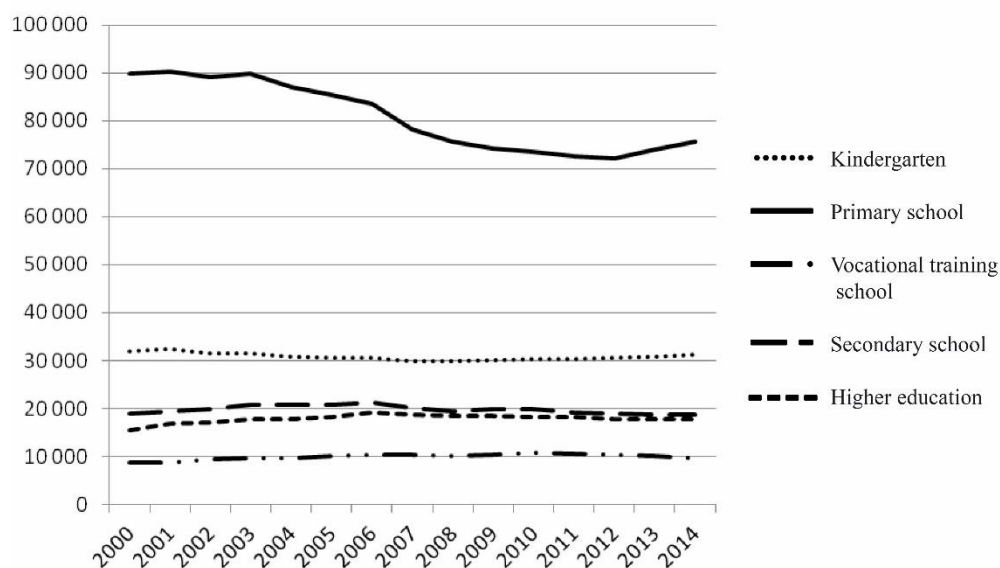
Creating equal opportunities has a significant role in ensuring students' appropriate progress even before the beginning of primary school education. Lowering the age of compulsory kindergarten attendance (from five to three) aimed to create equal regional and social opportunities in the institutions for socialisation and development, where the proportion of ethnic minorities has been very low for decades (cf. Havas 2004, Vágó 2005, Szabó-Tóth 2007, Hámori-Köllő 2011, Kertesi-Kézdi 2012). In 2014 approximately 320,000 children took part in kindergarten education, where activities are led by nursery school teachers with a college diploma and children are tended to by nurses with a secondary school certificate.

The basic objective of school education, which was subject to constant changes in the past two or three decades, is to prepare the young generation both for the job market and for lifelong learning. Since the 1990s, parents have been given free choice of schools; however, school districts still operate under certain limits (e.g. schools are obliged to accept students resident in the district). There have been constant debates about school districts fostering or rather infringing students' opportunities, the selective nature of schools taken out of the district system, the regional inequalities, as well as school closures and mergers, which can be led back to the demographic changes discussed above (cf. Forray 1991, Imre 1997, Lukács-Nagy 2004, Ladányi-Szelényi 2005, Forray-Kozma 2011)

In the lower (ISCED 1) and higher forms of primary schools pupils are taught by teachers with different qualifications (college and university graduates, respectively). Primary schools have the highest student numbers and they employ a half of the teachers whose overriding majority are women (90%) (Figure 2.3). These institutions saw the greatest decrease in the number of teachers compared to the number of students. However, the student-teacher ratio is still lower than the EU average. This has several reasons, such as the high number of lessons, teachers' extracurricular duties, the number of employees without a teaching qualification who assist the pedagogical work of teachers as well as the inclusion of the teachers on childcare leave in statistics. (In Hungary childcare leave allows parents up to three years away from the job market) (Sági-Varga 2010).

**Figure 2.3.**

*Changes in teacher numbers between 2010 and 2014*



*Developed on the basis of the statistical data provided by KSH*

In secondary education, the changes in teacher numbers followed the changes in student numbers to a lesser extent than in primary schools. However, in certain subjects (especially in natural sciences), there is now a severe lack of professionals. Entry into secondary education (following the fourth, sixth or eighth form) is determined by the average of students' previous grades, as well as by the results of the

central written (and where required oral) entrance examination. The falling student numbers also leads to a diversification of secondary schools as grammar schools and vocational secondary schools, in order to maintain student numbers, accept weaker students, which demands new approaches to teaching and to the teacher-student relationship. For schools becoming more and more heterogeneous the differentiated exit requirements (with the introduction of the two-level secondary school-leaving examination, see below) can provide a solution for a successful completion of secondary studies as well as a means for selecting students for continuing studies. The growing popularity of studies providing students with a secondary school-leaving certificate has also led to the decreasing demand for vocational training schools (courses that do not supply a secondary school-leaving certificate, for students from the age of 14).

The demographic and economic tendencies have influenced the vertical and horizontal changes in the educational system (Fehérvári et al. 2011). The four- and six-year grammar schools have extended their courses downwards, accepting students from younger age groups. The schools offering vocational training have added new courses offering a secondary school certificate or additional qualifications on top of their existing forms. Schools offering courses with a form 0 (intensive language classes), have similarly succeeded in keeping their students for an extended time. The maintainer, the location and the pedagogical programme of the four- and six-year grammar schools define the composition of students. The early selection of 10 to 12-year-old students usually ensures students from higher social classes with better abilities, which can reduce social mobility and the right for equal opportunities (cf. Liskó 1995, Halász 1996, Hunyady-Szendrei 1998, Kertesi-Kézdi 2005).

Since the political changes in Hungary, the compulsory education has been modified more than once (in 1996 it was raised from 16 to 18, then in 2012 it was reduced to 16 again). In the debates about the compulsory education there have been two basic approaches to the years spent in school educations. Those advocating the age of majority (18) claim that school defers the age when individuals have to choose their profession and start work, allowing individuals more time to develop their own personality, interests and skills. The aim of keeping young people in the school system is to lay the foundations of lifelong learning, but the ‘parking’ of students also contributes to avoiding unemployment. Those advocating the age of 16 (or even 14) as the compulsory education aim to give work experience and an own income to students who are fighting with failures at school, have a high truancy record and are likely to drop out, while not excluding the chance for a later continuance of their

studies (see Fazekas et al. 2008, Halász 2010, Mártonfi 2011, Fehérvári et al. 2011, Hermann-Varga 2012)

Since 2005 the system of the secondary school-leaving examination has been transformed. The results and experiences related to this change have been the topic of professional and social debates. In Hungary before 2005 secondary studies were traditionally completed by a unified school-leaving exam, which was followed by an entrance exam into higher education. Students' acceptance to higher education depended on their results in the last two terms of their secondary studies and their results in the centrally organised oral and written exam. The organisation of the entrance exam fell under the authority of the institutions of higher education, where students were ranked on the basis of their oral and written exam results as well as on their secondary school grades. The dual level school-leaving exam basically took over the role of the entrance exam. School leavers, considering the requirements of the course in which they want to continue their studies, can decide to take the advanced level exam in some subjects and the intermediate level in others.

The system of higher education has gone through multiple changes in the past decade. Hungarian higher education was traditionally divided into a practice-oriented four-year long college education and the academically oriented five- or six-year university education. In 2005, as the result of the Bologna process, the new system divided into cycles started in Hungary, where students can gain bachelor and masters degrees and can take part in doctoral studies. In 2013, teacher training returned to the old undivided system: the training takes 4+1 years for future primary school teachers and 5+1 years for secondary school teachers. The expansion wave reached higher education at the beginning of the 1990s, which resulted in significant changes in the ratio of the number of applicants and the students accepted (the number of accepted students grew from a third to two-thirds of the applicants). Higher education, which was thus becoming more and more heterogeneous, faced a number of challenges as part of the process from elite to mass education (Kozma 1998, Hrubos 1999, Polónyi-Tímár 2001, Hrubos 2002, Kozma 2004). Massification also brought a change in student values. The pragmatic aspects of the labour market came to the foreground (Bocsi-Botrágyné 2013), but the academic behaviour, the possession of academic goals goes together with the possession of the appropriate learning strategies and techniques (Bocsi 2015).

In the Hungarian language there are three different expressions for the learning of adults. Adult education means the school education of adults who take part in learning adapted to their existing knowledge and their age, which is aimed at acquiring a secondary or higher education certificates. Adult training is used for education outside the school system, such as professional trainings for vocational qualifications, other

language trainings for vocational purposes and further trainings. According to the purpose of their training we differentiate between work-based learning (aimed at getting or keeping a job), general and language trainings, and free-time trainings (Zrinszky 2008). The term ‘adult learning’ is less frequently used in everyday language. In professional terms it is used to express that the various learning methods are complex processes that influence the individuals’ life as a whole (Durkó 1998). The learning activity of Hungarian adults is very low, altogether 4-5%. Similarly to international tendencies, it is the adults with higher levels of education that tend to invest in their own human capital in higher education. With respect to gender, willingness to learn is different. Women are more active in formal learning, while men prefer informal learning methods. Financially active people and the younger generations are more likely to engage in adult formal education. The willingness for adult learning generally peaks at the age of 35, then it starts to decrease dramatically (Sági-Róbert, 2011).

The system of Hungarian adult education rests on four pillars: trainings are organised by state institutions, non-profit training organisations, economic partnerships and workplaces. By formal learning we mean only education within state institutions, more precisely institutions of state education. Within vocational training, only the full-time training and education of students of school age counts as part of formal education. With the exception of this, all other forms of vocational training are considered as part of non-formal learning.

After the millennium the demand for ongoing learning grew, which is met by a wide range of offers in adult education and training. Due to the increasing number of trainings organised in the competitive sector, the sector of education is becoming an organic part of economic processes. This process seems to be gaining momentum in school education as well. First, this is signalled by the renewal of the content and the methodology of primary and secondary education, as competence-based learning emphasises the utilisation of skills and knowledge in the labour market. Second, institutions of school education, broadening their traditional role in adult education, have come up with a range of different trainings in adult training. Third, in vocational training and in some fields of higher education a dual structure was introduced, which tightened the link between school-based and work-based practical training.

Adult education connected to the various levels of school education has a primarily corrective function. Making up for missed studies on the primary or the secondary level will increase the chances in the labour market of people with little or no qualification, as well as the chances of students for further education (e.g. vocational training). The number of adults attending primary school is very low, which is partly

due to the improving rate of school attendance within society. However, the proportion of those who have not finished form 4 is still high. The expansion in secondary school education (in the 1970s and 80s) has also attracted adults who wanted to take a school-leaving exam. After reaching its full capacity of the system, the number of these students started to drop, as the age groups which were attracted by the full-time secondary education reached adulthood. This age group could have also been part of the massification of higher education, as full-time higher education was hit by the wave of expansion in the 1990s.

Following this, the number of part-time students in higher education grew considerably, too. Adults aiming to obtain a degree started to pour into universities and colleges. The institutions reacted to the academic needs of these adults, opening a wide range of courses for them. The studies of people arriving via the ‘servants’ stairs’ of higher education (Ladányi 1994) fall under a different judgement than that of full-time students (e.g. they have a different student route, they do not have the opportunity for a full immersion in the studied material, for consultations with their teachers, the requirements are different, etc.). However, as the composition of full-time students has become heterogeneous, these differences seem to be fading away. The methodology (e.g. the lack of practice-orientation) and the learning organisation (e.g. students existing knowledge and skills are not taken into consideration) of higher education does not have a different approach to teaching part-time students the majority of whom have experiences in the labour market (Maróti 2002, Derényi-Tót 2011). Similarly, little attention is paid to the needs of those students who pursue their studies beside their family and work (Engler 2014).

### ***2.3. Non-Traditional Learners (Re-entry students, migrant and Roma students)***

This subchapter presents the non-traditional learners of the Hungarian school system. It deals with the students who return to school as adults. We will also address the issue of Roma and migrant students.

In the 1990s there was a growth in the number of non-traditional students, such as students of low social status, migrants, Roma students, students with disabilities, and returning adult students entering full-time or part-time school and higher education. We carried out empiric research connected to non-traditional learners in the narrow field of higher education applying the following methods: focus group and individual interviews, questionnaires, secondary statistical analysis. The data on the various populations (migrants, Roma students, adults, and traditional students as a control

group) were compared in eight relevant fields. These were the following: course of studies (learning career, school type, participation in trainings, experiences in education, other experience, social background), initial motivation for learning, (reason for continuing learning, choice of institution, the role of regional characteristics), present motivation for learning (attitude, activity, values and norms), learning success, students' personal relationship with fellow students, teachers, learning difficulties (fixed methods, negotiating between studies and work or other duties), students' needs, students' plans.

**Table 2.2.**

*The number of foreign students in Hungarian school and higher education (full time)*

<b>School or academic year</b>	<b>Kindergarten</b>	<b>Primary school</b>	<b>Vocational training school</b>	<b>Vocational secondary school and grammar school</b>	<b>Institution of higher education</b>
<b>1995/1996</b>	n.a.	2.353	463	2.046	6.300
<b>1996/1997</b>	n.a.	2.465	518	2.255	n.a.
<b>1997/1998</b>	n.a.	2.899	505	2.573	n.a.
<b>1998/1999</b>	n.a.	3.228	466	3.038	7.111
<b>1999/2000</b>	n.a.	3.830	444	3.566	7.711
<b>2000/2001</b>	n.a.	n.a.	n.a.	n.a.	n.a.
<b>2001/2002</b>	1.048	3.561	685	4.640	8.556
<b>2002/2003</b>	1.554	5.002	747	5.459	8.605
<b>2003/2004</b>	1.538	4.761	911	5.365	9.371
<b>2004/2005</b>	1.608	4.577	882	5.353	9.946
<b>2005/2006</b>	1.683	4.515	717	5.152	10.974
<b>2006/2007</b>	1.584	4.496	741	4.921	11.618
<b>2007/2008</b>	1.603	4.399	633	4.281	12.212
<b>2008/2009</b>	1.629	4.224	448	4.075	13.681
<b>2009/2010</b>	1.516	4.200	462	3.667	15.035
<b>2010/2011</b>	1.701	4.288	487	3.659	15.889
<b>2011/2012</b>	2.366	5.954	520	4.190	17.112
<b>2012/2013</b>	2.696	6.310	450	4.381	17.987

*Source: Yearbook of Education Statistics*



In 2012 and 2013 we interviewed German, Iranian and American students focusing mainly on students' course of studies, the teacher-student relationship and the definition of a good teacher. We cannot discern a linear course of studies in the case of foreign students either. Their studies in Hungary were often preceded by some experience in higher education (in their home countries) and by voluntary work or primary employment. The main reason for learning difficulties is the lack of knowledge of English or Hungarian as the language of instruction, which might lengthen the time spent studying. Adapting to the different academic culture could also cause problems or conflicts, which foreign students encountered in their relationships with other students as opposed to with teachers. Foreign students mainly perceive other foreign students around them as monocultural groups organised on grounds of national and cultural similarities. In contrast, they characterise themselves rather as parts of bi- or multicultural groups of friends or students (Dusa 2014).

The interviews made with teachers also highlight another aspect of learning difficulties apart from the difference in cultures: the aspect of cheating in exams. Teachers, however, also mentioned positive things. For example, employing different teaching methods and giving lectures and seminars in English were interpreted as challenges. In addition to offering professional help to students, this extended role of teachers involves mediation between the locals (students from Debrecen) and the foreign students.

To survey Roma students, we conducted secondary statistical analysis using the database of Research on Colleges of Advanced Studies 2011. We concluded that, as the result of social processes, the objectives, basic principles and pedagogical methods of church-funded colleges of advanced studies have gone through changes, which made the support of students of lower social status one of their priorities. In addition, we interviewed students of a Roma college of advanced studies in Eastern Hungary run by one of the historical churches. We mainly focused on the question how a young Roma person coming from a disadvantaged social environment is influenced by the community in which they spend their days, be it their family, their close living environment or school. We posed the question to what extent is the individual's course of life and studies influenced by a significant teacher, religious upbringing or a small religious community.

Examining formal adult education, we visited part-time students studying in three major institutions of higher education in the Northern Great Plain region of Hungary: the University of Debrecen, the College of Nyíregyháza and the College of Szolnok. The quantitative study was prepared by qualitative tools at the beginning of 2013 (focus group and individual structured interviews with part-time students).

In the spring of 2013 we prepared for the questionnaires (we analysed the interviews, prepared the tools of measurement and acquired the necessary permissions by the rectors). It was a full-scale survey. The online questionnaire prepared in the EvaSys system was sent to all of the students in all three institutions via the Neptun online student information system. 1092 questionnaires were returned to us, which were evaluated with the help of the SPSS programme.

The results show that adult learning is greatly influenced by the individual's social background and course of studies. The most motivated students are the ones with the highest qualified background (family and partner) and the ones who have already gained a degree. The ones who study to compensate for an earlier decision have a lower social status; however, their personal environment is motivating and they have a strong sense of belonging to their region. This strong sense of belonging to a region is characteristic of students living in smaller settlements. Family status and raising children are also determining factors. We have created an indicator of success using class attendance, grade point average, language exams, etc. as variables. It is an important achievement that the indicators of success correlated not with the variables of origin but with family circumstances.

On the whole it can be concluded that the course of study of the students involved in formal education was considerably influenced by their previous school experiences, the personality and professionalism of their teachers and their family backgrounds. For non-traditional learners, the community of friends and family together with religious communities are determining factors in their success and progress. Non-traditional learners can successfully compensate for their disadvantage, while the success and integration of traditional learners seems to decline. The communities surrounding the students have the greatest role in the utilisation of acquired knowledge. Local ties can be strengthened by the family and religious communities as well as by the experiences in an academic milieu.

## ***2.4. Learners in the VET System***

This subchapter deals with the people studying in vocational education and training (VET), who are discussed in another chapter as well (non-formal learners). Here we deal with the ones who study in school-based vocational education.

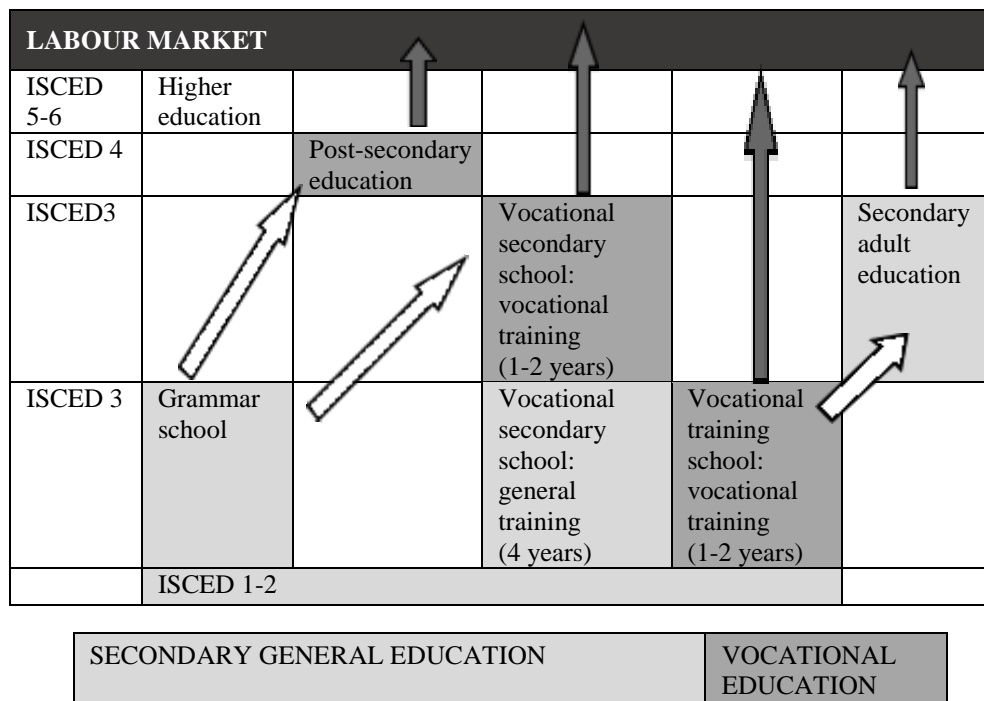
The higher secondary education of European countries offers two basically different courses of study. One model is built on the dominance of general education. A part of the students who complete their studies in this model (the majority of those not continuing their studies in higher education) start vocational education after this general education. The other model, however, is dominated by secondary vocational education. The majority of students in this model gain a complete secondary qualification (school-leaving exam/GCSE) following this vocational education. The majority of the European countries follow the former model. The most typical example of the latter is Switzerland, but Denmark and Germany have a similar model, too. Some traces of it can be found in the Dutch educational system, as well. Both models offer countless courses of study.

The Hungarian vocational education is based on the first model. Following primary education (ISCED 1), nearly three-fourth of students continue their studies in a secondary school that gives a secondary school-leaving certificate (ISCED 3A). Many of the students start vocational training after the completion of this level. Only a fourth of the students finishing primary education opt for traditional vocational training (termed vocational training schools, ISCED 3C). They are usually the students with the worst results. Many of them (an estimated one-third) do not even reach the level of vocational training and only a few use the opportunity to gain a full-value secondary school qualification (school-leaving exam/GCSE).

Through the ISCED system, participation in vocational education and training can be well documented but it cannot indicate the proportion of students in various courses of study. We know the number of students participating in school-based vocational education, but we cannot see which course of study the students opt for. Thus, we do not know the extent to which secondary education combined with vocational training (in the Hungarian school system vocational secondary schools) leads to the labour market or to higher education. It is also unknown to what extent vocational training without a school-leaving examination leads to the labour market or to full-value secondary education.

**Table 2.3.**

*The possible courses of study in VET and in secondary education in Hungary*



This makes it hard to find relevant indicators for school-based vocational education. The extent of participation reflects both the desire for knowledge that is relevant for the labour market (in this sense it is forward looking) and the chance of being left on the periphery of society (that is, the chance of lagging behind).

Due to the national differences in the courses of study, international data are similarly hard to interpret, which complicates the interpretation of the data related to the international comparison of the students studying in the Hungarian VET system. Participation in secondary vocational education in OECD countries ranges from 24% (Hungary) to 77% (Austria). Undoubtedly, countries with higher percentages tend to be more developed, while countries with lower percentages tend to be less developed, with some notable exceptions (e.g. Slovakia and the United Kingdom). The percentages are influenced not only by the vertical structure between vocational education and training programmes but also that *within* the programmes. The Hungarian vocational secondary school, for example, is generally divided into years of general education and vocational training. This means that in the first four years the majority of the students participate in general education (according to the ISCED

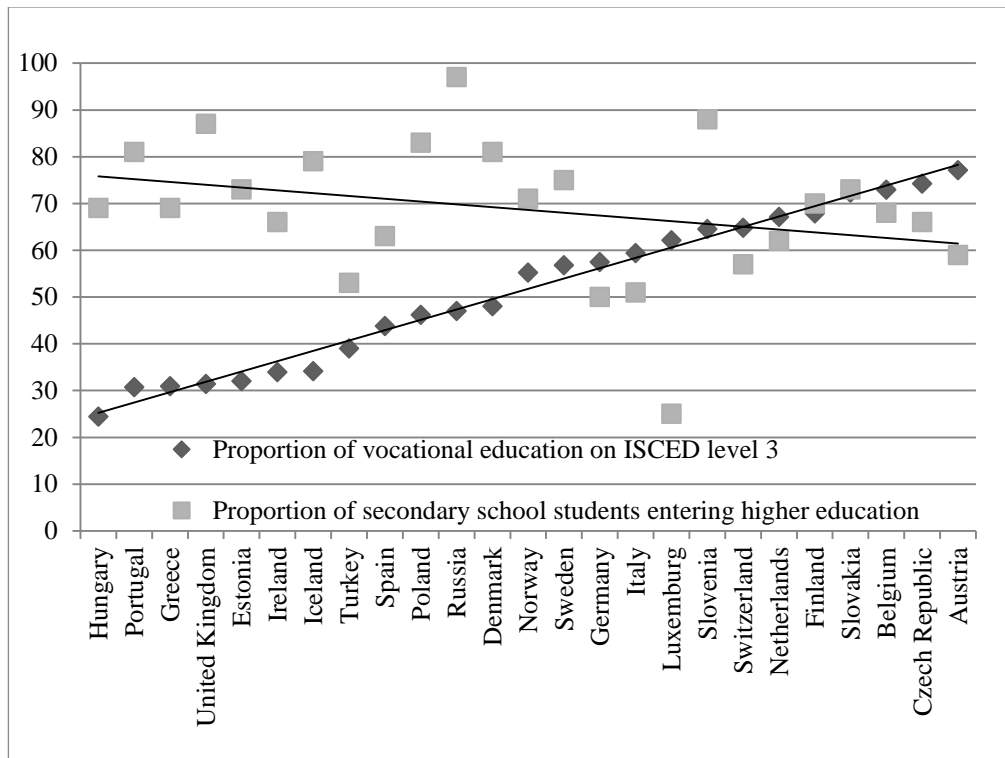
categories). In contrast, the Austrian BHS (*Berufsbildende Höhere Schule*), which is in many respects similar to Hungarian vocational secondary schools and allow almost unrestricted entry to further education, lack this rigid division into years. This means that according to the ISCED classification students attending this type of school belong to the vocational training system (ISCED 3B). In this way, the percentage of students in the Austrian vocational training is above that of Switzerland, although there only the dual system of VET really prepares students for the labour market.

The coexistence of parallel models on an international level means that it is unclear what the participation in VET involves as secondary education in the various nations has different functions. We examined two possible relationships with the help of statistics: the influence of participation in vocational training on students' entry into higher education and its benefits in the labour market.

The relationship between the participation in vocational training and higher education can be sensed but it is not particularly strong. As shown in the figure below (Figure 2.4), vocational training and higher education studies are in inverse relation but there are significant differences between individual countries. Based on this we can state that participation in vocational training reflects a lag. The interpretation of the data can be influenced by the fact that we compared the number of students choosing higher education to those who completed their secondary studies; however, in some countries the proportion of those who get a secondary qualification is very low.

**Figure 2.4.**

*Students in vocational training and secondary school students entering higher education*



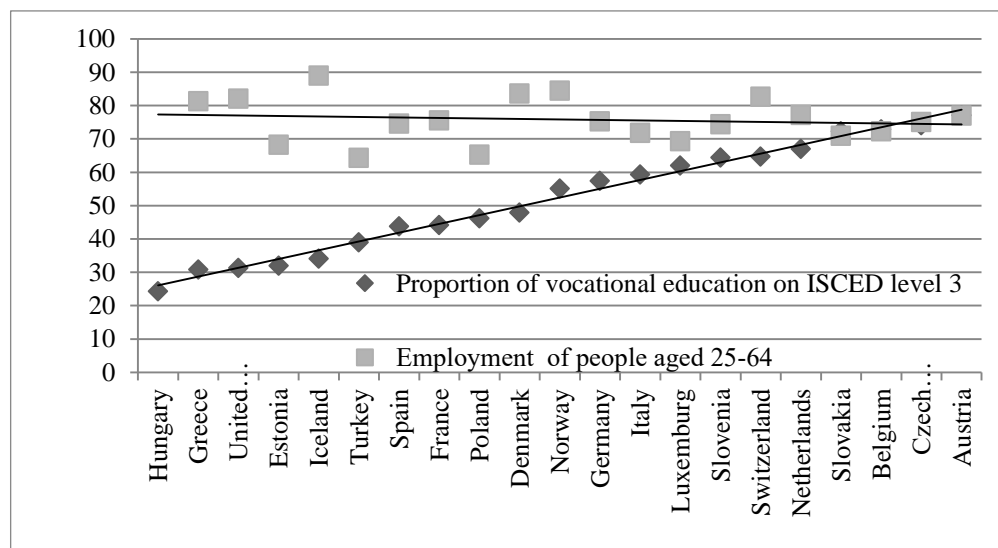
Source: *Education at a Glance*, 2010

The labour-market benefits of the participation in vocational training are also relevant as long as it provides an opportunity for a good income or greater chances of finding a job. The international data at hand only offer a limited possibility to look for connections, as these effects are only measured according to the level of the qualification and not to the content, which means that they do not differentiate between people with secondary qualifications irrespective of whether they have a vocational or a general qualification. Therefore, we can only make a comparison between the proportion of students in VET and the level of employment of the people with secondary school qualifications.

The data indicate that there is no connection between the variables, which means that the number of students in secondary vocational education, just like the differences in the structures of education, do not influence chances in the job market (Figure 2.5).

**Figure 2.5.**

*The significance of secondary vocational education and the employment of people with secondary vocational qualifications*



Source: *Education at a Glance, 2010*

This all shows that the proportion of people with a secondary vocational qualification has no indicative value. No matter which model we consider, it cannot be evaluated either as a clearly positive or negative process – it has become an in-between stage. In certain countries, however, we do not have to calculate with the effects of different models, or only to a very small degree. Here the different models can be substituted by identical or almost identical alternative courses of study.

These alternative courses can be found in Hungary. They are presented in Table 2.4. Five out of the eight courses of study supply the same qualifications – a vocational and a secondary qualification. Picking any one of these courses would be senseless as they depend on the proportion of students participating in the various alternative courses. Added to the five courses there is a sixth one, which is identical to the previous ones in terms of vocational qualification, but it does not give a secondary qualification.

**Table 2.4.**

*Courses of secondary studies in Hungary*

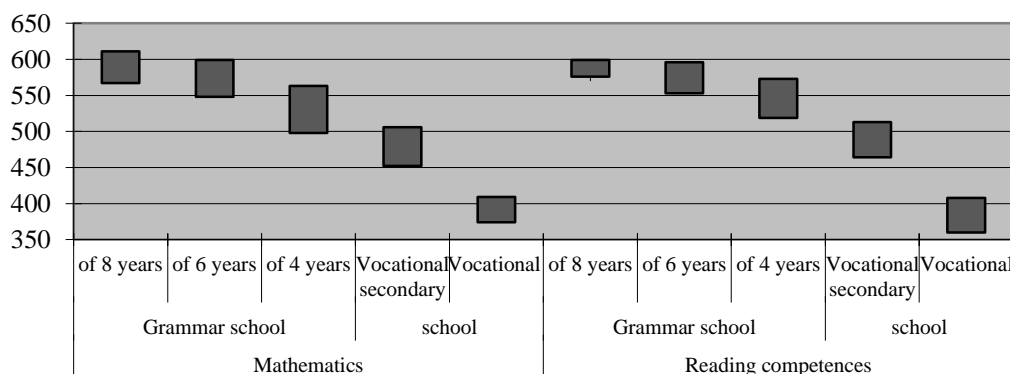
	<b>Phase 1</b>	<b>Phase 2</b>	<b>Time typically spent with studying</b>
<b>1.</b>	Vocational training	–	4 years
<b>2.</b>		<b>Secondary adult education</b>	<b>7 years</b>
<b>3.</b>	Grammar school	–	
<b>4.</b>		<b>Vocational school – secondary vocational training</b>	<b>6 years</b>
<b>5.</b>		<b>Vocational courses training</b>	<b>5 years</b>
<b>6.</b>	Vocational secondary schools – general training	–	4 years
<b>7.</b>		<b>Vocational school – secondary vocational training</b>	<b>6 years</b>
<b>8.</b>		<b>Vocational courses training</b>	<b>5 years</b>

Based on schooling statistics in Hungary, student numbers in vocational training schools have dropped from around 50% to 22-24% at the end of the 1980s. Considering that all students who finish their primary education continue their studies – if not for other reasons, because of compulsory education – everybody, apart from those who do not finish their primary school education, goes on to secondary education. Among the three alternative education programmes, vocational training schools have by far the lowest prestige, which is indicated, among others, by the data gained from the national assessment of competences. The competence test results of the best quarter of the students from schools offering vocational training are far below the weakest quarter of the students in vocational secondary schools (Figure 2.6).



**Figure 2.6.**

*Average scores in mathematics and reading comprehension in form 10 by education programmes, related to the composition of students in schools*



*Source National Competence Assessment, 2009*

Considering that according to the PISA data related to Hungary, of 22% of all 15-year-old students did not reach the pass mark in mathematics and 18% did not pass the reading comprehension test, it is obvious that a considerable proportion of students in vocational training schools is not suitable for vocational training (Balázs et al. 2010). If this is true, it undoubtedly means that vocational training school attendance is an indicator appropriate for describing negative tendencies as it does not mark the positive relation to the vocation and through this the relation to the labour market, but rather a lagging behind. Yet, we cannot recommend using it as an indicator in this sense, as, despite the high dropout rate, it still teaches students a vocation, and through this it ensures a job – although there is a high unemployment rate among the young people starting out on their career. At the same time, this calls attention to emergent processes within the vocational training programme that are worth registering. There is a clear divide between the students gaining the qualification and the ones who drop out not only in terms of their qualification but also in their chances in the labour market. According to some data from 2010, in the population aged 15-64, 24.5% of the people with only a primary school certificate (ISCED 2) and ‘only’ 12.3% of the people with vocational training qualification are unemployed.

## 2.5. Learners in Formal Education: Statistical Indicators

This sub-chapter deals with the statistical indicators. We examine how the processes of formal learning could be turned into statistical indicators as these are necessary for studying the learning regions in Hungary.

Developing the indicators of formal learning, we took into consideration the traditional measures belonging to the different levels of education and we also included the indicators related to the socio-economic environment of the educational institutions. In addition, the measures studied by the *Deutscher Lernatlas* (2010) and by the Canadian Composite Learning Index (2011) were also authoritative.

In the *Deutscher Lernatlas* formal learning – or its verbatim translation, school learning (*Schulisches Lernen*) – is divided into two basic parts by the researchers who examine school education and higher education separately. On the levels of secondary education the results of different competence assessments appear (including reading skills in the native language and in a foreign language, and competences in mathematics and natural sciences), together with the number of students who had to repeat a form, and the ones who dropped out, as well as the adults learning in the school. To explore higher education, they used the proportion of the 25 to 34-year-old young adult graduates and the education programmes in the various regions. The indicators were compared in 6 different regions, which were defined on the basis of the size and type of settlements.

In the development of the Composite Learning Index formal learning is placed on the pillar of Learning to Know along indicators such as accessibility of learning, availability of institutions, the proportion of postgraduate students, the dropout rate as well as reading and writing skills. The indicators examined within these categories were the time it takes to get to the institution, the proportion of graduates of ages 25-64, the proportion of students of ages 20-24 taking part in continuing education, the number of young students who drop out at the same age and finally their key competences at the age of 15.

When designing indicators for formal learning in the Hungarian learning atlas and adapting them to both studies, we divided institutionalised learning into two stages. As seen in the atlases presented, the results of various competence assessments (PISA, IQB) were used for the study of school education. In the first phase of the study we also made use of this opportunity, but later we removed these indicators. The reason for this is to be found in the novelty of international research. On the one hand, we could not project it on the entire Hungarian population, as the different age groups participated in different assessments (or were not assessed at all).

On the other hand, the changes in the content and the methodology of education (content-based vs. competence development) and the purpose of the assessments (competence-based) took time and in some age groups of the population the results of these studies were difficult to compare and contrast. We were of the opinion that the traditional hard indicators reflect the current learning atlas in a more reliable way. Therefore, we suggested statistical measures such as the number of people completing various levels of education, the number of students finishing their studies in different types of schools, the teacher-student ratio, the institutions classified by maintainer, as well as the dropout rate, which was also used in the atlases we referred to, and the availability of institutions.

With respect to higher education, we also found it important to study the educational programmes on offer, their accessibility and the proportion of graduates. At the same time, we also considered the ratio of students with a pre-degree certificate and those who have graduated, the rankings of higher education institutions, the geographic location of the institutions, the number of students in different fields of study and courses. We also found it significant to examine the composition of students with respect to non-traditional learners, as long as this could be read from statistical data (e.g. the proportion of the two genders, the proportion of students with disability, Roma and foreign students).

Apart from the indicators related to the educational institutions, it is also important to get an image of the demographic situation. Therefore, we suggested the inclusion of demographic data connected to formal learning. This involves the proportion of students under the dropout age, the number of people belonging to various age groups in the population, the gender proportions and regional data on the natural population growth and decrease.

From the indicators we employed to explore formal learning we used the ones we deemed as the most important in the final index. On the basis of this index the statistical-cartographical group created the complex index of formal learning. The demographic background was included as part of the so-called aging index, which is the ratio of the population above 65 and below 14. Although we did not use the results of the competence assessments based on the reasons detailed above, we did consider the proportion of illiterate people – people above 10 who have completed less than a year in primary education. To portray the number and level of qualifications, we included the proportion of graduates and those who have completed primary school to make up the final index (the latter involving the population above the age of 14 who have at least a primary-level certificate).

With respect to the socio-economic environment of formal learning, we included two indicators in the complex index, that of unemployed graduates and the availability of institutions. The data were broken down to the level of settlements.

\*

This chapter dealt with the processes of formal learning in Hungary. The processes of formal learning are the most important for a statistical analysis of the various learning regions, towns and communities. We have examined traditional and non-traditional learners in the school system and in school-based vocational training. Based on this we have suggested the indicators of formal learning, which will contribute to the exploration of learning regions.



## ***Chapter 3***

### ***Pillar II: Non-Formal Learning***

#### ***Learning outside the School***

*Zoltán Györgyi, Edina Márkus*

The previous chapter focused on the processes of formal learning. We examined how the processes of formal learning contribute to the formation of learning regions and how these processes can be measured. In this chapter we interpret the processes of non-formal learning. By non-formal learning we primarily mean learning taking place in adult age. This kind of learning mainly happens at the workplace (work-based learning), but it can also consist of courses organised outside the school. In the first subchapter we provide an overview of the different trainings courses for adults. In the second subchapter we deal with work-based learning in Hungary. Finally, we look for statistical indicators with the help of which we can describe the types of non-formal learning within the learning regions.

#### ***3.1. Pillar II and the Learning Region: Theoretical Considerations***

This chapter addresses the question of how non-formal kinds of learning contribute to the formation of a learning region.

Non-formal learning has various definitions. In an international context, its key document is the Memorandum on adult learning. The notion by all means refers to organised learning taking place outside the framework of schools. The major interpretational problem here is locating vocational trainings outside the school system. According to the most often quoted definition differentiating between formal and non-formal training/learning,

By formal learning we mean the activity of learner groups arranged into an age-based hierarchy learning under the leadership of certified and trained instructors. The goal, the contents, the time and the place of the learning activity are all precisely regulated. As opposed to this, non-formal learning includes those different courses, seminars and activities organised under similar circumstances that are led by professional trainers and are organised outside the school system. Their goal is to transmit knowledge and develop the learner's skills and personality. Both formal and non-formal trainings are characterized by organisation and regulation. (Tót 2002)

The position of vocational training outside the school system cannot be clearly deduced from this definition, as the contents, the time and the place of the training are regulated in a precise way under certain conditions. However, it does not function according to age-based learning group hierarchy categories. From now on we categorize this kind of training as non-formal training.

The contents of non-formal training can be very diverse, in accordance with the contents of the trainings in the same category. Partly based on theoretical considerations and partly on research on the precedents, we examine non-formal training emphatically from the aspect of the labour market. Even though we are aware that it has components which cannot be directly linked to labour market efficiency – as vocational training also has social, region developmental, etc. functions as well –, but at the same time we know partially from previous Hungarian surveys (for instance, Györgyi, 2003, Török, 2006) that participation in vocational training (in Hungary) is basically aimed at keeping or improving a position on the labour market. Based on the European Union's national reports on education (Eurydice) it can again be outlined that – perhaps with the exception of a few countries (such as Sweden) – adult education is interpreted partly (to a smaller extent) as adult education in a school framework, and partly as non-formal training providing professional knowledge. The interconnections of learning and the labour market is a central question also in the case of OECD, and *Educational at a Glance*, an annual statistical publication focusing on education, represents this view with a wide range of indicators.

Non-formal training has gained a special significance with the increase in need for lifelong learning. The latter notion articulates a general need for adult learning, or more precisely, learning from a position already on the labour market, which is connected to employment on the labour market and – resulting from the age of the person in question – own family background. Thus, the chances of taking part in formal education are small, and this necessarily brings to the forefront kinds of learning taking place within non-formal frameworks.

The Hungarian legal and statistical system handles trainings taking place in the school system and outside of it. The former kind has plenty of detailed data on it but in the case of the latter there are many incidental elements involved. Not only the magnitude is uncertain but in many cases also the definitions applied.

As a result of the above mentioned features, non-formal training cannot only be interpreted on the national level, but the measure of participation, its contents and features are also strongly representative of a smaller area's economic and social processes. This connection is much more ambiguous than in the case of formal

education, since training opportunities and the level of participation in the learning process are at the same time consequences of the developmental position of the given region and also greatly determine the region's future. The supply of trainings and participation – as opposed to formal training – are much less regulated by such equalizing state mechanisms as compulsory school attendance, the contribution of the state to school maintenance, and the laws concerning the functioning of schools, etc. At the same time, the educational supply of a given region is determined by educational enterprises (which can actually subsist by providing this service) and viable economic organisations (well provided with capital) also offering work-based trainings, as well as the transport facilities and the population which is able to improve its labour market position via learning and can cover the expenses of learning. The lack of all of these factors can somewhat be compensated by state interference, but – at least in the Hungarian context – they cannot fundamentally change them.

Migration is also an important factor. Usually it is the more educated and at the same time more motivated layers of the population that start to migrate from regions burdened with economic recession, that is, precisely the people whose motivation and relatively good financial situation are matched by an increased willingness to learn.

As a result of all of these features the participation of regions under recession in non-formal learning is affected negatively by several factors, and these in turn influence the resources of the given region which can be traced back to learning.

In Hungary a few state interventions are trying to slow down this process, which could be described as a negative spiral. On the individual level this primarily means the support of trainings for the unemployed, on the regional level it consists in the categorisation of microregions and districts<sup>1</sup> based on their economic situations, and also the manifold support of the most disadvantaged regions, also affecting non-formal trainings, among other things.

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<sup>1</sup> Since 2012 instead of the previous system of microregions based on the cooperation of local governments, districts have increasingly constituted the smallest regional level of polity above the municipalities. The number of these is distributed along the 196 districts, the smallest one has a population of 8800, while the biggest one 250 thousand.



### 3.2. General Adult Education

This subchapter examines the non-formal learning of adults in different non-school-based training forms.

The division of adult education outside the school system for professional, linguistic and general purposes has general training as one of its main fields. In the narrow sense the latter can also be regarded as part of general adult education (Márkus 2013, p. 6). The previous definition approaches the phenomenon from the direction of institutions but there is another way of defining general education which considers the role of content elements (Márkus 2014). Law No. 2001/CI on adult education has not been in force since 1 September 2013, but for more than ten years it had a critical role. In this sense general education means *‘a training which is aimed at increasing general knowledge which contributes to the development of an adult’s personality, the equality of social opportunities and the formation of citizens’ competences’*.<sup>2</sup> The presently effective statute on adult education is Law No. 2013/LXXVII, which does not use the term general education but the notion of ‘other training’. However, if we take a look at this definition, in terms of its contents it can be identified with the meaning of general education mentioned in the previous law. Based on this insight, this so-called other training means *‘a training which is aimed at the increasing of general knowledge, it is oriented at the development of competences that cannot be connected to an identifiable vocational or professional qualification or language training, it contributes to the development of an adult’s personality, the equality of social opportunities and the formation of citizens’ competences’*.<sup>3</sup> This is an exclusive definition, but similarly to the definition of the 2001 law, professional, linguistic and general (as per the terminology of the new law this is called ‘other’) areas may be differentiated on these bases within the field of adult education outside the school system.

The most widely used definition in Hungarian research is the one to be found in Sz. Tóth’s (n. d.) work on the development of general education, and it is the following: the field of general adult education includes the teaching and development of general knowledge and skills independent of vocation but at the same time applicable to various fields.

In the international context there is a precedent to the analysis of adult education with a general purpose. In the past few years with the participation of European countries

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<sup>2</sup> Law No. 2001/CI

<sup>3</sup> Law No. 2013/LXXVII

an international comparative analysis has been carried out in this field called ‘Non-Vocational Adult Education in Europe’ (Eurydice 2007). However, the approach in this case is somewhat different: it applies an exclusive definition of general education, the notion of non-vocational adult education (NVAE). This is a much broader notion than the Hungarian interpretation, which includes linguistic and IT trainings as well, that is, all kinds of trainings that are non-vocational and do not provide a professional qualification – independent of the fact whether they are programmes organised within or without the school system (Márkus 2013, pp. 6-7).

Those working with this subject typically narrow it down and/or concentrate on general educational programmes in school-based adult education (which is also called formal) or on adult education outside the school (for which the term non-formal is most often used).

Considering general trainings, we can rely on the Hungarian data found in OSAP’s adult education statistics no. 1665 for a statistical representation of available data.<sup>4</sup> Beyond this, there are other accessible statistical data and records as well.<sup>5</sup> These are worthwhile to analyse independently because they have been compiled with the help of different data sheets and questionnaires compiled by different organisations, and presumably there can be overlaps between their data. Thus, the institutions providing adult educational activities and pursuing activities concerning generally oriented adult education (which can be very diverse, including state-run, market-based and non-governmental organisations as well) can rather be presented independently from the kinds of training activities which are carried out by community cultural institutions (and Integrated Communal Scenes) on their own as well as in cooperation with others. In the present subchapter we rely on the statistical data of adult education.

It has to be mentioned that the OSAP database is often criticized for not being comprehensive and that several organisations do not meet their data supply obligation. However, if we take into consideration the number of institutions/organisations providing answers in the past few years, especially the past three years, the results show a relative stability. As we can see in the data of Table 3.1, the number of organisations providing general training in 2011-2013 has been around 300.

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<sup>4</sup>[https://osap.nive.hu/docs/osap1665\\_2012.pdf](https://osap.nive.hu/docs/osap1665_2012.pdf).

<sup>5</sup> For instance, there is an opportunity to access information thanks to the data supply of community culture and community collection institutions. In *The report on the activities of community culture organisations* (OSAP 1438) organised trainings also appear in the data group in connection with systematic cultural forms. Also, in the data of the *Report on the activities of libraries* (OSAP 1442) and *The data of museums* (OSAP 1444) there are data indirectly connected to general education. Beyond OSAP statistics there are also other records available.

**Table 3.1.**

*The number of institutions providing training based on the nature of the training (2008–2013)*

The nature of the training	2008	2009	2010	2011	2012	2013
Basic training founding vocational qualification	109	51	21	33	22	27
Providing an OKJ vocational qualification recognized by the state	429	434	374	445	459	456
Providing non-OKJ vocational qualification necessary for an activity or a job	167	197	114	110	117	105
Professional further training	272	305	270	339	306	313
Training to integrate the disadvantaged	12	23	8	7	9	4
Training to help employment and entrepreneurship	44	51	19	38	30	27
Training to prepare for qualifications related to various state authorities (transport, broadcasting and water conservancy)	79	67	61	65	74	68
Training to prepare for a qualification for chartered accountants	0	0	0	0	0	1
Language training	201	244	228	276	287	294
General adult education	174	252	208	280	271	308
Rehabilitative training for those with a reduced capacity to work	3	20	2	1	2	1
IT Trainings	124	130	82	93	75	87
Preparing for input competences	0	0	0	0	4	1
<b>Total</b>	<b>1.614</b>	<b>1.774</b>	<b>1.387</b>	<b>1.687</b>	<b>1.656</b>	<b>1.692</b>

Source: OSAP 1665 <https://statiztika.nive.hu/>

If we consider the number of courses in Table 3.2, we can see that there can be considerable differences year by year, which can even be a tenfold difference, as we can see between 2012 and 2013. Regarding only the general trainings we can state that in the year 2013 a significant increase was experienced, in the background of which we might identify the training programme for public servants but other central programmes as well (mostly financed from EU sources).

**Table 3.2.**

*The number of trainings (courses) based on the nature of the training (2010-2013)*

<b>The nature of the training</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
<b>Basic training founding vocational qualification</b>	346	641	248	370
<b>Providing an OKJ vocational qualification recognized by the state</b>	6.749	7.763	7.964	10.056
<b>Providing non-OKJ vocational qualification necessary for an activity or a job</b>	4.444	3.421	3.537	3.863
<b>Professional further training</b>	11.831	11.229	11.307	11.816
<b>Training to integrate the disadvantaged</b>	182	111	175	310
<b>Training to help employment and entrepreneurship</b>	354	485	421	592
<b>Training to prepare for qualifications related to various state authorities (transport, broadcasting and water conservancy)</b>	1.670	2.203	3.128	3.339
<b>Training to prepare for a qualification for chartered accountants</b>	0	0	0	17
<b>Language training</b>	22.686	25.421	18.441	22.650
<b>General adult education</b>	4.797	4.856	3.962	6.282
<b>Rehabilitative training for those with a reduced capacity to work</b>	77	39	34	27
<b>IT Trainings</b>	3.806	5.130	3.217	4.147
<b>Preparing for input competences</b>	0	2	32	43
<b>Total</b>	56.942	61.301	52.466	63.512

Source: OSAP 1665 <https://statisztika.nive.hu/>

Table 3.3, shows the number of people finishing their trainings between 2010 and 2013. We can also see here a significant jump in year 2013, which really makes sense as with the increase in the number of courses the number of participants and the number of those finishing the trainings were also expected to rise. This increase can be seen in almost every training type, in the case of general trainings in 2012 and 2013 this means altogether 23074 people.

**Table 3.3.**

*The number of those finishing the training based on the nature of the training (2010-2013)*

<b>The nature of the training</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
<b>Basic training founding vocational qualification</b>	3.804	6.995	3.442	4.654
<b>Providing an OKJ vocational qualification recognized by the state</b>	101.174	107.644	110.909	148.197
<b>Providing non-OKJ vocational qualification necessary for an activity or a job</b>	56.996	50.062	52.860	55.855
<b>Professional further training</b>	223.281	234.627	224.260	205.978
<b>Training to integrate the disadvantaged</b>	2.978	1.494	2.810	4.853
<b>Training to help employment and entrepreneurship</b>	5.224	6.692	5.829	8.558
<b>Training to prepare for qualifications related to various state authorities (transport, broadcasting and water conservancy)</b>	40.740	45.197	48.956	49.961
<b>Training to prepare for a qualification for chartered accountants</b>	0	0	0	286
<b>Language training</b>	82.777	82.805	62.421	121.319
<b>General adult education</b>	73.278	72.988	60.687	84.161
<b>Rehabilitative training for those with a reduced capacity to work</b>	888	391	432	803
<b>IT Trainings</b>	31.110	63.626	25.930	45.622
<b>Preparing for input competences</b>	0	53	423	544
<b>Total</b>	622.250	672.574	598.959	730.791

Source: OSAP 1665 <https://statisztika.nive.hu/>

However, we can also claim that general adult education is understood narrowly in the OSAP 1665 statistics, because if we rely on the definition of general adult education quoted in the introduction, then certain community group trainings can also be included in this circle. If we take the European definition on non-vocational adult education as a point of reference, then even language and IT trainings could be listed here.

We can argue that Hungarian adult education has the area of general education as one of its important fields; however, as a result of the varying kinds of statistical data collection methods, the results cannot be synthesized. The actors of several branches and many sectors are active in this field, and since these training programmes are not necessarily accredited/approved, most of them do not even occur in the registries. Consequently, the above presented data do not provide a comprehensive picture.

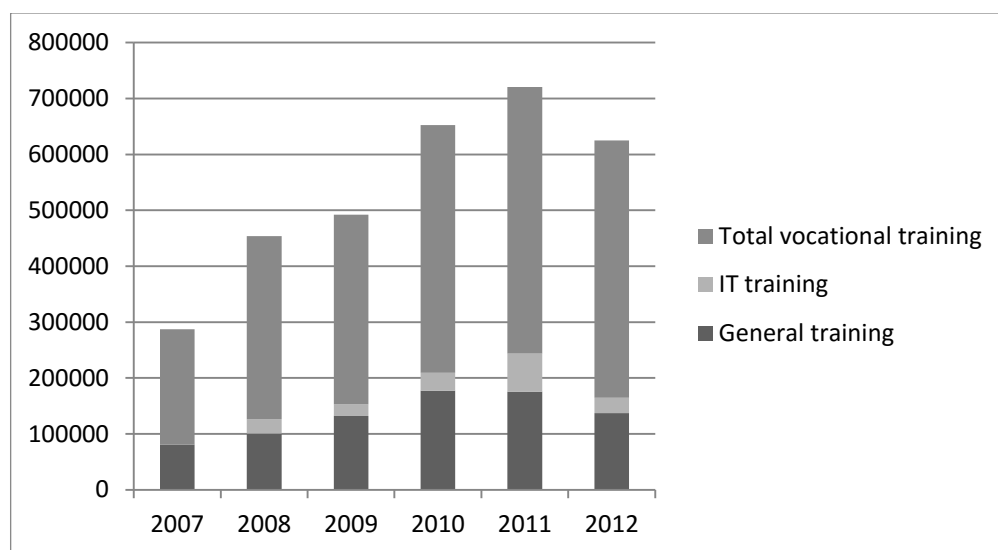
### ***3.3. VET Outside the School System***

This subchapter examines how non-formal education takes place at workplaces (work-based learning) in Hungary. The increased appreciation of vocational trainings outside the school system in the 1990s in Hungary can be linked to the change in the structure of secondary school education. In the period after the millennium, however, this is not the case anymore, because the proportions of secondary educational programmes have hardly changed. We cannot claim that making up for a vocational qualification not acquired on that level influenced the ground-gaining of vocational trainings outside the school system. We can rather talk about processes reacting to demands on the labour market.

Figure 3.1, shows the increased number of students participating in vocational training, and their proportion non-formal training in the past six years.

**Figure 3.1.**

*The number of participants in non-formal learning in Hungary based on the nature of the training\**



Source of data: OSAP 1665 database

On a national level we can hardly say anything more about non-formal vocational trainings. Behind the increasing numbers we obviously find not only an increasing willingness to learn but also the wide supply and the necessary financial resources. The sum of all these factors, their unison provides the basis for the increase in this sector. Considering the fact that we cannot outline a vertical structure here – as opposed to school-based education – the total number of participants provides a fitting description of the whole system, which also means that it has an indicator value.

A considerable slice of non-formal vocational trainings is provided by trainings supported by the workplace, possibly even especially ordered by the workplace. The latter case does not necessarily appear in the national statistical system because external organisations are not always included in it, which would notify their trainings. Precisely because of this phenomenon the periodic surveys of the Central Statistical Office have a special significance. The last one took place in 2011 and indicates that since the first survey done eleven years ago there has been a major step forward: a significantly bigger number of companies are now supporting the training of their workers in comparison with earlier results. In all three categories there has been an increase, but at the same time one can also see that the advantage of the big companies, which used to be the most active previously as well, increased even further (Table 3.1).

The proportion of the workers participating in trainings in the case of the biggest companies is 25%, in the smallest companies it is 11%, and the latter is also proportionate with their participation. The training proportion of medium-sized companies is 14%, which refers to the fact that only a very small amount of their workers access this support (26% of the workers of the biggest companies which are supporting education take part in some kind of training provided by the company, in the case of medium-sized companies this number is only 14%) (Statistical Mirror, KSH 2012/16, Table 3.4).

**Table 3.4.**

*The proportion of enterprises supporting trainings based on headcount categories in %*

<b>Headcount category</b>	<b>1999</b>	<b>2005</b>	<b>2010</b>
10–49 people	32	43	43
50–249 people	51	79	74
Over 249 people	79	92	95
<b>Total</b>	37	49	49

*Source: Statisztikai Tükör (Statistical Mirror), KSH 2012/16*

Regarding the fact that developed regions are more characterised by bigger, often multinational companies, this – translated into a regional approach – means that regions of a more favourable position have a greater chance to increase their knowledge capital.

The lack of support for trainings basically has two reasons, the first one is that the companies have enough qualified employees, and the other is that if they do not have enough of them, they can still find the needed workforce on the labour market, and this option is naturally more favourable for them than re-educating any of their employees.

### **3.4. Non-Formal Learning: Statistical Indicators**

In this subchapter we present the statistical indicators fit for examining non-formal learning from a regional perspective. By doing so we can enrich our picture of the learning regions. The definition of the size of the examined regional units is a key



question. The LeaRn research has three regional studies as its precedents which rely on significantly differing sizes of geographical units. The ELLI index (Saisana 2010) regards European countries as its basis, CLI made its calculations based on Canadian provinces and major cities, while in the case of DLA the so called Landkreis provides the basic unit.

In the case of a Hungarian study the units of CLI and DLA can come up as a model. Canada with its approximate population of about 30 million and the size of its 10 provinces is approximately the double of a Hungarian region. But it is partly the independence of the provinces and the great distances which make these provinces much more possible to be treated as independent research units. Hungarian regions are not organic units, they do not have independent public or professional administration or a historical past or an independent identity. The microregions on the other hand do feature these characteristics, since they are based on historically evolved districts. The administrative units of DLA also rely on the very same measure when they take the Kreis (circuit) as the basis of their interpretation. Considering the concrete number of inhabitants we experience that these are significantly bigger than the above mentioned Hungarian units. We have made the comparison based on a province having a population similar to Hungary's (Table 3.5).

**Table 3.5.**

*The subregions of Bavaria and Hungary*

	<b>Bavaria (Landkreise)</b>	<b>Hungary (microregions)</b>
<b>Population (thousand)</b>	1.2539	9.985
<b>Number of subregions</b>	96	176
<b>Minimum population (th.)</b>	39	6,4
<b>Maximum population (th.)</b>	1.353	1.730,0
<b>Average population (th.)</b>	130,6	56,7
<b>Population: &lt;40 th.</b>	1%	59%
<b>Population: 40-100 th.</b>	39%	32%
<b>Population: 100th. &lt;</b>	60%	9%

*Source: Bevölkerungsstand Bayerns am 30. September 2011. Bayerisches Landesamt für Statistik und Datenverarbeitung. Statistische Berichte.*

<https://www.statistik.bayern.de/veroeffentlichungen/download/A1100C%20201143/A1100C%20201143.pdf> and KSH Informational Database <http://statinfo.ksh.hu/Statinfo/haViewer.jsp>

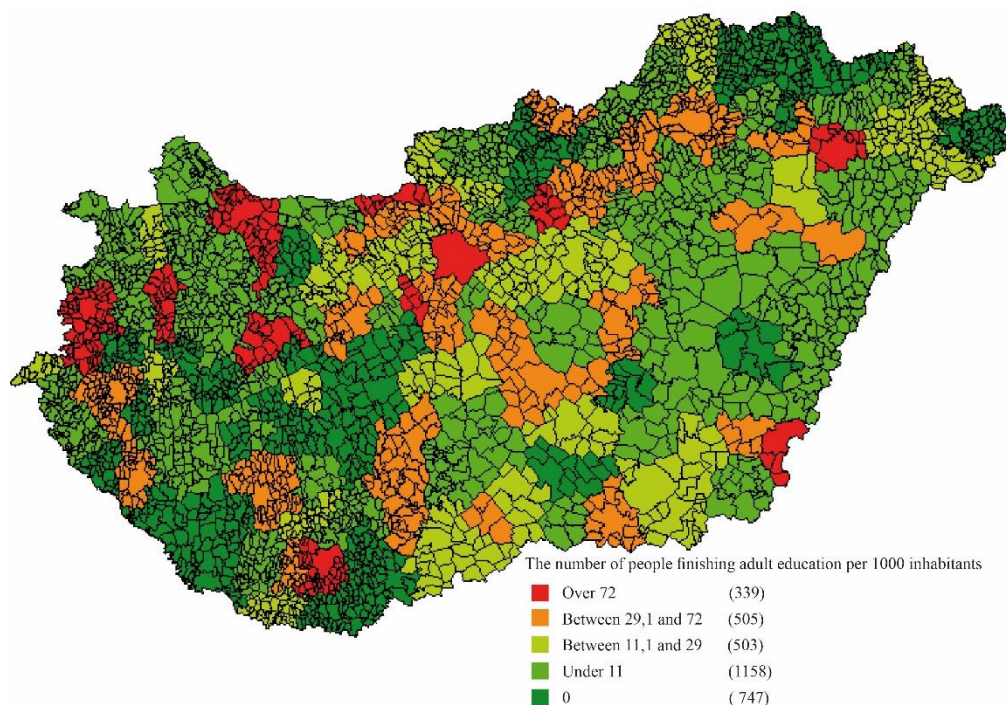
The size of the regions especially matters when it comes to the data concerning the capacity for trainings. It is really important in connection with vocational training, since its professional segmentation delimits a detailed regional analysis. It is worthwhile to include such data in the survey when these capacities are significantly serving the regional population and consequently the population of a given regions finds training capacity in its own region. The smaller the region is, the less it is fit for the description of its educational situation, and also that of its non-formal education. As a result, in the case of Hungarian surveys one has to be very careful when applying the indicators of educational capacities.

Despite the above mentioned problems we have placed the microregions into the focus of our analysis: within the Hungarian territorial distribution microregions can be regarded as the most uniform area units, having long-lasting traditions and services which – in spite of our doubts about vocational training – serve mainly its own population. Although this is not as true of the labour markets of the microregions, but in this regard we really cannot find a more usable territorial unit: for the various groups of the population the labour market is formed by different territorial units (Györgyi 2012). Another argument on the side of the microregional approach is that in the case of local surveys the size of microregions makes possible the detailed examination of learning and its determining factors, and, last but not least, the examining the impact of the given microregion's economy on learning, that is, the analysis of the learning regions.

Participation in non-formal learning in the Hungarian statistical system means adult education outside the school system. Microregional maps indicate that the intensity of this is primarily – but not exclusively – connected to certain major cities. Some of these major cities have a markedly developed economy (Győr, Szombathely), which – as we have indicated – might influence both the supply and demand in training. However, other regions do not belong among the most developed ones: in some cases one can assume an abundance of educational capacity (for instance, in the case of a campus city such as Pécs), in other cases the role of being a county seat (with weak small towns, which are probably greatly attracted to the county seat of a central location in the field of education, too). In yet other cases neither of these factors appear, but – presumably – some kind of local cultural capital is present, which might appear either in the educational offer or in the students' demand, or both (Gyula) (Figure 3.2).

**Figure 3.2.**

*The number of people finishing adult education per 1000 inhabitants*

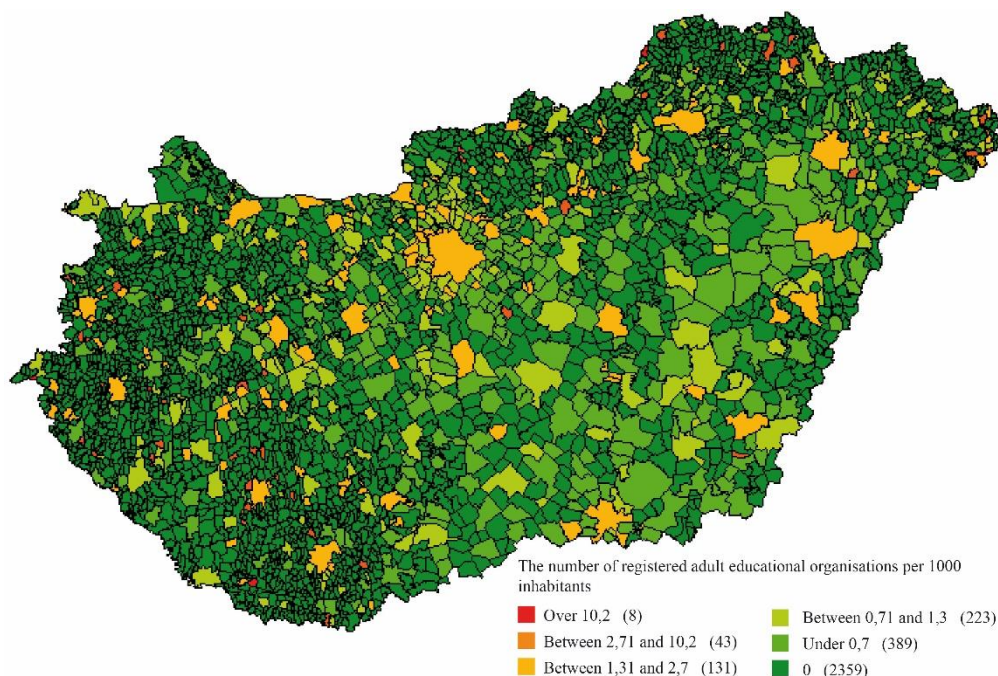


*Source: based on the data of [www.nive.hu](http://www.nive.hu), Czimre–Márton–Teperics, 2013*

Participation in training – based on the number of organisations providing it – can rather be determined by the students’ demand than the supply. At least this seems to be the case as the supply is usually more even: in the case of small settlements there is hardly any, while in major cities there is but a small difference only (Figure 3.3).

**Figure 3.3.**

*The number of registered adult educational organisations per 1000 inhabitants*



*Source: based on the data of [www.nive.hu](http://www.nive.hu), Czímre–Márton–Teperics, 2013*

In this chapter we have examined the processes of non-formal learning. Non-formal learning – partly referring to course trainings for adults, but mainly meaning work-based learning – emphatically enriches our earlier picture of the learning regions (the indicators of formal learning). Work-based non-formal learning is usually condensed in an industrial centre, or places where there is a special cultural capital available. Courses and other kinds of learning are located in a more even way in space (they can be organised in settlements of varying sizes and having different features). The more even localisation of course-based and other types of learning can be one of the explanations why different regions can or cannot evolve as learning regions in Hungary.



## ***Chapter 4***

### ***Pillar III: Cultural Learning***

*Erika Juhász*

#### ***4.1. Pillar III and the Learning Region: Theoretical Considerations***

Cultural learning is a non-formal and informal type of learning realised through the greater system of institutions and tools of a given culture. Its history dates back to the birth of humankind, and its study has concurred with trends of cultural sociology. These surveys, however, primarily include the analysis of a partial field (reading, museum attendance, Internet use, etc.), for which we intend to provide a broader interpretive framework in this study. We present the institutional scenes and cultural tools through which certain forms of cultural learning may appear and become measureable. With the help of the cultural learning index compiled from nationwide statistics we pinpoint the interconnections which signal that a given region's state of development as per the social-economic index is in several cases (with the exception of Central Hungary) inversely proportional to its state of development as per the cultural learning index. Based on this we examine how the development of the infrastructure of cultural learning may affect the region's social-economic state.

The methodology of our study is provided by the German Learning Atlas (Deutscher Lernatlas – DLA), which analyses the learning regions and the social-economic impact of learning in connection to four learning dimensions (cf. Schoof et al. 2011):

1. Formal learning (related to the school system; in Hungary this includes compulsory and optional learning activities operated by the law on public and higher education, usually completed by earning some kind of general qualification and certificate)
2. Vocational training (mostly formal training aimed at obtaining some vocational qualification or further education in the vocation)
3. Personal learning (to be outlined in detail, as this provides the main basis of the current study)
4. Social learning (social, collective and political learning activities performed individually or in communities and NGOs)

DLA associates statistically measurable indices with these dimensions, and compares those in relation to differently sized German settlements.

Our LeaRn research is conducted in work teams in relation to these dimensions. In this study we have undertaken to present the major findings on the 3<sup>rd</sup> dimension. This dimension is termed ‘Persönliches Lernen’ in DLA, which may be translated as personal learning. Our team analysed the topic interpreted as ‘personal learning’ in the first two years (2012-2013). (members of the team were: Erika Juhász, Ph.D.; József Szabó, Ph.D.; Edina Márkus, Ph.D.; Márta Miklósi, Ph.D.; Irma Szabó, Ph.D.; Judit Dankó-Herczegh, Ph.D.; Klára Kovács, Ph.D.; Zoltán Attila Kenyeres, Tímea Szűcs, Krisztina Máté, Orsolya Tátrai.) On the basis of the main indices used in the German model, we included the dimensions of informal and general non-formal learning, which are separable from formal learning systems (e.g. public and higher education) and the professional part of non-formal learning, that is, vocational training. In this dimension German researchers (DLA) study four major areas, which are, however, given a much broader interpretation in the Hungarian context. Let us present the primary differences between the German and Hungarian interpretations:

1. General (further) trainings: German researchers mainly study people’s college training courses, while in Hungary this is a much wider field, including all general-purpose non-vocational adult education.
2. Participation in cultural life: in Germany this means visits to museums, theatres, concerts, etc., whereas in Hungary, in addition to the aforementioned, visiting community cultural institutions is prominent, also listing libraries, which DLA links with field 4 (media). (The system of cultural institutions in Hungary is provided for in Act No. CXL of 1997 on Museum Institutions, Public Library Services and Cultural Education, the title of which shows that museums, libraries and community cultural institutions are regarded as the three tiers of institutions mediating culture.)
3. Sports activities: the study of sport organisations and activities, which is analysed separately from professional sports, mainly as free time sports activities, in both the German model and our research,
4. Tools of the media: including mass communication from radio to the press and television and the Internet, as well as libraries in the German example, which latter we analyse in field 2 (culture).

These dimensions have been examined jointly or separately (mostly in this way) by other Hungarian and international researches as well, with lesser and greater deviances in the findings, collected and analysed here. From the analyses and interpretations it became obvious that in Hungary general adult education is difficult to separate from other areas of adult education: vocational training and language courses, as they are all governed by a unified law (Act No. LXXVII of 2013 on Adult Education), and thus their statistical data appear in the same records (in many cases inseparably from one another). The team has examined the area of general-purpose trainings within the framework of adult education from the 3<sup>rd</sup> year, 2014. (Therefore, the name and scope of the vocational training team has been extended to non-formal learning, including the whole of vocational and adult trainings outside the educational system. The world of school-based trainings is to be examined by the formal learning team, while team 4, investigating the topic of social learning, focuses on community learning through and by communities.) The three other areas mentioned (culture, sport, the media) are combined into a unified and broader interpretation of cultural learning.

In our interpretation cultural learning is a non-formal and informal way of learning realised by the wide-ranging systems of institutions and tools of culture, present throughout the individual's entire life with differing intensity and varying use of tools. The institutions of cultural learning include institutions of community culture, museums and libraries; various scenes of performing art (theatres, cinemas, circuses, musical institutions, dance institutions, fun fairs, etc.); sports organisations and the media (the press, radio, television, the Internet). The system of tools of cultural learning is widely available and ranges from passive and receptive genres (e.g. theatrical performances and puppet plays, visiting concerts or sports matches, watching TV, listening to the radio) to active and creative genres (e.g. a membership in amateur art groups, learning traditional folk dancing, free time sports activities, sharing Internet contents, etc.). The different forms of cultural learning permanently prevail in the individual's life even if there is a fluctuation in activity in each age group. This prevalence can be an autonomous, conscious learning process, when the individual begins learning in their own initiative, to develop themselves, with the help of the system of cultural institutions and tools in a guided (non-formal learning) or self-guided (informal learning) form (Forray – Juhász 2009). But the presence of cultural learning is observable as a spontaneous, unintentional process, too, when the individual attends cultural institutions accidentally or with a non-learning purpose (e.g. for entertainment), and enriches themselves with cultural learning in an unplanned way.



The interpretation of cultural learning evidently points toward it being a rather complex process, owing to which it and its elements are difficult to measure. Our research team undertook to make as many elements of cultural learning measurable as possible by accumulating the relevant interpretations, analysing national statistical data, and carrying out individual empirical research.

## ***4.2. The Scenes of Cultural Learning***

### *4.2.1. Cultural learning through the narrower system of cultural institutions*

Several researchers have attempted to define and interpret culture (see Maróti 2005, Koncz – Németh – Szabó 2008, Kroeber – Kuckhohn 1952). UNESCO's World Culture Report (1998) tried to define cultural through editing cultural indicators (Terry McKinley, Amartya Sen, Prasanta Pattanaik) and arrived at a rather broad definition: 'the way of people living together by influencing each other and cooperating – coupled with the way such interactions are justified by some system of beliefs, values and norms' (Bellavics 2000. 307). Culture is a descriptive and not a normative term here, meaning human development. The indicators of the report target the analysis of human development from a cultural perspective.

Canadian researchers have developed the Composite Learning Index (CLI), a system of indicators and tools for measurement, based on four pillars and suitable for measuring learning activities on a national, regional, microregional and settlement level. Of the four pillars our group chose the one called 'learning to be', referring to different aspects of cultural life. By it they understand abilities and activities that contribute to personal development (physical, spiritual, mental growth). They have attributed two indices to cultural life/learning:

- Learning through culture. This indicator shows how much money Canadian households spend on activities of culture and learning such as museum visits, music festivals or the arts.
- Access to cultural resources. This indicator presents the time needed to access museums and art galleries.

The two indices basically approach the problem from an economic standpoint, since one examines how much money of their income households allot to cultural consumption, and the other represents the possibilities of access, but this also has economic relevance. Getting to a given venue has a cost, and the time spent doing so involves an alternative cost. These indices, however, do not show the advantages of

cultural activity, if not based on continuous utilisation, that is, as a result of a longitudinal investigation – as long as the indices are unchanged, or increase – we may believe that the populace deems it beneficial to utilise cultural services.

The Cultural Statistics of the European Union contains statistical data, including data on Hungary. Their data also target economic indicators, primarily on cultural consumption (European Union, 2011).

The Statistical Institute of UNESCO also regularly compiles cultural statistics (UNESCO Institute for Statistics, 2009). In 2006 UIS sent out a report to developing countries to test the EU model (Eurobarometer) in connection to cultural activities. The report defines the uses of culture as follows:

- Home-based (e.g. watching TV, reading, use of the Internet)
- Going-out (e.g. visiting cinemas, theatres, museums)
- Identity building (e.g. amateur cultural activities).

UNESCO's World Culture Report (1998) attaches the following indicators to cultural activities according to its definition of culture:

- The performing arts: attendance, foreign tours, institutions, performances and attendance,
- Archives, museums: archived materials by length, attendance, attendance projected onto personnel, museum attendance, attendance projected onto personnel.

In Hungary the Ministry of Human Resources demands obligatory data supply from cultural institutions, called Cultural Statistics (EMMI, 2012). The main available indicators are about institutions and cultural consumption.

The comprehensive research on Hungarian cultural institutions beyond the borders of Hungary, organised and coordinated by the Institute for Research on Ethnic Minorities of the Hungarian Science Academy (originally initiated by the late Ministry of National Cultural Legacy), mainly involves research on institutions (Blénesi – Mandel – Szarka 2005). The questionnaire's professional questions emphatically include, in addition to the generic categorisation of individual art groups and science popularisation clubs, questions on the type of repertoire, the characteristics of membership, and attendance at the performances.

#### *4.2.2. Cultural learning through leisure sports*

Sports are interpretable as part of both an informal and a generally non-formal field of education. Different sources highlight different elements of the educational value of sports, but they all agree on one point: any kind of sport of any purpose has an impact on learning, apart from the effect on developing the physique and maintaining health. Of educational processes with regard to sports, we will focus on physical, moral, mental, aesthetic and community education. Success in sports, be it a competitive or leisure activity, reaching individual goals demands the consistent development of the sportspeople's character.

“Sport is not only physical education, but the most forceful and noble tool of educating the psyche... A sports team is the miniaturised version of society, and a competition symbolises the noble struggle for life. Sport teaches in a short time, through play, the most important virtues of citizenship: togetherness, self-sacrifice, the total subjugation of individual interest, perseverance, assertiveness, quick decision-making, independent judgment, absolute honesty and, above all, the rules of ‘fair play’, the noble fight.”  
(Szent-Györgyi 2006 [1930], 40)

According to Snyder and Spreitzen (1981), there are two directions in the relationship between sport and socialisation: one is socialisation in the world of sport, the other, socialisation by sport. In the first one, efficient sports activities are essentially a learning and socialisation process, and so research into the field concentrates on the physical and mental factors influencing participation in any sports activity. On the other hand, it is also important that doing sports is in general a community activity (individual sports achievements also involve at least a trainer or a PE teacher), thus it has several roles in socialisation. Socialisation processes in sport make possible learning values such as self-definition, ambition, sportsmanship, competition, the worth of hard work (Frey – Eitzen 1991).

In the field of research it makes a difference which type of the sport is being examined, as characteristically competitive sports and leisure sports are not analysed at the same time. Competitive sports are distinguished from leisure sports and play by the fact that competitive sports are usually characterised by a greater absolute set of norms and formal prescriptions (that is, rules) (Loy, 1974:41). These rules include – apart from the ground rules of the given sport – for example, the quantitative and qualitative criteria for attending the trainings.

The dimensions of investigation in the DLA research are also interpreted thus: sport is not only primary due to the importance of stamina, but also owing to its social and skills-development/learning functions (self-organisation, self-confidence, sense of reliability, team work, etc.). They think that sport keeps local societies together, has an integrating effect, and increases the appeal of a community. Here, however, it is also true that a very narrow area of the effects of sports clubs on a given region's cultural life, social capital and economic development is examined.

Of the four dimensions analysed in the CLI research 'learning to be/live' is attributed to the field of sports. Within this learning through sports appears, by which Canadian researchers measure sports and recreation activity. Beyond this, however, sport may appear in the dimension 'learning to coexist', as sport is in many cases a joint activity, thus learning rules and values necessary for coexistence, going to sports facilities and joining sports associations and clubs are also important elements.

Other international research and major indicators mainly investigate the sociological aspects of sport (Washington – Karen 2001.), its methods (Johanssohn – Turowetz – Gruneau 1981), its social impact (Mansfield 2007), etc., which are fields only bordering our research. The White Book on Sport (2007) deals with the role of sports in education and training. It expounds that sports, through their role in formal and non-formal education, reinforces Europe's human capital. The values mediated by sport contribute to the development of knowledge, motivation and skills, and the increase of personal dedication. Time spent with sports in school and at university has health and educational benefits, too, which must be enhanced. The European Committee encourages the support of physical activity through different political initiatives in education and training on the basis of experience gained in 2004's 'European year of education through sport', including the development of social and citizenship competences in harmony with the 2006 recommendation on key competences for life long learning.

#### *4.2.3. Cultural learning through media*

The importance of the media in the learning process needs no emphasis. Experts all over the world have long been intrigued by the inclusion and channelling of knowledge from non-formal and informal learning into formal training in the school system. Salomon's analysis highlights that gaining information from television is in many cases created by a so-termed drip-effect: the viewer picks up information and knowledge if they only watch TV for entertainment. Repeated statements from less cultured programmes also get integrated in the recipient's consciousness patterns and

influence their thinking and opinion (Salomon 1981). Comstock and Scharrer (1999) created three categories of motivation for watching television, which are the following, in the order of significance: escape from reality, reinforcing self-esteem through comparison and seeking information. According to Brown, Steele and Walsh-Childers' (2002) 'media practice model' what someone learns from the media depends on the viewer's motivation, the receiving situation, their own senses, their identity and their experience.

As regards the dimensions of analysis, the DLA research delegates to this subdimension the role of mass communication tools, the Internet and library in learning. Taking into account the Hungarian circumstances, we have recategorised library to the subdimension of cultural institutions, thus in the subdimension of media we deemed important the investigation of learning through four basic tools of media: the press, the radio, television and the Internet.

The four dimensions analysed in the CLI research (learning to learn, learning to act, learning to coexist, learning to be/live) include the field of media in the latter. Within this there appears the indicator of exposure to media, which expresses the access of Canadian households to traditional (books and periodicals) and modern media (Internet) tools, and provides information on the frequency of their use. The other indicator also examined in this analysis (use of broadband internet access) expresses the access to high-speed broadband internet.

Of the international surveys we deemed Van Evra's (2004) analysis on involvement related to television most suited to our subject matter. According to the study, watching television can be twofold: on the one hand, it can be a serious activity, an attempt on the viewer's part to gain information and knowledge from the content. The other kind of watching is when the viewer watches seeking recreation, distraction and entertainment. Regarding the social and economic status of viewers, the study establishes that viewers watching TV for significant periods of time include groups such as ethnic minorities, disadvantaged people, young people, the elderly, and less educated people. They are more likely to rely on information from television, and they have fewer and less varied alternative sources of it. Analysing viewers' preferences the study states that those looking for information have a completely different choice of content than those looking for entertainment. On the basis of all this there is also a difference for people using television with the purpose of learning. People utilising television consciously as a means of learning select contents more intentionally, view them more critically, and during reception they make a mental effort to process the information (Szabó – Kenyeres 2012).

‘Enhanced Learning Unlimited (ELU)’ project, carried out between 1 January 2006 and 30 June 2008 involved a Hungarian consortium partner, too. The goals included introducing and disseminating, through digital TV, the opportunity of learning at home, at the office and at school (ORT France, 2009)

Hungarian media studies has significant database on the topic, of which prominent ones are the databases of the Central Statistical Office, AGB Nielsen and the Hungarian Media Authority. These have data on both the service providers and the consumption of media, but any relevant and direct data on learning are difficult to identify.

### ***4.3. Cultural Learning: Statistical Indicators***

In this chapter we have analysed the regional representation of cultural learning along certain data. To do so first we compiled an Economic Development Index (EDI) on the economic development of the given regions. The index was created on the basis of the Central Statistical Office’s 2014 data along the factors determining social and economic development for each region. (We used data from 2014 because currently only these are available on the development of cultural learning, and we can thus have a valid comparison.) Of the factors we analysed the 10 major factors also appearing in the statistical comparison (cf. KSH 2015), now highlighting five: the level of education in the region, the GDP, the number of operating economic organisations, the unemployment rate and the rate of activity. Those indices were granted a value of 7 in the seven regions which proved the most developed from the aspect of the given factor (highest level of education, highest GDP, most economic organisations, lowest unemployment rate, lowest activity rate), and as the indices fall regionally so are the individual regions attributed lower and lower values. We have summarised the results along the five factors, and set up the order of development of the regions. (Table 4.1)

**Table 4.1.**

*State of economic development of the regions*

Regions in Hungary	Education	GDP	Number of economic organisations	Rate of unemployment	Rate of economic activity	Total	Sequence of regions
<b>Central Hungary</b>	7	7	7	7	7	35	<b>1</b>
<b>Western Transdanubia</b>	6	6	6	6	6	30	<b>2</b>
<b>Central Transdanubia</b>	5	5	5	5	5	25	<b>3</b>
<b>Southern Transdanubia</b>	2	4	4	4	4	18	<b>4</b>
<b>Southern Great Plain</b>	3	3	3	3	3	15	<b>5</b>
<b>Northern Great Plain</b>	1	2	2	2	2	9	<b>6</b>
<b>Northern Hungary</b>	4	1	1	1	1	8	<b>7</b>

*Source: own indexing based on KSH 2014.*

The functionality of the method is validated by the similar orders in professional and scientific findings in regional development figures (cf. KSH 2015). The Central Hungarian region proves the most developed on all counts, which is evidently followed by the Western, then the Central Transdanubian region in all of the factors compared. The fourth place of Southern Transdanubia is weakened by the fact that it is increasingly lagging behind regarding the level of education, and in the order of regions the last one, Northern Hungary, is taking its place. In spite of this, after the Southern Great Plain and the Northern Great Plain, this region remains the loser of the regional development competition.

Creating the index is important in our research as the regional analysis of the development of cultural learning and the tool of measurement was made possible by this method. We have collected statistical data on cultural institutions, media scenes and amateur sports organisations examined throughout the research to yield indices of the measurement tool. Out of the data we have compiled a comparison of 10 factors. When collecting statistical data we had a bit of difficulty, as it is only the cultural area that has annual nationwide compulsory data flow (Cultural Statistics: available at EMMI 2014, kultstat.emmi.gov.hu). When accumulating statistical data on the various scenes of the media, we had partial success: in the case of data on the Internet the Central Statistical Office collects such data, but with regard to periodicals, radio and television stations, only data from the National Media and Infocommunications Authority may be used, which are, however, not based on full-scale surveys and not repeated annually. (Source of their data: [www.mediatanacs.hu](http://www.mediatanacs.hu).) Researchers have the most difficult job with amateur sports organisations and their activities, as unfortunately there are no nationwide data; the only relatively reliable data on organisations in operation are available from the National Association of Sports Societies. (Source of their data: <http://www.sosz.hu/kozvetlen-tagsag>.) Of the 10 factors we use data yielded by five in the current study, similarly to the index, which are as follows: the number of community cultural institutions, libraries, hiking associations, periodicals and radio stations. We have represented the findings for the five factors in a range of seven values similarly to the previous one, thus obtaining the state of development of cultural learning in the regions. (Table 4.2)



**Table 4.2.**

*State of development of cultural learning in the regions*

<b>Cultural learning index</b>	<b>Cultural houses</b>	<b>Libraries</b>	<b>Musical institutions</b>	<b>Journals</b>	<b>Radios</b>	<b>Total</b>	<b>Sequence of regions</b>
<b>Central Hungary</b>	7	1	7	7	7	29	1
<b>Western Transdanubia</b>	4	7	2	1	1	15	7
<b>Central Transdanubia</b>	5	4	1	4	2	16	6
<b>Southern Transdanubia</b>	3	6	3	2	3	17	5
<b>Southern Great Plain</b>	6	2	4	5	6	23	2
<b>Northern Great Plain</b>	1	3	6	6	5	21	3
<b>Northern Hungary</b>	2	5	5	3	4	19	4

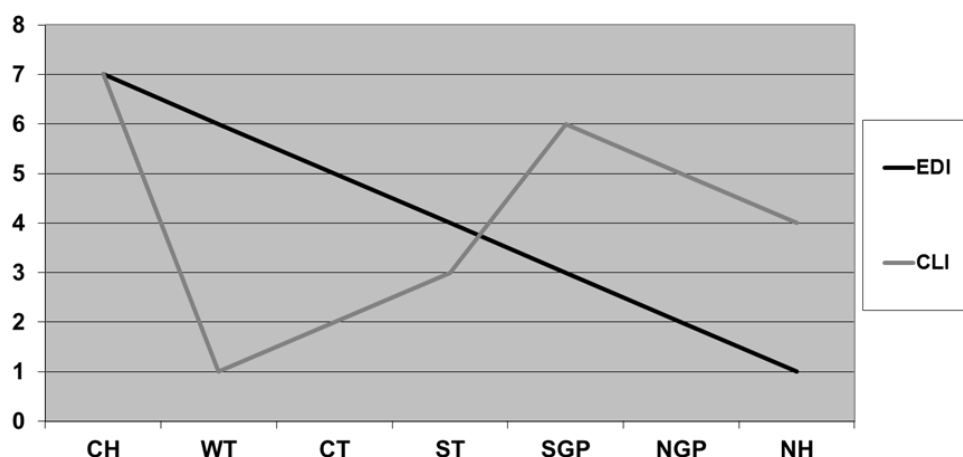
Source: own indexing based on KSH 2014.

Judging by the findings we may observe a significant reorganisation beyond the fact that the Central Hungarian region still has a leading role: regions with high economic development underachieve in the field of cultural learning, while regions with lower economic development are ranked higher in cultural learning. The order of the most developed regions is fully reversed, and the Cultural Learning Index (CLI) is lowest in the Western Transdanubian region, which is preceded by Central and Southern Transdanubia by only one index point. Inequality between regions east of the Danube

remains: the Northern Hungarian region, lowest in economic development, is in fourth place in the development of cultural learning, lagging behind the regions east of the Danube, followed by the Northern Great Plain in sixth place in economic development, while the prominent second place after Central Hungary in the development of cultural learning goes to the Southern Great Plain. The interconnections are more conspicuous when presented as a line chart. (Figure 4.1)

**Figure 4.1.**

*Interconnections between EDI and CLI*



*Source: own indexing based on KSH 2014.*

The phenomenon cannot be explained in a unified way due to the above. According to our view, investment in cultural learning by less economically developed regions has a compensatory effect, making up for the disadvantages. Cultural learning is managed as a factor improving and creating opportunities in these regions, helping them to recover from economic disadvantages and providing hope for social ascension. On the other hand, however, there is also a kind of elitist scheme validated here, according to which culture, and thus cultural learning, provides ascension, distinction, also accompanied by the enjoyment of economic advantages, while also having a role of conserving social standing. The developers and decision-makers of economically disadvantaged regions may invest in cultural learning for both reasons. Our findings show the predominance of compensation, but in the future it may be

important to investigate the content elements of cultural learning, since based on the primary analysis of cultural statistics, even though there is a lower level of use of cultural learning west of the Danube, the utilisation of high culture and the sums expended on it are much more significant in this region, thus the elitist concept is also apparent.

#### ***4.4. Cultural Learning: Empirical Indices***

The empirical indices of cultural learning have been analysed through questionnaires in the Northern Great Plain. We have decided on a questionnaire for the institution, which contains a general section, a section on personal cultural learning and a special list of questions related to the three partial areas (community culture, media, sports). Therefore, actually three questionnaires were made, the questions of which overlapped to 60%, and they contained 40% of specific questions.

Structure of the questionnaire:

I. General questions on organisation (approximately the same in all three questionnaires): the generation, past, system of activities, human resources, infrastructure, financing, of the organisation and its network of relationships with other organisations, etc.

II. Questions on personal cultural learning (approximately the same in all three questionnaires): provision of opportunities for non-formal learning, the number of non-formal learning events, users of non-formal learning, the significance of informal learning in the organisation, etc.

III. Questions specific to the institution (different in the three questionnaires, analysing the specific functions and content indicators of the individual institutions):

For community cultural institutions e.g. the form of programmes, number of participants, number of people purchasing tickets, the range of free programmes, etc.

For media e.g. types of programmes, air time, forms of online publication, forms of support, criteria for selecting programmes, audience figures, etc.

For sports associations e.g. the number of members, users of the range of programmes, criteria for selecting programmes, recruiting supporters, etc.

The three circles of organisations to examine include a large number of institutions on a national level, thus there is a need to mark off areas and thematics. Areal delineation results in a focus on the Northern Great Plain region. When choosing thematics we chose types of organisation providing multiple forms of personal learning in all three fields: in the field of cultural institutions community cultural institutions, in the field of media television stations, in the field of sports organisations hiking associations. In the case of individual types of organisation we strove to reach a minimum of 30% sampling rate, which we managed to exceed, altogether contacting 34% of the institutions in the three fields in the Northern Great Plain region (Table 4.3).

**Table 4.3.**

*Institutional population and the number of institutions analysed (pc)*

Type of institution	Number of items in the Northern Great Plain region*	Number of institutions to examine (30%)	Number of institutions examined**
Community cultural institution	272	82	82 (30%)
Television	23	7	9 (39%)
Hiking association	32	10	21 (66%)
Total	327 (100%)	99 (30%)	<b>112 (34%)</b>

\*Sources of regional data:

- For community cultural institutions **Cultural Statistics** (EMMI 2012, [kultstat.emmi.gov.hu](http://kultstat.emmi.gov.hu))
- For televisions the data of **National Media and News Authority** ([www.mediatanacs.hu](http://www.mediatanacs.hu))
- We have no national data on the field of hiking associations, unfortunately, but **The National Association of Sports Societies** provides relatively reliable data on organisations in operation (<http://www.sosz.hu/kozvetlen-tagsag>).

\*\* Source: findings of own empirical research.

First let us review the main data of organisations analysed. 40% of the 112 organisations examined had already been in operation before the change of regime, which is due to the high rate of community cultural institutions. 26% of the organisations were set up between the change of regime (1990) and the new millennium, while in the new millennium 34% of them were established. Thus the sample contains both organisations operating for several decades and new ones. 35% of the organisations responding to our questionnaire are based in Debrecen, whereas no other prominent settlement is represented in the sample. The organisations are divided among three counties. As regards the three sectors 48% of the organisations examined are state owned, 16% are private enterprises and 36% NGOs.

Efficient figures may be acquired on the size of the organisations and the tasks to be handled by the number and composition of the employees. We have analysed all employees in the 112 institutions and their average figures by institution. Altogether 1775 people are employed in the 112 institutions (Table 4.3.), of whom 967 have a degree (54.5%). The rate of managers is also high: in the 112 institutions 253 people (14% of the total staff) are in managerial positions.

**Table 4.4.**

*Total number of employees (persons)*

<i>Number of employees (persons)</i>				
	<b>Professional employees</b>	<b>Administrative employees</b>	<b>Technical employees</b>	<b>Total</b>
<b>Full time</b>	958	221	222	1.401
<b>Part time</b>	276	23	75	374
<b>Total</b>	1.234	244	297	<b>1.775</b>

*Source: own empirical research.*

It is clear that the organisations have average human resources, and as for size they are of medium size, as on average they have employees above 10 persons, but work with a staff below 50 (Table 4.5).

**Table 4.5.***Total number of employees in institutional average (persons)*

<i>Number of employees (institutional average)</i>				
	<b>Professional employees</b>	<b>Administrative employees</b>	<b>Technical employees</b>	<b>Total</b>
<b>Full time</b>	10.8	3.6	3.6	18
<b>Part time</b>	6.7	1.3	2.7	10.7
<b>Total</b>	17.5	4.9	6.3	<b>28.7</b>

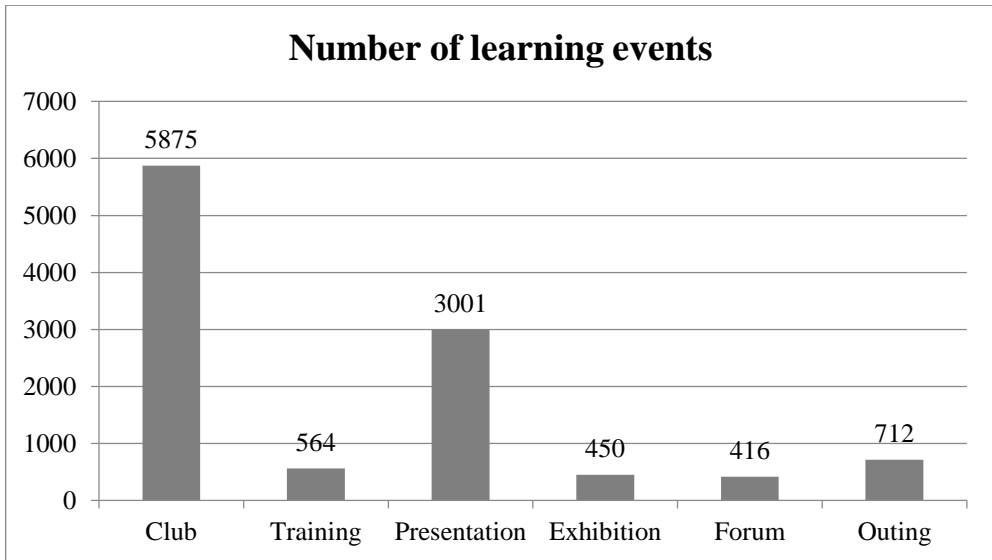
*Source: own empirical research.*

Human resource supply is improved by the fact that volunteers are employed in 54% of the organisations. At the time of the survey altogether 841 persons were being employed, which is an average of 15 volunteers for each institution.

In the second part of our analysis we review some results of the examined institutions supporting personal learning. The learning events surveyed with regard to the organisations included clubs, trainings, presentations, exhibitions, forums and outings. Of these all were included in great numbers in the case of the organisations examined, even forums, which were indicated as the rarest, were organised on 416 occasions by the 112 organisations. The largest number of learning events were produced in clubs (5,875 learning events), which is also due to the fact that these are regular activities; that is, if a club is held once a week on average, that can be regarded as approx. 50 learning events a year. The number of presentations, which can be defined as learning events in the narrower sense, too, is the highest most prominent figure, and the practical form of those, trainings, were also represented in high numbers (564 events). Learning events for the 112 organisations totalled 11,027, which corresponds to an average of approximately one hundred (98.5) learning events for each organisation (Figure 4.2). Thus we can say that these institutions and organisations are extremely active in organising learning.

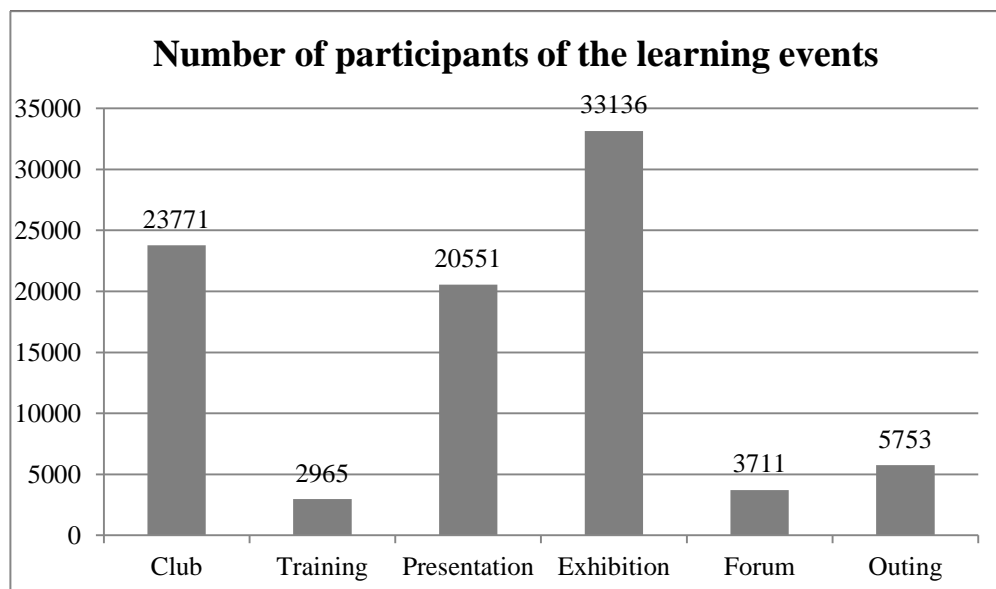
**Figure 4.2.**

*Number of learning events in the institutions (pc)*



*Source: own empirical research.*

Learning events draw in a great number of participants. The data unfortunately does not say anything about overlaps in the circle of participants, in other words, if there is a group of people that regularly attend more than one kind of learning event, but it is highly likely so. Even taking this into account we get prominent figures. Approximately 90 thousand people attended the learning events in 1 year at the 112 organisations examined (Figure 4.3).

**Figure 4.3.***Number of participants of the learning events (persons)**Source: own empirical research*

The characteristic average age in clubs is 37, at trainings it is 35, in presentations 40, for exhibitions 40, for forums 35, and on outings 30. Yet, exactly this age group is most frequently absent from these learning events, as the main target groups are students and young people, and the retired, and the average of these two target groups equal the middle aged stratum, which is most often absent from cultural institutions, thus the statistics in this case are strongly distorted.

Finally, let us examine what subject matters or topics these learning events touch upon in the community cultural institutions, hiking associations and television stations. The categories of learning events examined were taken over from a former OTKA research (Forray – Juhász 2009) (Table 4.6).



**Table 4.6.**

*Frequency of forms of learning by topic (%)*

<i>Frequency of forms of learning by topic (%)</i>							
	<b>Club</b>	<b>Training</b>	<b>Presentation</b>	<b>Exhibition</b>	<b>Forum</b>	<b>Outing</b>	<b>Total</b>
<b>Informatics</b>	6.3	14.3	13.4	1.8	1.8	0.9	6.4
<b>Foreign languages</b>	7.1	4.5	6.3	1.8	0.9	3.6	4
<b>Housekeeping</b>	6.3	0.9	7.1	0	0.9	1.8	2.8
<b>Health</b>	<b>16.1</b>	<b>5.4</b>	<b>25.9</b>	<b>4.5</b>	<b>7.1</b>	<b>7.1</b>	<b>11</b>
<b>Work</b>	2.7	15.2	11.6	1.8	8.9	0	6.7
<b>Finances</b>	3.6	5.4	8.0	0	4.5	0	3.6
<b>Politics</b>	4.5	1.8	16.1	6.3	9.8	4.5	7.2
<b>Religion</b>	8.9	0	16.1	4.5	2.7	1.8	5.7
<b>Hobbies</b>	<b>33.0</b>	<b>7.1</b>	<b>9.8</b>	<b>17.0</b>	<b>3.6</b>	<b>14.3</b>	<b>14.1</b>
<b>Science</b>	6.3	0.9	21.4	6.3	1.8	8.9	7.6
<b>Culture</b>	<b>27.7</b>	<b>5.4</b>	<b>41.1</b>	<b>43.8</b>	<b>11.6</b>	<b>18.8</b>	<b>24.7</b>
<b>Sports</b>	21.4	6.3	10.7	1.8	4.5	17.9	10.4
<b>Clothing</b>	4.5	0.9	8.0	2.7	2.7	2.7	3.6
<b>Agriculture</b>	6.3	0.9	13.4	4.5	6.3	0	5.2

Source: own empirical research

Due to the high number of community cultural institutions cultural learning events are dominant, which is followed by the ones related to hobbies and health. We can establish that the role of cultural learning in compensating for disadvantages is significant with regard to learning. The institutions examined in the Northern Great Plain region utilise the system of institutions for functions of compensating learning with a high activity in learning for great groups, with which they also contribute to the social and economic development of the region.

## ***Chapter 5***

### ***Pillar IV: Community Learning***

*Katalin Forray R*

This chapter deals with Pillar IV, which involves community learning. The chapter is structured as follows: first, we define the term community learning and describe its various meanings. Then we show how community learning contributes to the evolution of the learning regions. Next, we present three examples of community learning in Hungary: community learning in small towns, in immigrant communities in Hungary, and in the work of civil societies. The chapter is concluded by a presentation of the indicators, which are recommended for a statistical-cartographical analysis of the learning regions.

#### ***5.1. Pillar IV and the Learning Region: Theoretical Considerations***

In this subchapter we interpret community learning and its various forms of realisation. We investigate how a community contributes to the evolution of the learning region through learning. We present the areas in which we examined the transforming potential of community learning in Hungary.

Community or social learning means the learning of the members of society within a community. Its framework is the local or regional society and its communities. Its aim is mostly to solve a common problem for which previous knowledge is not sufficient and which, therefore, requires new knowledge (competences and skills).

In the scientific literature, community/social learning has two interpretations. According to psychologists, it means socialisation, which is described by some scholars as learning (N. Miller, J. Dollard 1941, Bandura 1986). Sociologists interpret community/social learning as a social activity and as the involvement of individuals in communal activities (such as shared work or entertainment) (Wenger 2000). (In Hungarian scientific literature, community/social learning was described much earlier. Kozma, in his 1985 book, considers it as the force behind social change.) In the following we use the term ‘community learning’ to refer to a learning process which is generated by a problem affecting a whole community and whose solution requires new knowledge, which the community did not possess before.

According to this interpretation, community learning contributes to the evolution of the learning region. This process is realised in the following way:

- A challenge coming from the outside triggers the evolution of the learning region. This challenge can be, for instance, a flood, but an unexpected modernising influence can have similar consequences as well.
- The community attempts to avert or use this influence and looks for new knowledge (for example, by trying to rebuild the old dike around the town).
- The representatives of the old and the new start to compete, which means that these groups possess different knowledge and competences.
- The knowledge and competences of these groups is probed by how successfully they cope with the challenge (e.g. by saving the community from the flood).
- The power relations of the community are reorganised: the successful group, which is in possession of the knowledge and competence, takes over in the community.

The communal activities in settlements, which provide individuals with the opportunity of learning, can be divided into the following categories on the basis of the major purpose of the activities: learning opportunities can arise in everyday communication, in formal learning situations, cultural activities, community and sport events, economic activities, and international relations.

We aim to provide an example of all of these activities.

The period after the political changes in Hungary in 1990 saw dramatic changes in several settlements. Some have lost their previous sources of support and find it hard to transform in order to make up for this loss and find new opportunities. Other settlements, small towns, found new ways either as a result of internal development or as a result of the favourable new circumstances. These forms of behaviour – recess, stagnation and development – are interpreted as community learning.

Another aspect of community learning is represented by the settlements – mostly villages – where local societies are dynamised by Western European settlers. This process is a specific form of community learning. Both the settlers and the locals are faced with a multitude of new knowledge which needs to be acquired in order to lay the foundations of a new system of living and learning together. These learning processes demand more effort than formal and non-formal learning. The settlers need to learn a new language, get to know a new environment while keeping their own traditions alive despite the changed circumstances. At the same time, they have to gain new experience through communication with the people around them.

Communication with the neighbours coming from different cultures means new forms of learning and rules for the locals, too. Adapting to the neighbours who come from a foreign culture and speak a foreign language is financially profitable for them. Their wealth adds to their merits as they offer money for jobs known and regularly done even by the poorest villagers.

We also explore how the Roma population, which stands out both historically and culturally, experiences the changes. Do they profit from it or are they outsiders in this social process as well? The separation of the Roma is not controlled from 'above' like that of the settlers who become house owners. On the contrary, it is organised from 'below'. We give an overview of the programmes which aim to integrate this ethnic group into the community relying on their active participation.

What indicators help us understand the process of community learning in Hungary? We need indicators that are widely available and are suitable for analysis on the level of settlements. The DLA has developed a system of measurement (see below). But how can this system be adapted to the Hungarian circumstances and to the statistical data available for us? The Canadian *Composite Learning Index* (CLI) contains a number of indicators that cannot be adapted to Hungarian measurements. How can these be substituted? At the end of this chapter we present the DLA as well as the Canadian CLA indicators and look for their Hungarian equivalents.

## ***5.2. Community Learning in Small Towns***

This subchapter explores how community learning contributes to the transformation of settlements. Community learning has already been defined in the introduction (using new knowledge for the solution of communal problems). Through the example of the settlements we have researched we can clearly see what happens if community learning is successful and what happens if it fails.

Small towns with a population of 20,000 are characteristic to the Great Hungarian Plain, which is in the east of the country. The history of these settlements goes back centuries, which is quite long considering that this region has often been destroyed. All of them have a more or less well-developed educational and cultural infrastructure and they also have the most important public facilities. However, the political changes in the 1990 have pushed them into circumstances harder than what they had expected. During the years of state socialism agriculture in these regions declined, small-scale industries were closed down, and the factories built in this era were not compatible

with the modern circumstances. Mass unemployment threatened both skilled and unskilled workers, whose only way out was to leave these settlements.

The analysis of the current state of these towns clearly shows that some of them have managed to end this pressing situation and find a way out of it. This is demonstrated through the example of two neighbouring towns. (Forray, Kozma 2013, 2014).

One of these settlements became a town in the eighteenth century. Its catholic majority was meant to counterbalance the dominance of the Reformed Church in the neighbouring settlements. As a reward for its loyalty, it was granted a lot of opportunities to develop (they built a railway, a dam and developed their industry), which resulted in dynamic urbanisation. This process was interrupted by the Second World War and the communist takeover. In the 1960s there were renewed efforts for urban development. An important element of this was the building of the secondary school, which was completed but after a few decades it could not attract enough students to fill a class and is therefore threatened by closure.

As the most industrialised settlement in the region (Pusztai 2010) it was the first scene of communist activities and later, the communist party started its work here. This, together with much more, disappeared after the political changes and gave way to conceived (constructed) or real historical identities. Only the Catholic Church stayed in its place during the communist era. It remained stable enough to continue its work and emanate self-consistency. After the political changes church activity gained noticeable strength and when the secondary school was threatened with closure, an option to save it was to transform it into a church funded school (though this plan was not realised). It is evident that instead of the secondary school, the parish is one of the centres of power in the settlement. Most activities that could be organised by a dynamic (secondary) school – social initiatives, hiking trips, civil initiatives, innovations of the labour market, creating and organising celebrations, communication with kindergartens and schools, etc. – are successfully organised by the parish instead.

The other settlement is officially a town, yet, as one walks along its streets, it rather gives the impression of a big village. However, the businesses, enterprises and initiatives of this small town reach out to a wider geographical area than one would at first glance expect. The local factories, shops, trade and other enterprises frequently appear in other settlements 20-50 km away, which are sometimes twice as big. This settlement proves to be much more dynamic than what its administrative significance or prestige in the regional (county) hierarchy suggests.

This vitality and mobility – which is supported by the popularity of its website – elevates this settlement from its village atmosphere. Considering its busy trade and visitor traffic, it is evident how this settlement could compete with the previously described small town. Immediately after the end of the war, the town started to organise its own grammar school. The local museum of geography used to belong to the grammar school as it was founded by one of the geography teachers. Today the museum has transformed from an academic stronghold into a cultural centre. The Tiszazug Museum of Geography still has geographic rarities and local anglers still bring in mammoth remains from the eroding loess walls along the River Tisza. The focus of the museum, however, has shifted from academic interest to the service of the local community.

The latter small town was more successful in coping with its past problems, and, consequently, it is more successful in facing its history. The identity of the former settlement seems to be more prestigious, yet it is unstable. It could be displayed at an exhibition, yet it is not worth taking as an example for other communities. The identity of the latter settlement is still more ‘rural,’ yet it offers what is necessary for its identity: it lays the foundations of the changing local communities. This dynamism dominates in the secondary school as well. The school aims to tie students to the institution even as young adults. This has a distinctive result: a latent or semi-visible post-secondary training organised in the secondary school which is a non-planned beginning of higher education or leads students towards higher education. This is a special ‘stronghold’ in the development of the town’s political strategy. The secondary school, which is one of the main employers in the town, together with its teachers and the headmaster comprise a critical mass in cultural, educational and town development policies. In addition, the lay leader of the local Reformed parish also takes part in the organisation of the secondary school, and together with this, in the organisation of the local community.

Considering the above examples, we can make some significant conclusions. To solve its problems, a community needs somebody who recognises the problem, makes it explicit and sets goals. This person is traditionally called the local hero (or the agent of change in organisation studies, the key figure in social anthropology and the leader or leadership in political literature). The various names are based on the same realisation. Decisive power, if split among more members of the community (democracy), can sometimes extinguish itself and individual interest can stop the community from quickly responding to challenges and from successfully solving problems. The role of the local hero is to communicate the problem in a way the others

cannot or are not willing to do or do not dare to do. This person sets the goal so that the majority can accept it and identify with it. If the local hero fails and the community opposes them, they will be marginalised. But if they win (if they are accepted by the community), they bring new knowledge and competences into the community, which are supported by new interest groups. Through this, the local hero establishes a new balance (democracy) in the community.

### ***5.3. Community Learning in Immigrant Communities***

This subchapter presents how new knowledge reaches a community and how this helps the community to respond to new challenges and to solve its problems. We explore this through the example of immigration to Hungary.

Before the peace treaty following the First World War, a significant part of Greater Hungary had an ethnically diverse population. A declared purpose of the post-war redefinition of borders was to cede mixed ethnicity territories to the neighbouring countries. The territorial redistribution following the Second World War basically reinforced this decision. As a result, there hardly remained any representatives of the previous ethnic groups in Hungary. Ethnic diversity suffered another blow under the system of state socialism following the Second World War, when the members of the German ethnic groups were deported from the country.

Hungary's entry to the European Union brought significant changes. Since 2004 the number of European families settling in Hungary has been continuously and dynamically increasing. The families that had been deported or their descendants, mostly from German-speaking countries, bought houses or bought back their former homes and started to resettle in Hungary. Between Hungary's 2004 EU accession and the national census in 2011, the number of Western-European EU residents owning a house in Hungary and settling in the country for a long period of time quadrupled. For example, the number of German immigrants tripled and there was a sevenfold growth in the number of Dutch immigrants, but there are immigrants from almost all European countries. Their settlement in the country brought new socio-cultural elements, which had been unknown for generations.

Throughout the last half century these regions have been gradually losing their population. The borderland territories, following the deportation of the original inhabitants, were mostly inhabited by the Roma. Those who could move from the remaining local communities left, those who remained grew old. There was a drastic decrease in the number of available workplaces in the whole region. Thus, we cannot

claim that these changes were caused by the political changes, but they were definitely accelerated by the changes. For example, the closure of the mines in Baranya County has significantly accelerated these processes. Agriculture in the farmlands of the Great Plain has lost its attractiveness and it gradually lost its capacity of securing the future of the inhabitants. Foreign families started to appear and buy houses in settlements that have lost hope and their original inhabitants.

Considering their number and their choice of houses, the Dutch represent a unique attitude. The settlements they tend to choose are far from being in the centre of touristic attention. They seem to be most interested in a few farming villages in the region between the rivers Danube and Tisza, which have a strong Calvinist tradition. Southern Transdanubia also proves to be highly attractive for them, which is motivated not by Calvinism but rather by the beautiful landscape. The number of houses purchased here is well above a thousand. In the whole country altogether 3717 houses are in the possession of people coming from the Netherlands (Demographic Annal 2011).

The new settlers not only dynamise the life of these villages, but also take part in a process of mutual learning with the locals. These are cases of community learning which are suitable for analysis. To demonstrate this case, we have chosen a village in Southern Hungary.

The village used to have a German ethnic minority. The descendants of the deported families bought back the properties that used to be in possession of their families or they bought new houses. Thus, apart from the Hungarian community the small village today is home to Finnish and German communities. The organisation of the major festivals in the village now is gradually taken over by these communities (e.g. the steamed dumpling festival, the gingerbread exhibition, the doll exhibition displaying the traditional costumes of the former German ethnic group).

Foreign settlement in the village was motivated by a chance encounter. A Finnish painter travelling in the area was taken by the beauty of the village and bought a house there. Then, he invited his acquaintances to move to the village. Today the nearly thirty Finnish families living in the village lead an active social life. They regularly organise and take part in the cultural events of the village. Their active lifestyle and regular sporting activities are the most noticeable phenomena in the whole community. In the mornings they go for a walk or go jogging alone or in small groups. The locals have noticed that not only the younger but also the older Finnish dwellers do regular exercise. Apart from physical exercise, the Finnish attitude to old age was also highlighted by the locals as a perceptible cultural



difference. They praised the mobile lifestyle of the Finnish and their positive attitude to the future, usually adding that this could partly be the result of their better financial situation.

The Finnish are eager to learn the Hungarian language, which is deeply appreciated by the locals. This is partly the reason for their openness to the Finnish language. As a result of their everyday communication, working together in the garden, grill parties, and visits to Finland, those who are in a closer relationship with the Finnish have already acquired a small Finnish vocabulary. (For a more detailed analysis of language use in this settlement, see Heltai 2012).

The two choirs of the settlement are mostly attended by middle-aged inhabitants or people with small children. One of them functions mostly as a church choir and they sing in Sunday masses. The other one is the choir of the German ethnic group. The rehearsals are not only opportunities for the members to socialise but are also learning processes. Both choirs sing songs in German and the German ethnic choir has some Finnish members as well, who teach them Finnish songs.

In the summer two camps are organised for the children, one in June and one in August. These are mostly attended by the children who have already moved away with their parents but whose grandparents still live in the village. The camps are organised so that these children can get to know their family roots. Furthermore, the craft workshops, trips, team games, thematic days, ecological programmes help them to get to know each other (for instance, every day they evoke a different historical period, and they prepare costumes and play games connected to this period). The inhabitants of the village prepare for the ‘eco day’ by collecting empty plastic bottles from which the children prepare various objects. In the evenings, groups of friends gather at one of the grandparents’ houses and continue playing. The camp was initiated by three young mothers, whose aim at the beginning was to find an active and useful way for their own children to spend their free time. They plan and organise the programmes of the camp every year, which is partly financed by grants, partly by the attendance fees.

The village choir has travelled to Finland, where the locals took part in a mushroom picking competition. These trips provide excellent opportunities for the locals to practice the Finnish language. There have also been many social gatherings where the Finnish painted Easter eggs and cooked traditional Hungarian dishes. At the same time, a number of local families, learning from the Finnish, have built a sauna in their homes, which are palpable evidence of community learning in the village.

The life of the settlement described above is an excellent example proving that the solution of a problem within a community (stagnating villages, loss of population, and incapability of economic renewal) requires new knowledge and new competences. These can be realised if the various (local, regional and national) levels of community learning are joined. Problem solving within a community works only if the community gets the required knowledge and competences not only from the local level but also from the levels above (such as the international level, as shown in our example). In this way, the problem solving process is not only a way of learning but also of renewal (innovation).

#### ***5.4. Community Learning in NGOs***

This subchapter demonstrates how joint efforts of problem solving (facing challenges) generate community learning. We also explore the sources of knowledge and competences with which the community seeks to solve its own problems. This collective problem solving strengthens the community, because the necessary knowledge and competences are integrated into the culture of the community. The community building effects of joint problem solving can be analysed through the working of NGOs.

In the following we outline the participation of the Roma in the civil sphere. We have chosen this ethnic group as its problems – social discrimination, low levels of education, lack of training – are characteristic of this group in the whole of Europe. The European Union has turned its attention to these only recently but in Hungary regular attempts have been made to improve their situation since the political changes, for example, by supporting organisations aiming to empower this ethnic group (Forray 2012, Híves 2006).

One of the most important activities of Roma organisations is the running of training programmes. These are not only courses that are directly aimed at success in the labour market or the acquisition of vocational qualifications. There are a number of other learning interactions organised in the framework of civil societies such as courses on health or legal aid. All of these programmes have a specific aim, such as the acquisition of certain qualifications, but their main function is to propagate the attitudes that will help participants be successful in the greater society. The other party participating in this learning process is also important. The organisers and teachers do not assume formal roles in the more or less spontaneously forming groups. They are rather seen as partners who have a greater knowledge about certain social questions and want to hand down this

knowledge to the others. The programmes, such as trips, visits to the theatre, etc, aim to create and strengthen the sense of community. The organisers of these programmes are not only organisers but also members of the communities.

The roots of the so called ‘after-school clubs’ go back to the 1990s. Today the ‘after-school clubs’ are non-school institutions in various regions of the country which are adapted to local needs and are financed by civil organisations. They are meant to give cultural, social, psychological and learning support to socially disadvantaged pupils. The programme is organised in club-like form, where pupils take part in individual tutoring, participate in cultural programmes with the others and can talk to adults who care about their lives. Since their beginning, after-school clubs have been financed from grants. This civil form of support has spread throughout the country – currently there are nearly hundred after-school clubs. There are no systematically accumulated records on the effects of the programme. Therefore, we can only claim that this civil initiative has gained significant popularity. Even though it has not significantly changed the disadvantaged status of the Roma in education, through the personal contact and the intensive participation in out-of-school cultural programmes the most disadvantaged Roma children and teenagers are provided with an opportunity to be active members of society. In this way it improves their future chances of participating in organised and non-organised forms of community learning as adults.

The NGOs (Roma NGOs, after-school clubs, etc.) are good examples of how learning through problem solving fosters community building. In order to give adequate response to the challenges faced by the community (discrimination, segregation), the community has to reorganise itself from below. (See the relatively great number of Roma NGOs in Southern Transdanubia). The NGOs provide the legal framework required for this. Recognising the challenge, they have to set new goals and for the realisation of these goals they need to acquire new knowledge and competences (after-school clubs). The new knowledge and competences are integrated into the culture of NGOs thereby strengthening NGOs making them more resistant. The stronger, more resistant and self-conscious NGOs are able to give legal and successful response to the challenges faced by Roma communities (discrimination, segregation).

## 5.5. Community Learning: Statistical Indicators

In this subchapter we present the indicators that enable the statistical analysis of community learning. These indicators are compared and contrasted to those used in the DLA and in the Canadian CLI. Then, we propose the Hungarian indicators of community learning that are necessary to develop the national LI (LeaRn Index) (Tibor Cserti Csapó 2008).

The process we call community learning in this chapter is interpreted by the DLA as a social function (the voluntary participation of individuals in community activities). The Canadian CLA interprets it as a socio-political activity. Our use of the term incorporated both interpretations. We apply the term community for what others term as local society. Thus, community learning is the learning of the local society. By learning we mean learning through problem solving, which transforms the life of a community. The activity transforming a community is called political activity by others.

Based on the above, we recommend the following measurements from the Deutscher Lernatlas (Table 5.1). (LI [LeaRn Index] in the heading of the table refers to the composite index developed as a result of the Hungarian research.)

**Table 5.1.**

*The possible indicators of community learning (Pillar IV) based on the DLA*

<b>Indicators of the DLA</b> <i>Pillar IV</i>	<b>Indicators of the LI</b> <i>Pillar IV</i>
The percentage of socially devoted citizens in general	1% of the personal income tax offered for the given cause – data provided by the National Tax and Customs Administration of Hungary (NTCA), voluntary activity in the organisations working toward the given cause
The percentage of citizens devoted to the cause of children and young adults	1% of the personal income tax offered for the given cause – data provided by the National Tax and Customs Administration of Hungary (NTCA), voluntary activity in the organisations working toward the given cause

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<b>Indicators of the DLA</b> <i>Pillar IV</i>	<b>Indicators of the LI</b> <i>Pillar IV</i>
The percentage of citizens devoted to the cause of the elderly	1% of the personal income tax offered for the given cause – data provided by the National Tax and Customs Administration of Hungary (NTCA), voluntary activity in the organisations working toward the given cause
The percentage of citizens devoted to a church and religion	1% of the personal income tax offered for the given cause, churchgoing, voluntary activity in church organisations
The percentage of devoted citizens working in a voluntary fire brigade	the number of voluntary fire brigades and their members
The percentage of devoted citizens working for the German Red Cross	voluntary work, data provided by the Red Cross
The percentage of bone marrow donors	the number of bone marrow and other donors, health care statistics
Elections turnout (%)	Data provided by the National Election Office
Party membership (%)	Data provided by parties
Programmes for children and young adults (number of programme per person)	Companies Registry data, data found on the Internet

Based on the Canadian CLI the following data are relevant (Table 5.2.)

**Table 5.2.***The possible indicators of community learning (Pillar IV) based on the CLI*

<b>Indicators of the Canadian CLA Pillar IV</b>	<b>Indicators of the LI Pillar IV</b>
Voluntary work	
Participation in the work of community clubs and other organisations	Data provided by the Hungarian Central Statistical Office on the distribution of household expenditure Participation in the work of civil organisations
Access to community institutions	surveys or local case studies
The learning of other cultures	Case studies

In this chapter we have proposed some possible indicators to describe community learning (Pillar IV). First, community learning was defined as a learning process aimed at the solution of a problem faced by the local community. The examples taken from our research demonstrated what problem-solving community learning means. Finally, based on the German and Canadian indicators, we have made our own recommendations for the indices describing Pillar IV.



## ***Chapter 6***

### ***The Territorial Characteristics of the Four Pillars***

*Károly Teperics*

In this chapter we examine the spatial characteristics of learning in the broader sense (life long and lifewide learning). For the analysis we have selected the indicators established in the previous chapters when investigating the four dimensions (‘pillars’) of learning respectively. In the introduction the antecedents and methodology of our statistical analysis are presented. The subsequent four subchapters deal with the regional distribution of the four dimensions (pillars) individually. The closing subchapter compiles a composite index of the groups of indicators, which we have termed the ‘composite LeaRn index’, following the Canadian example. With this composite LeaRn index we characterise the different regions of Hungary with regard to the potential types of learning found in them, thus compiling a map of Hungary’s learning regions (cities, communities).

#### ***6.1. Territorial Characteristics of Lifelong Learning: History and Methodology***

The present subchapter yields the antecedents, perspectives and methodology of the aforementioned study. By processing statistical data on ‘learning’ by settlements (its regional scope) we attempt to identify areas that have specific (similar) features.

Our hypothesis is as follows: with the help of a complex indicator representing the attitudes to different forms of learning, and mapping the values for settlements, we may reveal differences existing in distinct regions. If the settlements and catchment areas within shorter reaches of one another show specifically favourable attitudes (higher values than the national average) to learning, those may be the traces of ‘learning regions’ in Hungary.

With reference to ‘indicators of learning’ we have used international findings. (See Chapter 1 for further relevant details.) From the indicators of the ‘pillar structure’ we have created ratios, then calculated complex indices for each pillar. By this it becomes possible to identify regions with features (both positive and negative) different from the average. (Similarly to other regional analyses, a further task would be to explain the differences with the help of case studies.)



A key problem is representing phenomena with the help of indicators and available data. As for Hungary this means over 3200 regional units to get a sufficiently varied picture. Due to the peculiarities of accumulating statistical data (figures are aggregated from settlement level towards greater administrative units) this yields the possibility of the most refined examination possible. During processing we consistently used this regional unit (partly due to the fact that when drawing the borders of learning regions we searched for spaces with homogeneous patterns, which was promoted by the detailed data flow), as exploratory calculations and representations had proved that data on the microregional level contained serious distortions when translated to a regional one. We did not employ calculated data, since that would have interfered with settlement-level detail.

When choosing the target group of the phenomenon that we intended to measure, similarly to the indices of CLI and ELLI, we decided to employ data of individuals and institutions for the settlements (see Chapter 1, Table 1). We do not have access to the findings of informative family questionnaires (CLI) or information on the quality of work (ELLI) for the population and all settlements of Hungary; therefore, we must substitute these with other parameters (of similar content). There are solutions like this in all of the antecedents used as methodological examples (CLI, ELLI, DLA). Along with indices of the populations of settlements (e.g. the ratio of graduates) there are institutional data (e.g. accessibility) and information on the incomes of families. In our case, with the combination of the population of a given settlement (as a group) and the institutional data, it is possible to represent regional attitudes to learning.

It is generally true that the fact of the data collection imposed serious restrictions on our selection of the indices. We could only use data that were collected nationwide, but for individual settlements. Without the possibility of collecting full-scale data on our own, in many cases we were forced to make a compromise, and instead of the indices regarded as good/better we could only work with the results of KSH and other central data collection systems (cultural statistics, OSAP 1665, etc.). The possibility of own data collection better representing the phenomenon was left to regional processing attempts not like some 'deep drilling' ventures.

The accessibility of data delimited the period analysed, too. The most detailed settlement data flow accessible in Hungary comes from censuses, and thus the survey for all indices was conducted on the data of 2011.

The data used to analyse the characteristics of groups (the populaces of settlements) and the institutions (institutions in the settlements) may be categorised in accordance with the comparison of existing methodologies (CLI, ELLI, DLA) and available data: data usable without any alteration, data usable with alterations, and data to be replaced.

The examination of accessibility was a task that evidently did not present a problem. All pillars of the Canadian *Composite Learning Index* included this emphatically (even for more than one element) and it was one of the most important factors in the index. This is easy to represent in Hungary, too, with reference to public and higher education, vocational trainings, adult education, community services and cultural institutions. We regarded it as the most prevalent dimension with regard to formal/institutional learning; therefore, we included it in the first pillar. In our view the index reflecting settlement hierarchy is parallel to the availability of the educational infrastructure.

Generally speaking, we had access to the generic indicators of Pillar I (KSH, GeoX Kft.) and Pillar II (KSH, OSAP 1665). In the case of Pillar I, we found several overlaps between CLI and ELLI indices. CLI presented this field with 5 indices and 7 data (plus accessibility), while ELLI did so with 5 indices and 6 data. Both examined basic skills also included in the PISA studies (reading comprehension, problem solving, mathematics and scientific skills), as well as trainings completed by and certificates granted to adults. The difference is detectable in the fact that the compilers of CLI include dropout data, too (of ages 20-24, those with uncompleted secondary education). DLA (2 dimensions, 10 indices) touched upon the phenomenon of school-based learning through students' academic achievements (IGLU, PISA, IQB indices) and the data of dropout and repetition. We had no access to their data collected through microcensuses and data surveys. The problematic is fairly well covered with the help of Hungarian statistics data on the basis of CLI's perspectives.

As for Pillar II, in the indices regarded as an example the emphasis was on vocational trainings and those at the workplace. CLI (3 indicators, 4 data) presented this with fewer figures, the number of trainings offered by the workplaces and the number of participants, as well as the availability of trainings. ELLI (4 indicators, 12 data) employs a significantly more detailed approach. Here, in addition to the data also appearing in CLI, characteristics of work are included, too. The complexity, monotony of the tasks, the demand for an Internet connection, etc. reflect important features. DLA (3 dimensions, 10 indices) went further, in addition to the data of the employment office as well as varied information on adult education, drawing trainings at the workplace into the survey, too. This is information that is inaccessible to us in

its detailed breakdown, which is partly why we moved in the direction of CLI's methodology.

Data on learning/cultural consumption at home – deemed important in both the Canadian (Pillar IV) and ELLI and DLA (Pillar III) methodologies – may be used in a modified form. In CLI this was presented with the help of data on the expenses of households in comparison to their incomes, while ELLI uses data on individuals. We think our view is much more nearer to CLI's data use; following in its footsteps – lacking the necessary data – we may attempt to receive data on the expenses on culture by using the capacity of the system of cultural institutions in the calculation. Data on the capacities of theatres, libraries and galleries may serve with information that is not identical, but similar as for its content. An even better approach may be provided by the indicator on the use of the Internet/printed media, while the data on the spread of broadband Internet may be gathered from subscription figures available in Hungary in a breakdown of settlements, transformed into a population-proportionate data.

The indices on learning in a community (CLI Pillar IV, ELLI and DLA Pillar III) provide the circle of questions which must be replaced. The data demand of both problematics is hard to manage, and their indices had to be characteristically supplanted. CLI seemed more freely accessible, even though the index on the ratio of intercultural connections for families is hard to manage due to the lack of data surveys. Under Hungarian circumstances these could be replaced by migration data. Presenting the appearance of volunteering and NGOs in figures also posed similar problems. Bridging the gap is possible by collecting data on the number of organisations and the proportion of people doing voluntary work, potentially utilising the possibility to calculate it in a population-proportionate way.

Generally speaking, on the basis of the accessibility of data and their representation in a breakdown of settlements, of the three complex indices that could be regarded as antecedents (CLI, ELLI, DLA) we found the Canadian CLI – which is more distant in space – was the best adaptable to Hungarian conditions. The CLI is favourable because it stresses accessibility, while data used in Pillars I and II are available in Hungary, as well as data used in Pillars III and IV are easier to replace.

The purpose of the regional-statistical analysis was to make a national (bird's eye view) map with the help of the selected indices. We standardised the indices chosen by the teams, calculated ratios in proportion to the respective settlements' population figures, then we recalculated them as a percentage of the maximum value for each index, also representing them individually on a map. The standardised values of indices for each Pillar were organised into an index by simple averaging. This made

possible the later combination of the individual Pillars, and the calculation of a complex index through the average of the Pillars (HLI, see also Chapter 1). The individual indicators were deliberately not weighed. With the help of the pillar indices we calculated a combined (complex) index, which was represented on a map, also analysing the regional characteristics.

## ***6.2. Theoretical Characteristics of Pillar I: Formal Learning***

In this subchapter we examine the spatial distribution of the index of Pillar I (formal learning). When compiling the index we utilized 5 index numbers. To show educational qualification we used ‘purified schooling indices’ (Becsei 2001). The qualification of the population was presented through highest qualification earned in the school system, which in this case only validates the given qualification if it accords with the regular age the individual usually takes the examination. We analysed data from the following four age groups:

1. the proportion of young people in the population aged over 10 years not completing any of the forms (10-x),
2. the proportion of young people in the population aged over 15 years completing at least primary school (15-x),
3. the proportion of young people in the population aged over 18 years completing at least secondary school (18-x),
4. the proportion of young people in the population aged over 25 years having earned a degree (25-x).

Our data are exclusively based on the 2011 census. The availability of basic data made it possible to analyse changes in the period between the two censuses, but we decided against this as it would have apparently overestimated the progress that settlements under poorer circumstances made from a lower level. We remained with processing the data from the static 2011 census.

The characteristics recognisable in the case of indices related to qualification concurred with demands arising from regional differences (Appendices 6.1-6.4). In the category of statistical illiteracy (proportion of young people aged over 10 years not completing a single form, 10-x) the status of settlements on the peripheries of the country (characteristically with small populations) is worst. High values are found in the areas of Somogy, Baranya, Abaúj, Szatmár and Bereg, while lower figures (values) appear in the northern part of the Transdanubian area, in the Budapest conurbation and in the conurbating regions around our cities. When calculating the index of the Pillar

these high values were taken into account in a ‘translated’ form, of course; that is, the proportion of the ‘non-illiterate’ population was standardised. The image changed a little in the case of the population aged over 14 completing at least primary school (15-x). Alongside the higher values the county seats and their immediate vicinities were prominent with their positive figures. With low values other areas in the regions falling behind included the northern parts of Bihar, Nógrád and Heves as well as the settlements of the central Tisza region, also called ‘the dead heart of the Great Plain’.

The picture is even more definitely varied among people over 18 with at least secondary level education. Regions with lower values include the southern part of the Little Hungarian Plain, and the settlements of Kemenesalja, Kemeneshát. The settlements on the north and south shores of Lake Balaton, however, constitute a unified streak with prominent values, similarly to the settlements along the western border. In fact these are the characteristics that feature in the map presenting the proportions of people above 25 with a degree. The picture is more concentrated, however. The bigger towns and Balaton-side settlements show prominent figures. It is interesting (but not surprising) to see some individual medium-size towns (Paks, Baja, Kecskemét) emerging from its vicinities.

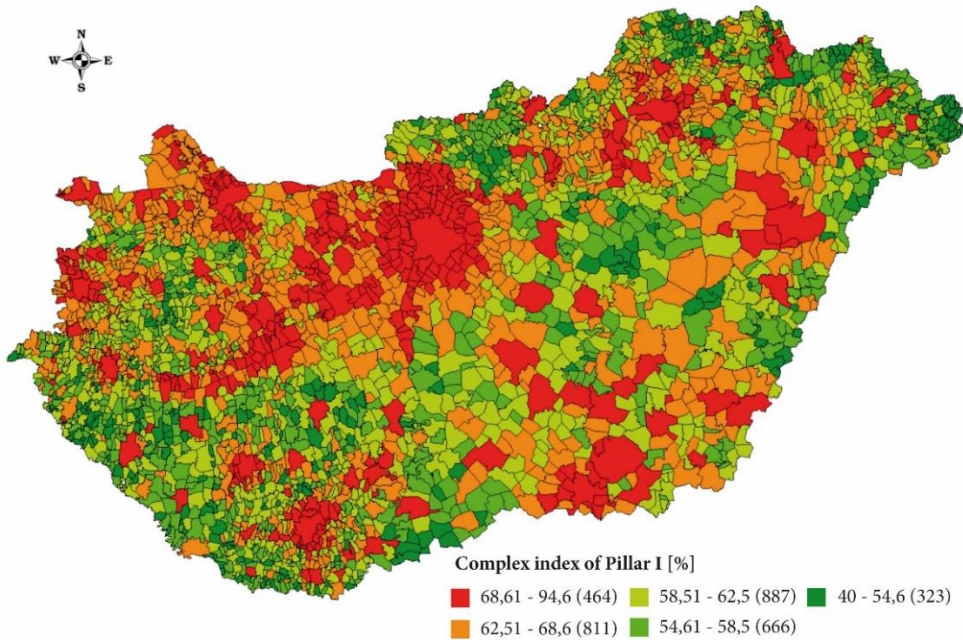
Using the experience of CLI we integrated an element of access in the analysis of institutional learning. Taking into account the situation of secondary and higher education institutions we examined the proximity of the settlements to centres (microregional, county and regional seats) as a fifth index (the possibilities of accessing them in time). Work with the already calculated data (GeoX Kft.’s data from the TEIR database) was much faster than the amount of information lost by calculating concrete access to institutions for all settlements. The access index includes the temporal distances of microregional, county and regional seats and centres. We standardised these values one by one, but they were conflated in the pillar index (Appendix 6.5). As a territorial picture, we see the hierarchy of settlements, which is parallel to the hierarchy of public and higher educational infrastructure.

The unified index on formal learning mainly reflects the picture of the hierarchy of settlements (Figure 6.1). Of the components of the index, access was found to have the strongest correlation ( $r=0.852$ ).

Budapest, county seats and towns of county rank and their vicinities yield the best values. Also worthy of attention, in addition to these swathes, the unified areas of Győr-Budapest and Veszprém (both shores of Lake Balaton)-Budapest, as well as the closed belts of town pairs Debrecen-Nyíregyháza, Miskolc-Eger and Pécs-Székeszárd, as well as the zones around Szeged, Szombathely, Kaposvár, and the conurbation of Central Békés and vicinity of Kecskemét.

**Figure 6.1.**

*Standardised complex index of Pillar I [%]*



*(Source: based on data from KSH, GeoX)*

The lower figures from the outer peripheries at the borders do not provide any special surprises. Bácska is the only region with specificities worthy of more detailed analysis. Inner peripheries also appear, such as the area of the Central Tisza Region. A unique ‘fault line’ is shown in the area with poorer figures ranging from Bihar – North Békés through the Central Tisza Region to Nógrád and Outer Somogy to South Zala.

### **6.3. Theoretical Characteristics of Pillar II: Non-Formal Learning**

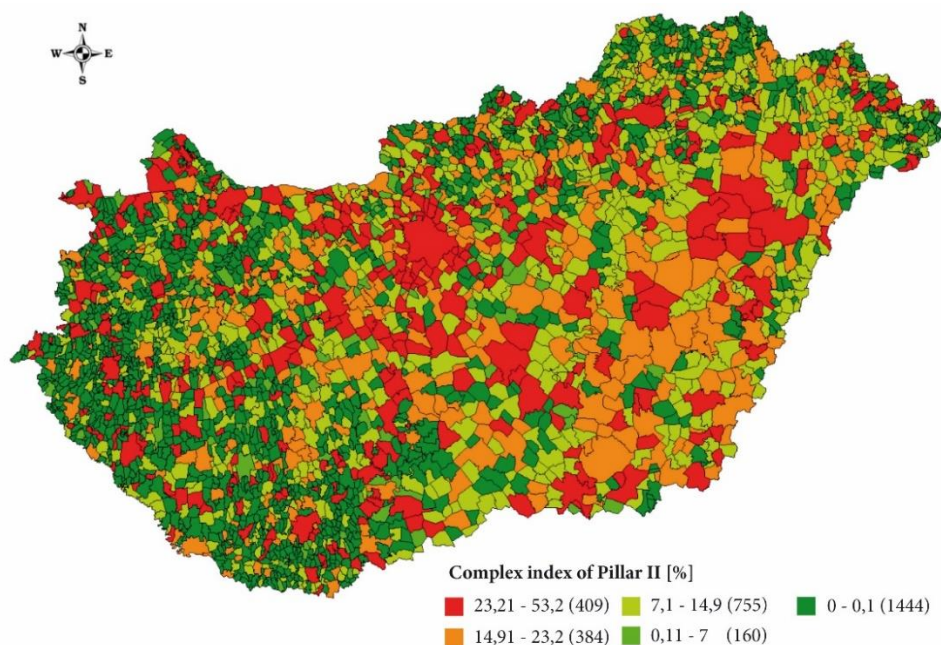
In this subchapter we analyse the spatial distribution of the index of non-formal learning and its specificities. When creating the index we used 5 figures (see Appendix 6.6 – 6.10.). A part of these was connected to the situation of the system of adult education institutions (and its proportion to 1000 inhabitants). By using the data from NIVE we examined the number of adult education institutions and accredited adult education programmes to 1000 residents. The other group of indices referred to the participants of adult education. On the basis of OSAP 1665’s data we analyse the proportion of those completing their training to the total population and to those

enrolled. We deemed it important to involve in the analysis the examination of financing of the trainings, to highlight the motivation of learning, thus the proportion of people participating in trainings supported and not supported was also analysed. We experienced significant difficulties in the location of individual/corporate and subsidised trainings.

- The indices characterising the system of institutions of adult education yield a mosaic. In our case, two-thirds/three-quarters of the settlements were not involved. Taking them into account when calculating the index seems justified owing to the access to the infrastructure of education.
- The indices of the populace appearing in adult education prove the willingness to learn.
- The index of the pillar is rather diffuse (Figure 6.2). Of the components the biggest correlation was between the proportion of people enrolling and completing the training ( $r=0.872$ ) and the proportion of participants in subsidised and non-subsidised trainings, respectively ( $r=0.841$ ). The inhabitants of settlements with smaller populations is apparently disadvantaged in this Pillar.

**Figure 6.2.**

*Complex index of Pillar II*



(Source: based on data from NIVE, OSAP 1665)

The size and role in the hierarchy of settlements make themselves felt, but the direct vicinity of bigger towns does not tower above the average. Above average values appear with respect to the Great Plain. In this case the policy of support directed at backward regions may have a role.

#### ***6.4. Theoretical Characteristics of Pillar III: Cultural Learning***

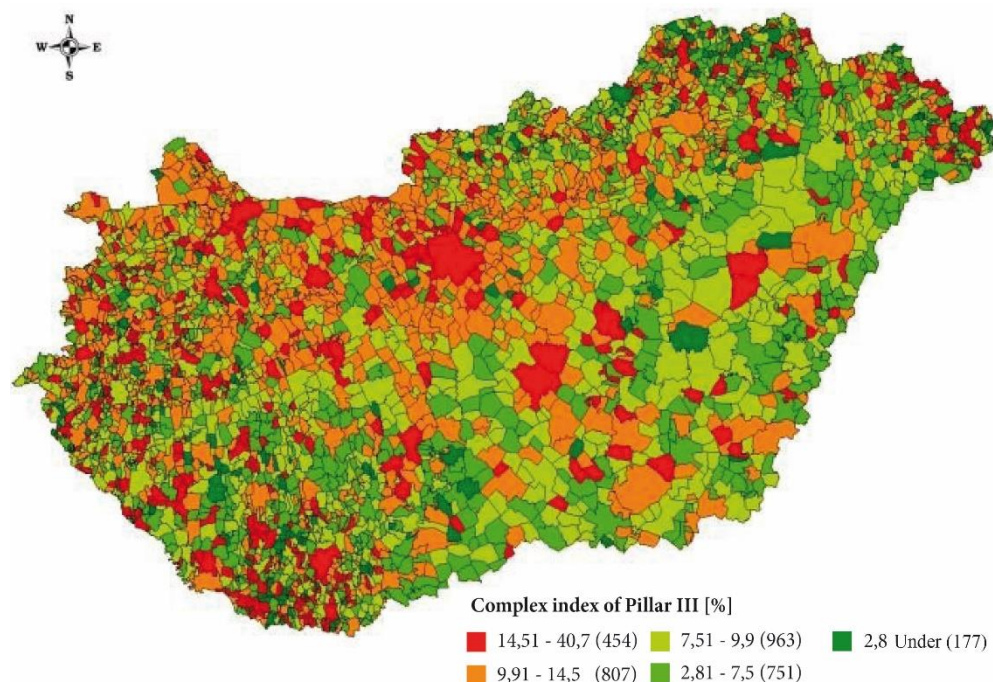
In this subchapter we analyse the territorial distribution of Pillar III ('cultural learning'). We tried to highlight territorial differences with the help of 5 index numbers. Data in this Pillar were the most difficult to collect. The majority of indices yield a mosaic; characteristically two-thirds of settlements do not appear in a significant manner (see Appendix 6.11. – 6.15). In relation to cultural institutions and local media the ratio increased to two-thirds. Part of the data was from a governmental database (kultsat.emmi.gov), from which the analysis included the number of cultural institutions (community cultural institutions, cinemas, theatres, libraries, archives, museums, zoos and wildlife parks) to 1000 inhabitants. On the other hand, we analysed the number of local media (TV, radio, printed press) to 1000 inhabitants, and emphasised learning through the World Wide Web by examining the number of Internet subscriptions. Here we handled 'the proportion of populace with access to at least 30 Mgps bandwidth cable Internet' as an index on the basis of data from e-NET Internetkutató és Tanácsadó Kft. (TEIR). Participation in events was the fifth index number.

The index of the Pillar reflected the advantages of small settlements (Figure 6. 3). We found the biggest correlation in the case of the number of cultural institutions (community cultural institutions, cinemas, theatres, libraries, archives, museums, zoos and wildlife parks) to 1000 inhabitants ( $r=0.955$ ).



**Figure 6.3.**

*Complex index of Pillar III*



*(Source: based on data from KSH, TEIR)*

It was perhaps the network of cultural institutions, established in the near past that provided a new significant role for smaller settlements. The traces of settlement hierarchy are the most hidden in this pillar.

### **6.5. Theoretical Characteristics of Pillar IV: Community Learning**

In this subchapter we examine the territorial distribution of indices for Pillar IV. We applied 5 indices, too, when creating the pillar (Appendix 6.16 – 6.20). The first shows the migration balance of settlements in the period from the prior census, with the help of data from the 2011 census. With the second index we attempted to show religious activity, by regarding, irrespective of denomination, as active those that replied not ‘atheist’ but ‘does not belong to a religious community’ or ‘does not know, did not reply’ to the question of the census. We also included in the analysis the number of NGOs and minority local governments to 1000 inhabitants. The fifth index was

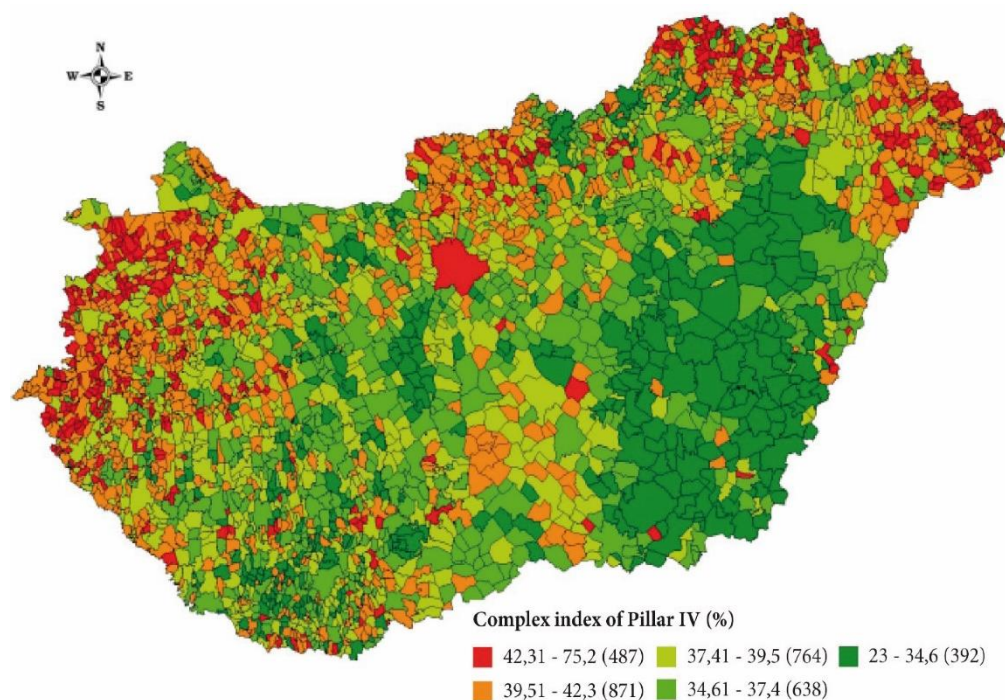
provided via political activity, based on turnout figures in the 2010 general elections. The greatest correlation was found between the indices of religious activity ( $r=0.788$ ) and political activity ( $r=0.643$ ).

- The migration balance exhibits the economic situation of the settlements. Characteristically those with poorer fundamentals experience migration from, those with better circumstances migration to. Northeast Hungary and South Transdanubia is characterised by migration from, but parts of the country with greater economic (and other) growth (Budapest, North Transdanubia and the island-like vicinity of other big towns) are destinations of migrants. In the case of the latter it is clear that these are not the settlements at the top of the hierarchy which are the real winners of immigration, but their neighbouring conurbation villages.
- In the values of religious activity we find significant differences. In Budapest and big towns, as well as the Trans-Tisza region activity is low, while it is high in areas with smaller settlements (except around Pécs).
- The number of NGOs and minority local governments to 1000 inhabitants provide further touch-up to the picture.
- With regard to political activity the high values of Transdanubian settlements above the Budapest-Balaton line are rather striking. There are interesting differences between the settlements on the Balaton shore (higher values) and south of that (lower values) of Somogy county.

The complex index of the pillar shows a definite separation between the greater settlements of the Great Hungarian Plain and regions with small settlements (Figure 6. 4).

**Figure 6.4.**

*Complex index of Pillar IV*



*(Source: based on data from KSH)*

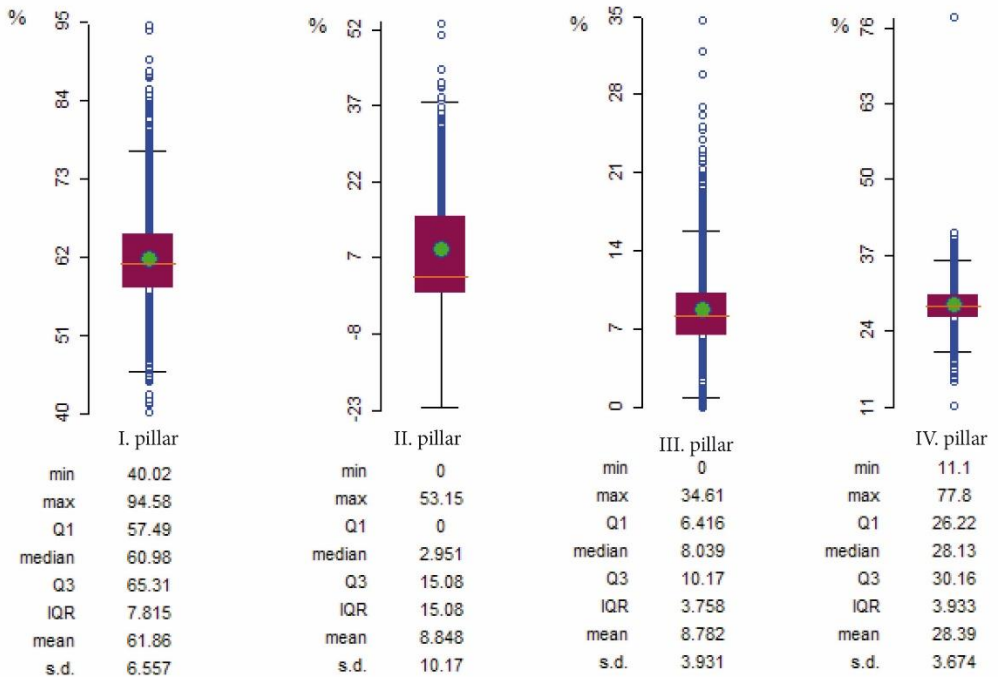
The values of the Trans-Tisza region, the Budapest conurbation, Central Transdanubia and the minor settlements of Baranya (and Pécs) are lower, while the values from West Transdanubia, Nógrád, Abaúj, Zemplén, Szatmár and Bereg with small villages, as well as Budapest are higher. Budapest is rather rarely mentioned in the same category as areas with a village municipal structure.

## 6.6. Theoretical Characteristics of the Four Pillars: The ‘LeaRn Index’

We also attempted to create a complex index by means of the available data. According to our basic hypothesis the complex of indices reveals territorial differences. Naturally, their variation carries the possibility of their extinguishing one another and ‘blurring’ territorial differences (Figure 6. 5).

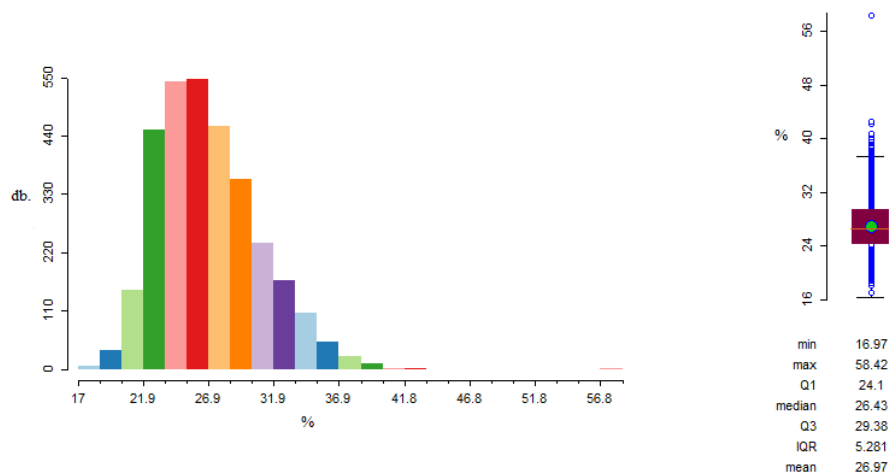
**Figure 6.5.**

Boxplot diagrams of the individual pillars



Of the components of the complex index the first and fourth pillars seem more stable with lower deviation. In the case of the second, extreme values appear in larger numbers. For Pillar II the 15.08 value of the interquartile is exceptionally high. The complex index, which was created by averaging the partial indices, is called *LeaRn Index* (LI). By looking at Figure 6.6, we may establish that the complex index is statistically suitable for presenting the phenomenon.

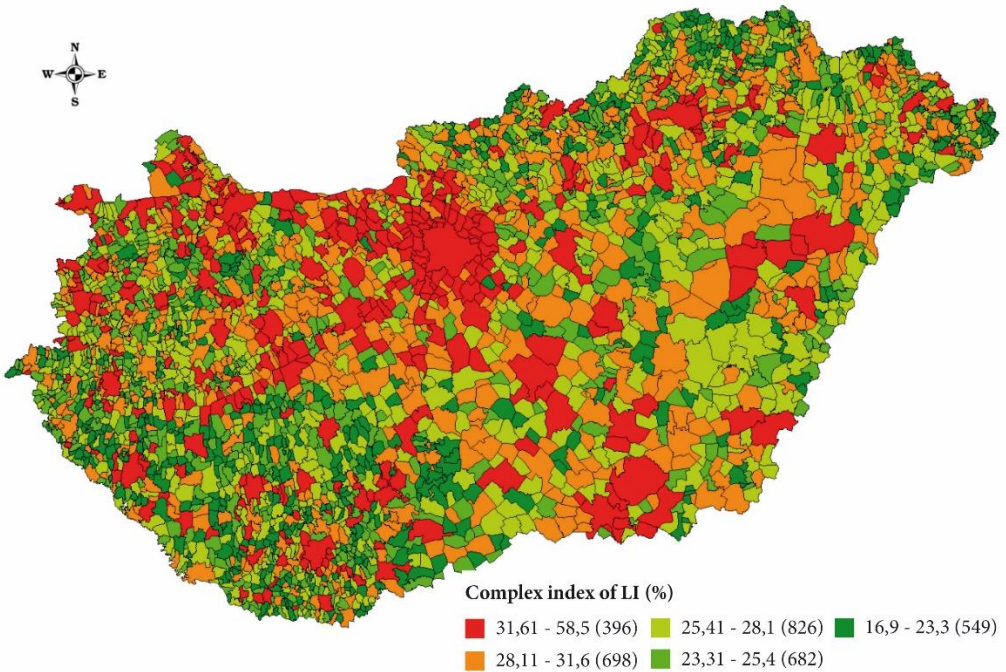
**Figure 6.6.**  
*Histogram of LI*



The curve of the histogram slightly shifted toward the lower values, and the boxplot also proves deviation. The values of the settlements have been presented in a five-degree scale with the help of MAPINFO, by the software's automatic categorising feature entitled 'natural break' (Figure 6.7).

**Figure 6.7.**

*Spatial distribution of LI in Hungary*



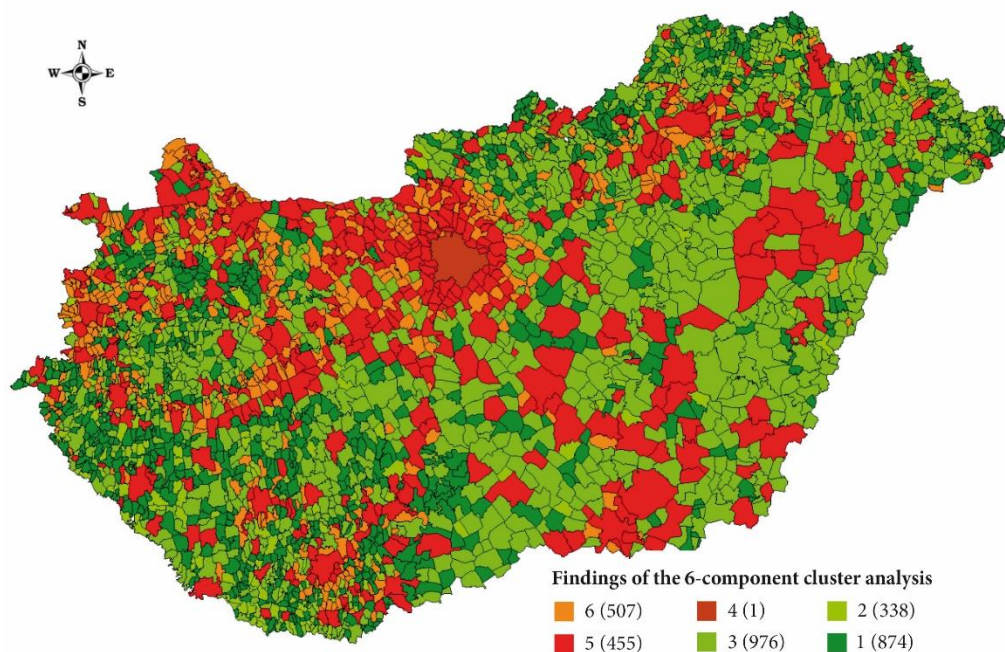
(Source: KSH)

Budapest's conurbation, the region of Central Transdanubia emerges from the Hungarian average as a unified zone. In relation to it, we may recognise a Kecskemét-Szeged axis, too. In addition, regional centres (Miskolc, Debrecen, Szeged, Pécs) and their vicinities appear with learning values above average. In these areas some town pairs appear: the relationships of Miskolc-Eger, Debrecen-Nyíregyháza, Szeged-Békéscsaba, Pécs-Székeszárd-(Kaposvár) appear prominent. In order to confirm territorial interdependences we carried out cluster analysis with 6 components, which further varies the picture (Figure 6. 8).



**Figure 6.8.**

*Findings of the 6-component cluster analysis*



The picture from the cluster analysis reflects territorial characteristics more accurately. The six clusters are in fact only five, since Budapest, arising out of the towns, is a cluster in itself (Cluster 4). The warm colours following it (red and orange) represent the territorial concentrations in better circumstances. Cluster 5 performed more weakly in Pillar IV, while cluster 6 did so in Pillars IV and II. The lively green hues show poorer indices. Cluster 2 (light green) represents settlements with around average indices in Pillars III and IV, while number 3 shows the same in Pillar II. The clearly poor values belong to Cluster 1 (deep green).

Homogeneous areas with great areas and positive indices can be found in the regions of Budapest and North Transdanubia, Miskolc-Eger, Debrecen-Nyíregyháza, Szeged-Békéscsaba, and Szolnok and Kecskemét. West and South Transdanubia (vicinities of Szombathely-Zalaegerszeg, Kaposvár, Pécs-Szekszárd) have more varied structures.

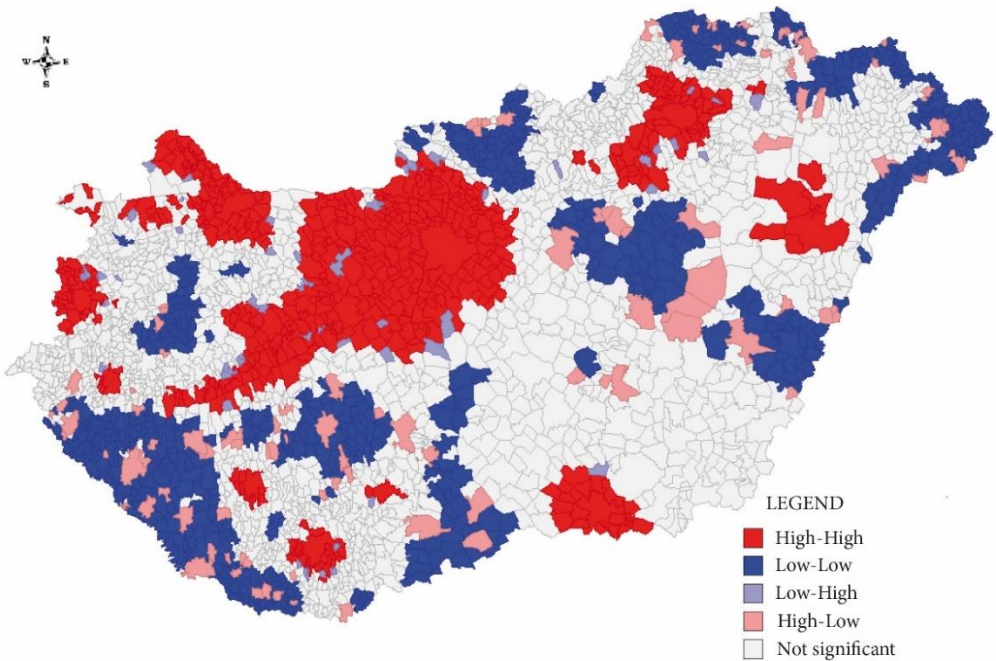
We attempted to show territorial interconnections by adjacency analysis. We performed a territorial autocorrelation analysis on our data. We chose as our tool the Local Moran autocorrelation coefficient, developed by *Luc Anselin* in 1995 (Nemes Nagy 2007). The advantage of this is that differences are not only shown by numbers

but on a map, too, so it is highly suitable for representing spatial correlations and isolating connected settlement groups (Tóth 2003).

Statistics Local Moran I was directed at the spatial representation of attitudes to learning. In this, using LI, we wanted to see whether for neighbouring settlements the values of the complex index ‘shifted together’ or were independent of one another. The map shows the specific classification of the settlements (Figure 6. 9).

**Figure 6.9.**

*Local Moran I categories of the complex index (LI)*



The basic principle of putting in a group is a clear connection of an LI value of attitude to learning with its neighbours. It is not the values that have been presented, but the interrelations with the neighbours. As a result of the operation performed with the *Geoda* software (Univariate Local Moran's I) the settlements were delegated to four categories (five groups).



1. HIGH– HIGH (*hot spot*): Settlements with high values, the neighbours of which also show high values,
2. LOW–LOW (*cold spot*): Settlements with low values, the neighbours of which also show low values,
3. LOW–HIGH: Settlements with low values, the neighbours of which show high values,
4. HIGH–LOW: Settlements with high values, the neighbours of which show low values
5. There is no significant relationship between the settlement and its neighbours

The map is rather mosaic-like, but there are some intriguing points. In relation to learning, Budapest has a central role, with a unified area including Komárom-Esztergom, Fejér, and mainly Veszprém (with Keszthely: also Zala) counties. Győr-Moson-Sopron (Győr) as well as Vas (the vicinity of Szombathely), Pécs, Kaposvár are also central places in Transdanubia. In the Great Plain positive zones also appear around bigger towns. Szeged, Debrecen, Miskolc-Eger are all the centres of zones of greater girth. In general these are higher education centres, towns and catchment areas with strong educational traditions, with well-developed systems of secondary educational institutions: in their cases high values were presumed from the start. It is somewhat more interesting that the same good characteristics do not appear as unified areas around Sopron or Nyíregyháza.

Depressions are characteristically found near the borders, in Nógrád, Borsod, Zemplén, Szatmár, North Békés and the southern part of Bihar. The unified bad features of the triangle of Kalocsa–Hercegszántó–Bácsalmás are intriguing. Inner peripheries are also outlined here, with the conspicuous bad situation of the Central Tisza region and the Somogy Hills as well as the settlements of the Marcal Basin.

\*

The goal of our statistical data processing with relation to Hungary and settlement data and our experiment to create an index was to present the attitude of Hungarian settlements to learning. We looked for those settlements and settlement complexes, regions, where the results of learning in the broad sense (e.g. education) and its possibilities (e.g. network of institutions, access) were better (or poorer) than the national averages. Based on the opinions of experts we selected 20 indices which would be suitable to describe the phenomenon (according to our view). By statistical methods we organised these into an index and presented the findings on maps, analysing their territorial features. With the help of a territorial autocorrelation

analysis we showed the regional correlations of the values found. As a result of all these, we found settlements and groups of settlements with univocally good features where the possibilities of creating a learning region and learning town were given. Budapest, Debrecen, Miskolc-Eger, Szeged, Győr, Pécs (Kaposvár, Zalaegerszeg, and Szombathely) and their vicinities today have the best features for this in Hungary. The other extreme presented areas (characteristically along the border peripheries, in the regions of Nógrád, Borsod, Zemplén, Szatmár, Zala, Bácska), where the poor assets imposed barriers. The analysis of the components of regional features makes it necessary to carry out further detailed investigations the likes of a case study.

### ***6.7. Comparison of the LI with social and economic indices***

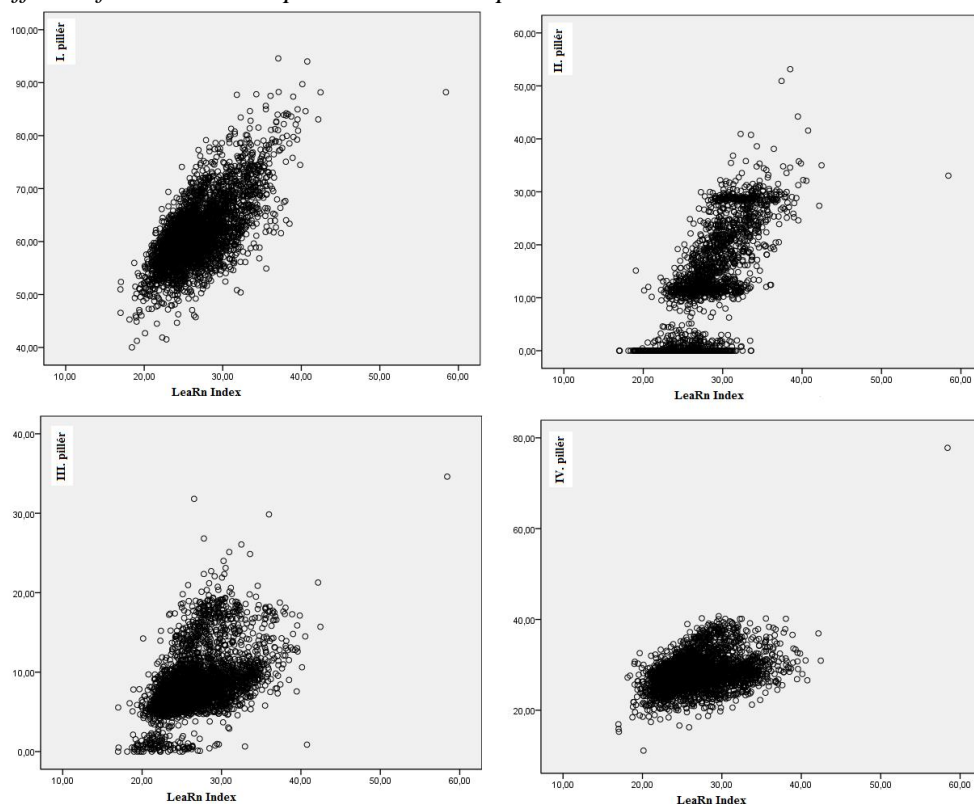
Following examples from professional literature we examined the effects of internal components (partial indices) on the LeaRn Index and also performed the comparison of components and the complex index with social and economic indices.

#### ***6.7.1. The impact of individual pillars on the complex index***

Searching for impacts of the individual dimensions on the complex index we realised that it was formal learning that had the biggest weight in impacts on the index (Figure 6.10). The correlation is evident.

**Figure 6.10.**

*Effects of the individual pillars on the complex index*



Due to the characteristics of data, the relationship between Pillars II and III is mosaic-like. In these cases data did not present continuous values. The case of Pillar IV is special. Its effect is recognisable, and continuous, but the correlation is nothing like that of Pillar I.

Our presumption already outlined in the stage of data collection was verified. Pillars I and IV have clearly recognisable statistical backgrounds. We were able to work with easily collectible, various indices, and could select them when establishing the components. Partial indices, therefore, also yield a varied spatial picture (many coloured but also clearly showing territorial differences). Data from Pillars II and III were difficult to collect and mosaic-like. When creating the picture of the complex index they are important components, but their partial indices are in themselves not too informative.

6.7.2. *Social and economic and complex indices used for comparison*

Similarly to the international practice (CLI, ELLI) we performed the comparison of the index with some relevant socio-economic indices and complex indices also available for the settlements. We conducted correlation analyses with several indices (rate of unemployment, employment, aging index, amount of PIT per capita).

Owing to similar results of the *indices* we used the **unemployment rate** and the **value of PIT per capita** to present economic conditions. For both data from the Census of 2011, broken down by settlement, were included in the comparison.

Of *complex indices* the deprivation index and the objective well-being index, adapted to Hungarian conditions, were included in the comparison. Several dimensions of the **deprivation index** and the related numbers appeared suitable to present the situation of disadvantaged people in Hungary. The adaptation of the index developed by British scientists (IMD) was performed by the colleagues of the Hungarian Science Academy, Institute for Regional Studies, Centre for Economic and Regional Studies, Hungarian Academy of Sciences (MTA KRTK RKI) (Kovács K. 2010; Koós B. 2014). The following Table contains the dimensions and indices chosen by them (Table 7.2).

**Table 6.1.**

*Deprivation index components*

Index of Multiple Deprivation (2010) (number of indices)	Deprivation index 2011 (indicators)
Employment domain (7)	Unemployment rate Jobless household rate
Barriers to housing and services domain (7)	Rate of flats without comfort
Income domain (5)	Average monthly taxed income per capita Rate of personal income tax payers for the population aged 15-64
Education skills and training domain (7)	Rate of population with minimum secondary school degree for the population aged 25-x
Health and disability domain (4)	Number of people aged 60 and over per 100 children of age 15 and under
Crime domain (4)	-
Living environment domain (4)	-

(Source: based on Kovács, K. 2010)

The territorial specificities of the index truthfully reflect the regional differences in Hungary.

**The objective well-being** index, regarded by the representatives of regional science as the most widely based indicator, was created as a criticism of (alternative to) development analyses based on narrow economic indices (Table 6.2). Adaptation in Hungary was carried out by the staff of MTA KRTK RKI again. They worked with 10 dimensions and 30 indices. In contrast to the LeaRn Index, here the researchers weighted values. The dimensions of *income* and *employment* (1.45); *health, housing and qualification* (1.05); *risk, democratic participation, natural environment, access to public services, demographic sustainability* (0.79) were all weighted. It is interesting to note that there are overlaps with components of the LeaRn Index, too, in relation to education (education block), turnout of elections (democratic participation block) and access to services (only in the domestic adaptation).

**Table 6.2.**

*The well-being model adopted for Hungary*

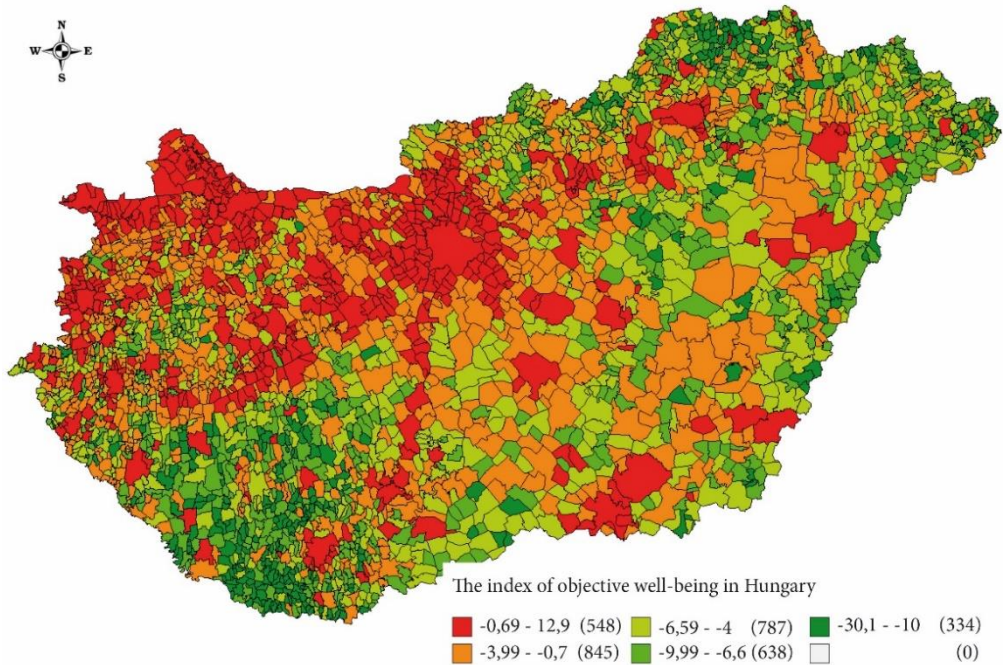
Canadian Index of Well-being	OECD Your Better Life Index	Well-being model adopted for Hungary
Living standards (housing index)	Housing	Housing
Living standards (income)	Income	Income
Living standards (work)	Jobs	Jobs
Education domain	Education	Education: <u>18-x; 25-x</u>
Environmental sustainability	Environment	Environment
Democratic engagement domain	Civil engagement	Participation at parliamentary and self-governmental elections
Health	Health	Health
Community vitality (crime)	Safety	Risks
X	X	Demographic sustainability of the region or settlement
X	X	Local availability of secondary and tertiary public services
X	Life satisfaction	X

(Source: based on Nagy, G. – Koós, B. 2014)

It follows from the complexity and versatility of the index that it presents territorial differences in a sophisticated way, too (Figure 6.11).

**Figure 6.11.**

*The characteristics of objective well-being in settlements of Hungary (2011)*



(Source: based on data from Nagy G. - Koós B. 2014)

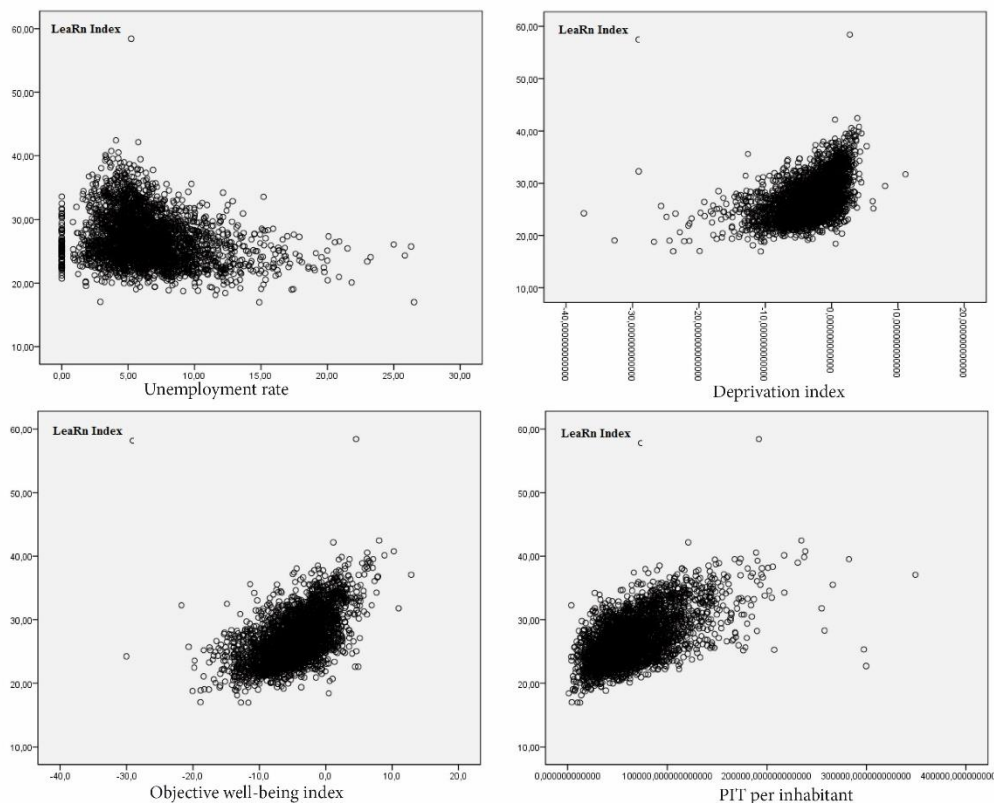
Budapest and its conurbation, the north of the Transdanubian region appears as a block on the map in relation to positive values, the bigger towns and their vicinities as a mosaic. The indices of the settlements of South Transdanubia, Northeast Hungary and the South Great Plain are among the poorest.

### 6.7.3. Statistical interconnections between the social and economic indices and the LeaRn Index

In general we can say that the LI shifts closely together with the indices of economic development (or naturally their inverse, if the index is about a negative feature). The most definite correlation of the like can be seen with the objective well-being index (Figure 6.12).

**Figure 6.12.**

*The relationship of the LeaRn Index with the indices used for comparison*



In the case of the unemployment rate the different picture results from the reverse relationship.

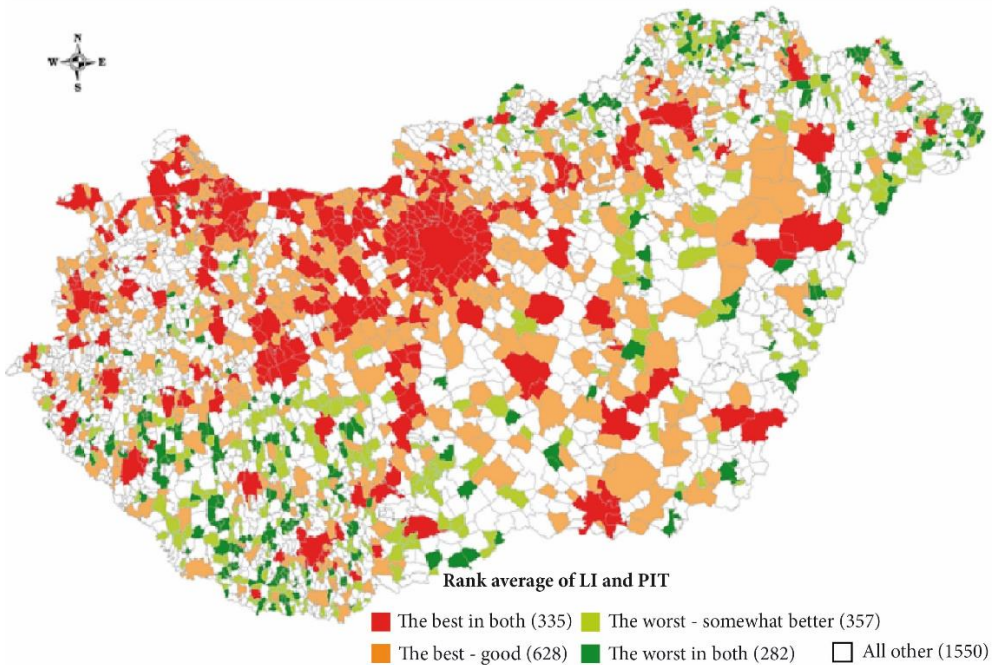
#### 6.7.4. Territorial correlations

In addition to statistical relationships, we also examined territorial correlations. By simple ranking (rank averaging) we looked for settlements with similar features. In the case of the LeaRn Index and the index selected for comparison we divided the settlements of Hungary into five parts of identical size (with near identical numbers of settlements). The results of ‘fiving’ (in the case of individual socio-economic indices falling in the first, second, third, fourth and fifth category) were compared to the identical categories of the LeaRn Index. The group of settlements which were in the

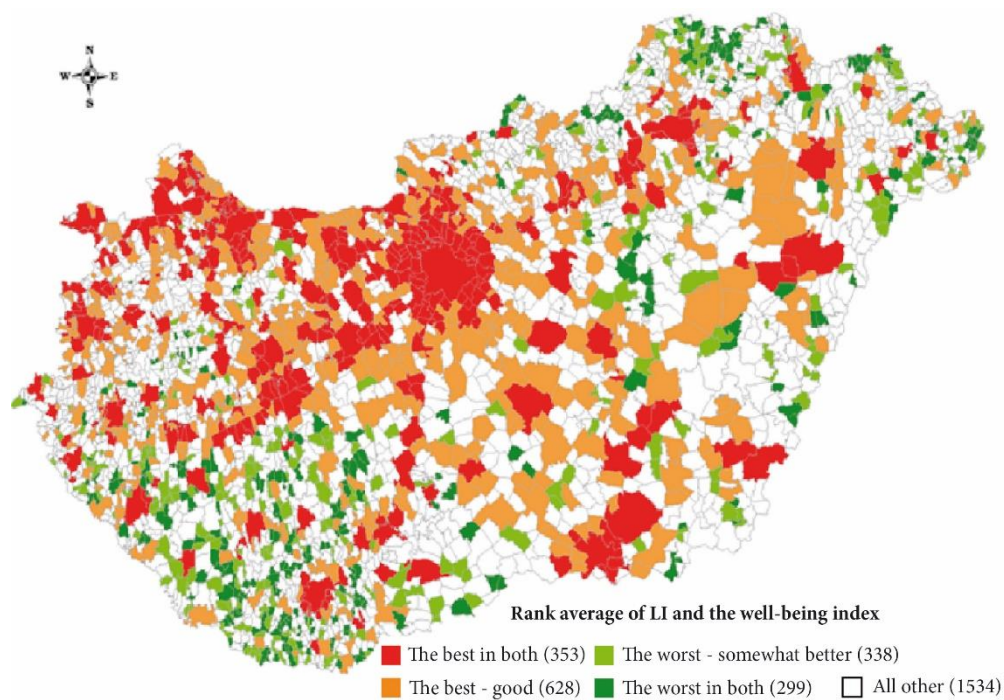
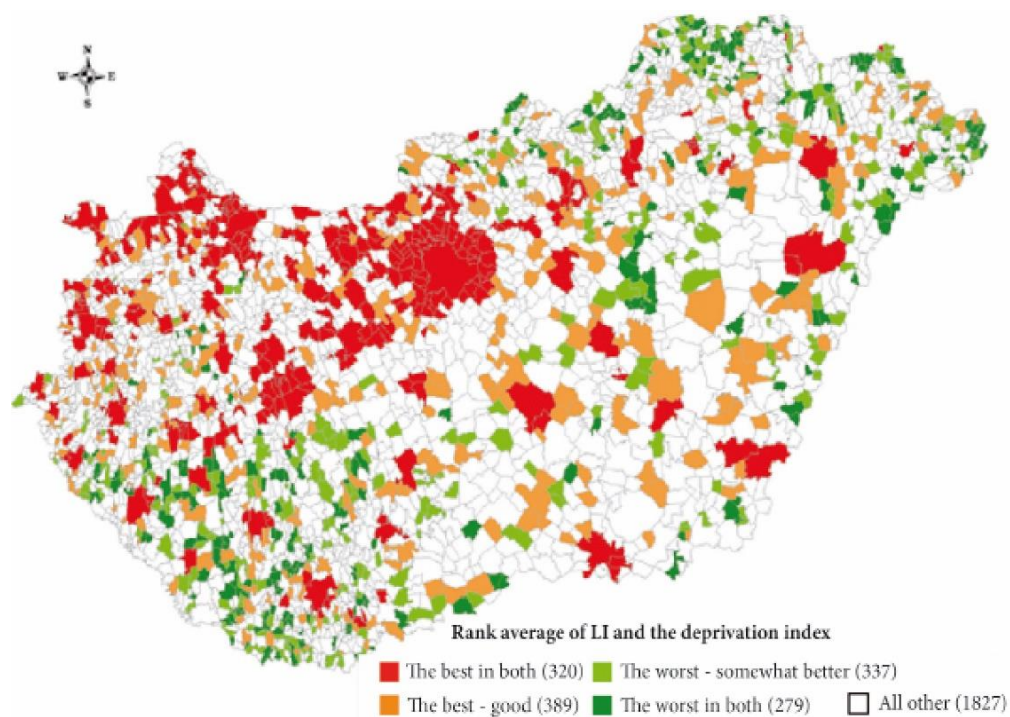
best fifth both in the LI and the index used for comparison were naturally the ones with the best living conditions. On the thematic map these are shown in red. If they were the best in ‘only’ one of the two factors compared, but were one notch lower for the other index, they went into the second category (orange). These settlements were among the best with regard to the LeaRn Index or the index number used for comparison, in the other rank (here undecided which of the two) received a value of ‘almost the best’. According to a similar logic, settlements indicated in dark green received worst for both categories, while those in light green received one worst plus one ‘almost the worst’ (Figure 6.13).

**Figure 6.13.**

*Coincidences in social and economic indices, complex indices and the LeaRn Index*







It is observable that the occurrence of values close to one another (presence in best and worst categories) is high. In all three comparisons the number of settlements in the best tier is above 300, while the number of ones in the combined ‘best-good’ streak is between 400-630. The worst correlation is lower (below 300). In general parallels are cleaner in the case of better categories.

Regionally, the strongest correlation lies with the well-being index. In 652 settlements the correlation is full, in 966 it is close. All in all, over half of the settlements fall into the identical or very similar category. With regard to regions, these essentially coincide with advantaged and disadvantaged settlements in the LeaRn Index.

The fact presented in the previous subchapter (namely that Pillar I, ‘formal learning’ has a definitive role in the complex index), can be seen here, too. The first pillar definitely correlates with all the social and economic indices.

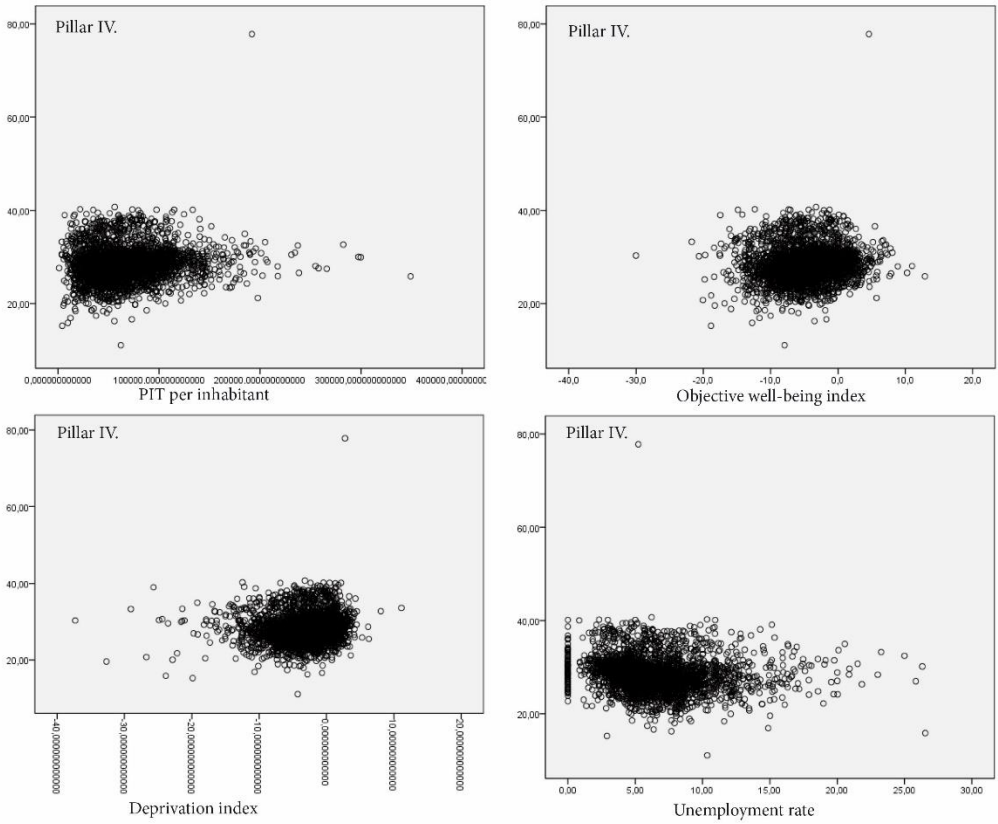
#### *6.7.5. The connection of individual pillars (dimensions) to the indices used for comparison*

Given that the role of Pillar I is dominant in the complex pillar, it is not surprising that it has a close connection to indices analysed. In all comparisons, it is much like the parallels with the complex index (Figure 6.14).

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**Figure 6.15.**

*The connection of Pillar IV to the indices used for comparison*





## ***Chapter 7***

### ***Learning Regions in Hungary***

#### ***Summary***

*Tamás Kozma*

The concluding chapter of this volume summarizes the problems, the procedures and the results of the LeaRn Project. LeaRn as a research project aimed to:

- discover and analyse the economic, political and cultural factors in a given territorial and social unit that contribute to the emergence of a ‘learning region’ (LR).
- identify, describe and compare territorial units in Hungary as ‘learning communities’ (LC) and their co-operations as future LRs.
- study one or more of those LCs as cases of the emergence of alternative LRs.

#### ***7.1. The Problem***

The LeaRn project intended to address the following problems:

- Transnational structures (development agencies) initiate the emergence of LRs in Europe as in other parts of the world (CERI 2000, Cedefop 2003). LR is, however, a loosely defined concept for communication rather than for analysis and policy building. The developmental agencies referred use this concept as an umbrella term for their various policy initiatives.
- As transnational structures, developmental agencies apply top-down strategies. They use LR as a benchmark of (regional) development, and invite competitors to meet the benchmark. Competitors then show their developed regions (usually *the* most developed) to meet the benchmark. (See LRs in selected EU member states: <http://www.noema.fi/go.cfm?PageID=3020>).
- Applied as a benchmark – rather than an analytic concept – LRs and LR-forming processes are not studied empirically. Because studying the elements of LRs and the processes of LR forming may lead to the definition of alternative LRs and the initiation of bottom-up strategies.

The LeaRn project intended to meet this challenge from the research side. In the background of the elements of LR and LCs a regional statistical analysis has been conducted. On the basis of its findings, types of LCs have been described and a typology of LCs suggested. By studying one or more cases alternative processes of LR forming were also discovered.

## **7.2. Background**

The LeaRn project had a fourfold background: (a) the concept of ‘LR’ and the R&D related activities; (b) the concept of ‘lifelong / lifewide learning’ (LLL) and its relation to LR; (c) the concept of ‘urban centres of culture and education’ as an alternative strategy of regional development; and (d) minority (higher) education and related initiatives as political movements in the political transition of Hungary and East-Central Europe.

*LR as a R&D&T (research, development and training) concept.* The concept and the word ‘LR’ has first been used by Florida (Florida 1995). He suggests LRs ‘as collectors and repositories of knowledge and ideas’ which ‘provide the underlying environment or infrastructure which facilitates the flow of knowledge, ideas and learning’ (Florida 1995: 527). Right from that beginning, the concept of LR emerged and formulated as an umbrella concept for various meanings and thoughts. The typical ones has been:

- *LR as a concept in the economic geography* (human or social geography), which may apply the economic importance of education, science and knowledge industry to the processes of regional developments (Morgan 1997). To revitalize stagnating (monostructured) regions of heavy industry, mining etc. by the help of educational and cultural institutions came at the turn of the 1970 and 1980s. To integrate these endeavours into a new development strategy (LR), however, has been the result of the late 1990s and the early 2000s (Hudson 1999, Hassink 2004).
- *LR as an LLL concept.* LR as an alternative strategy for regional development – heavily depended on knowledge production, learning and culture (in a broad sense) – is closely connected to the concept of LLL. In some cases and publications, LR seems as the optimum territorial unit for the ‘education and training agencies taking a leading role in promoting innovation on a regional basis’ (Cedefop 2003: 1). LLL activities can better be coordinated at regional (territorial, local) rather than national levels. ‘This refers to social and organisational learning that arises in the course of cooperation between different

bodies and interest groups, technological and social research/development agencies, educational institutions, companies, social partners, community bodies (civil society), working together in project teams or in dynamic networks to achieve a common goal' (Cedefop 2003: 3). It is a new understanding and application of the known term of LLL.

- *LR as a political concept.* Some of the contributors and forerunners of the LR concept stress the importance of political initiatives, actors and processes which lead to LR as an objective (a political target). Lukesch and Payer (2009) connect LR as a development concept with the process of governmental renewal. To them, LR is a political slogan (or it can be formulated as such) and can and should be applied for a new understanding of local (regional) governance. ('The literature upon regional governance focuses on conscious and purposive collective action', Lukesch and Payer 2009: 5). The same is stressed heavily by the editors of the collection of papers referred to (Cedefop 2003). According to them, LR is a political rather than just a developmental concept. LR is especially a concept which organises local/regional political actors of knowledge production, innovation, learning etc. for regional development.

*LLL and its actors for development.* LLL is also an umbrella concept. It collects various activities which can be classified as 'learning' or can be connected with it (from work based learning to leisure-time cultural activities and from formal to non-formal and informal learning). Traditionally, LLL has three main dimensions: (a) formal LLL means adult education, mostly in school settings; (b) non-formal LLL points to workplace (in-service) education and training; while (c) informal LLL can be understood as social and political processes within a polity (be it a habitat, a community or an organisation). LLL in the connection with the 'LR' concept is mainly used as a political term. It means that LLL activists and their activities may contribute – or play a critical role – in creating LRs / LCs. LLL as a collection of various cultural activities for local / regional development can only emerge if the necessary infrastructure is given or can be built (capacity); if a human potential for LLL exists or can be created; and if a political will is available.

*Urban centres of education and culture: the heritage.* LeaRn as it was understood and defined by its team had a long research heritage going back to the late 1970s in Hungary. At the turn of that decade (1970s-1980s) developmental strategies had been formed and suggested to the political centre as alternatives for their rigid regional planning. Those alternatives stressed the importance of culture and education in regional developments and initiated the creation of 'urban centres of education and



culture’ besides industrial centres (Kozma 1988). LeaRn can be defined as a descendant of that early initiative.

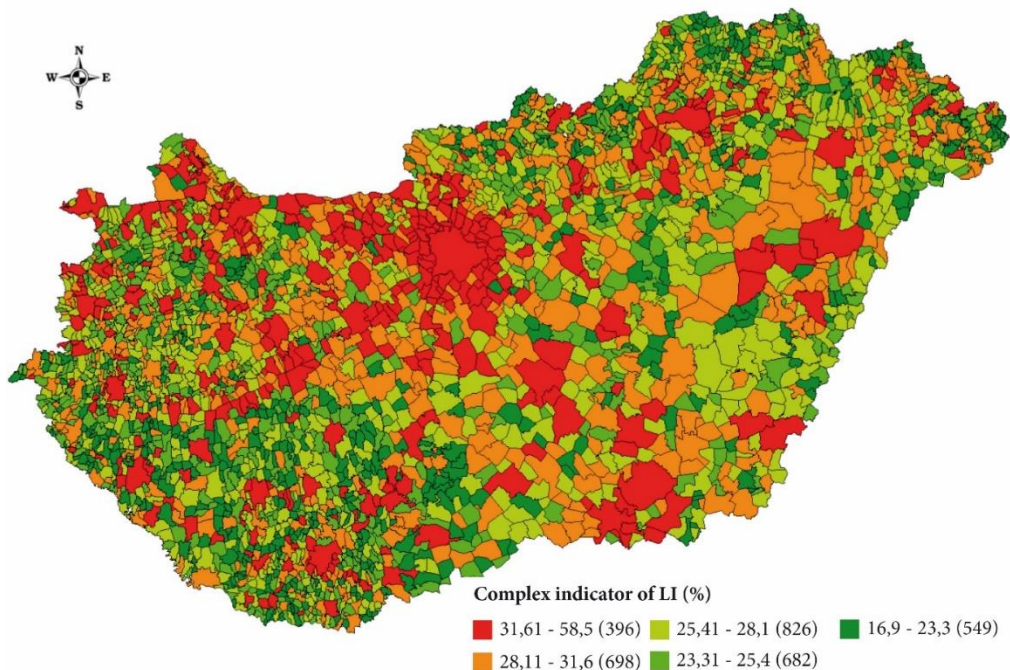
*TERD: Tertiary education and regional development.* Studying the regional impacts of education and education policies in a cross-border area (the ‘Partium’), the outstanding importance of civic initiatives became visible. These civic initiatives were especially vivid at the political turn of 1989-90, and characterised (educational) policymaking all over the East-Central European region. Studying the emergence of new LCs and alternative LRs, the LeaRn project goes back to this political tradition of bottom-up policy formation.

### **7.3. Learning Regions in Hungary**

Figure 1 summarizes the main findings of the LeaRn project. It shows the spatial distribution of the HLI (Hungarian LeaRn Index).

**Figure 7.1.**

*Learning Regions in Hungary*



The map presents three different types of LR's in the country. (For a better understanding and an easier overview, we only concentrate on territories indicated in red on the map.)

- Budapest, the capital, together with its urban area, emerges as the leading LR of Hungary. According to the classical (economic geography) interpretation, it might even be called the only LR of the country.
- Three sectors are shown on the map, starting from Budapest and leading to Western, South Western and South Eastern Hungary. In a more inclusive interpretation, these three sectors could also be called the LRs of Hungary. The western sector consists of the conurbation area between Budapest, Győr and Sopron (with newly upgraded higher education institutions and plants of outstanding German car factories such as Audi and Opel). The south western sector embraces Székesfehérvár with its traditional and modernised manufacturing as well as the Balaton area which emerges, according to recent census data, as a tourist and resort area (for senior citizens with higher education). The south western sector is a new development from the point of view of LR's and could be called an LR mostly created by educational and cultural indicators. The south eastern sector is also a new development. It covers the Hungarian territory beginning again at Budapest and reaching, via Kecskemét, the southernmost city centre, Szeged. It is characterised by Kecskemét as an emerging centre of German car manufacturing (Mercedes) as well as by Szeged as both an industrial and a higher education centre.
- Besides those LRs, further parts of the country emerge on the map as smaller or larger individual territories (Debrecen, Miskolc, Szolnok and to a lesser extent Pécs). They are typical urban centres with their vicinities. We suggest the label 'learning cities' to them. The meaning of this label is miscellaneous. In any case, however, these territories offer a 'climate' with dense communication networks, more intensive community life and stronger social interactions. Among other things, they offer a better infrastructure for all these actions. The 'learning cities' of Hungary offer more and a wider selection of jobs and a differentiated service sector. Last but not least they are the administrative centres of the Hungarian government administration.
- The emergence of 'learning communities' is also visible on the map (points in red). These 'points' are communities – mostly separated from one or other 'learning cities' – still showing signs of economic, political and cultural activities. They can attract their surroundings and could be (at least some of them) starting points for future 'learning cities'. A future socio-economic developmental policy may concentrate on these.

Thus, the concept of ‘learning region’ proves to be a powerful tool for understanding the socio-economic processes of the given social and territorial units, and for contributing to their further development. The role of education and training in this development has been known for a long time (from the mid-1950s) in developmental studies. These studies, however, mostly used the educational and labour statistics. On the basis of those statistics, various territorial units could be described and demarcated as centres of development or as crisis areas. Time to time, however, those demarcated areas might show unexpected ‘behaviours’. They might unexpectedly meet economic, social, even historical challenges. They might even turn from stagnation into development as a consequence of such a challenge. The explanation lies in the various human resources of the given territorial unit. The LeaRn Project – following its predecessors, the Canadian CLI, the European ELLI and the German Atlas of Learning – proves that a multidimensional vision of human learning (cultural and community learning besides the formal and non-formal learning) may lead to a better understanding and a more embraced vision of the human development of the territory where we live.

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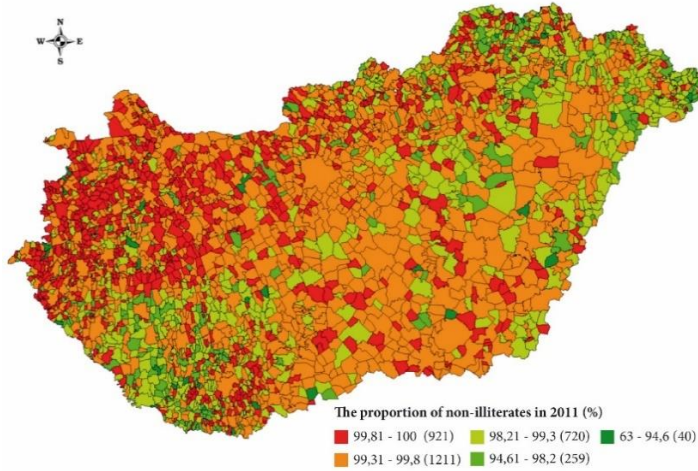
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## Appendices to Chapter 6

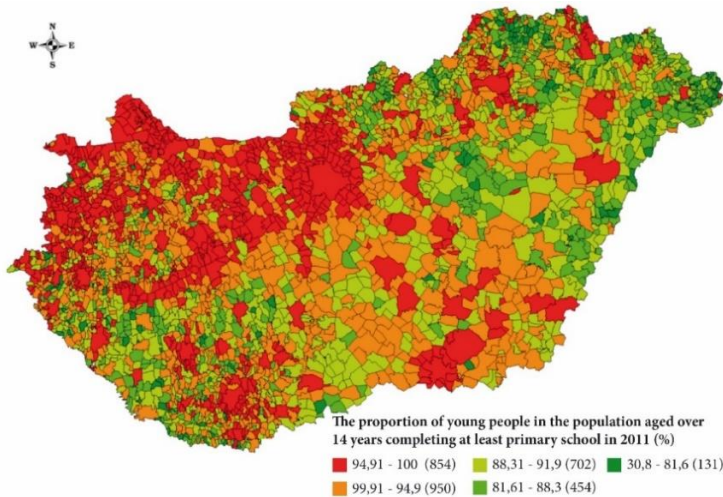
Károly Teperics

### 6.1. The proportion of non-illiterates in 2011



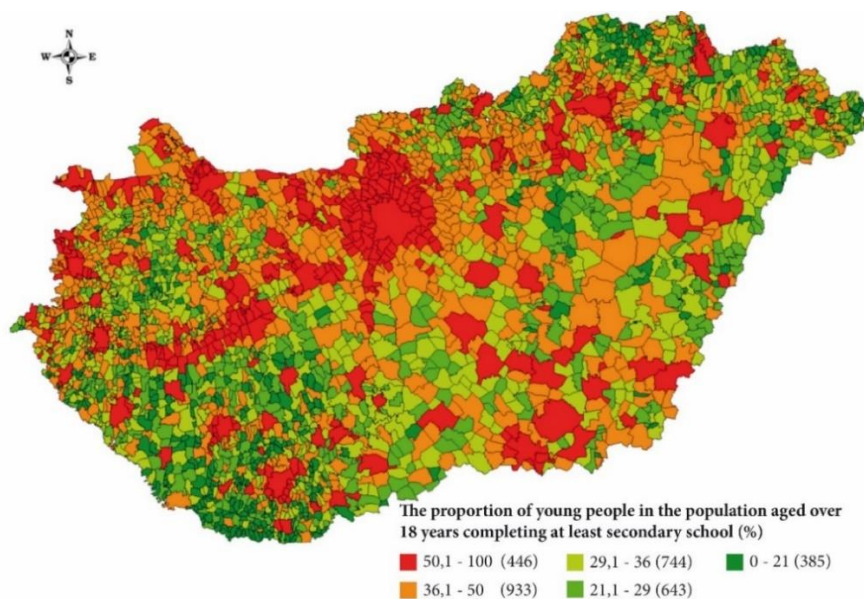
(Source: Census 2011, KSH)

### 6.2. The proportion of young people in the population aged over 14 years completing at least primary school in 2011



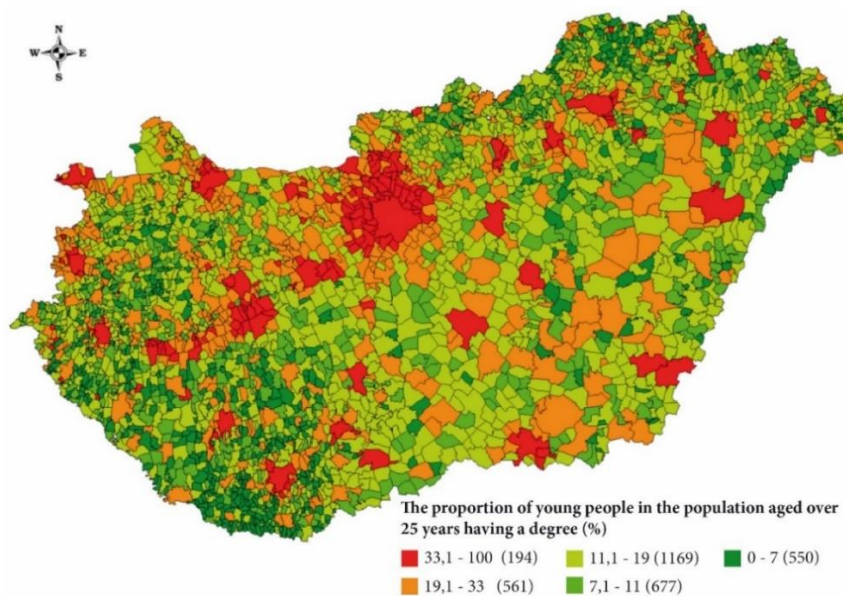
(Source: Census 2011, KSH)

6.3. The proportion of young people in the population aged over 18 years completing at least secondary school



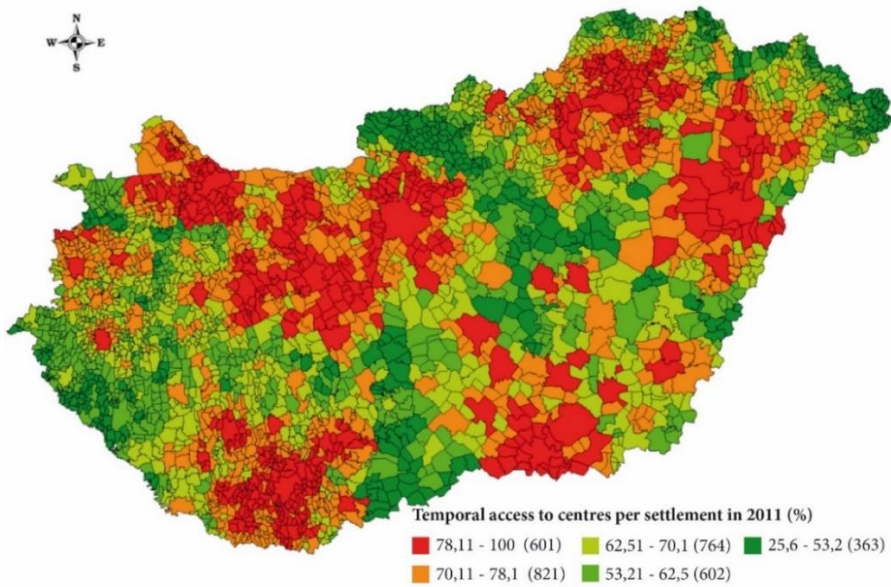
(Source: Census 2011, KSH)

6.4. The proportion of people in the population aged over 25 years having a degree



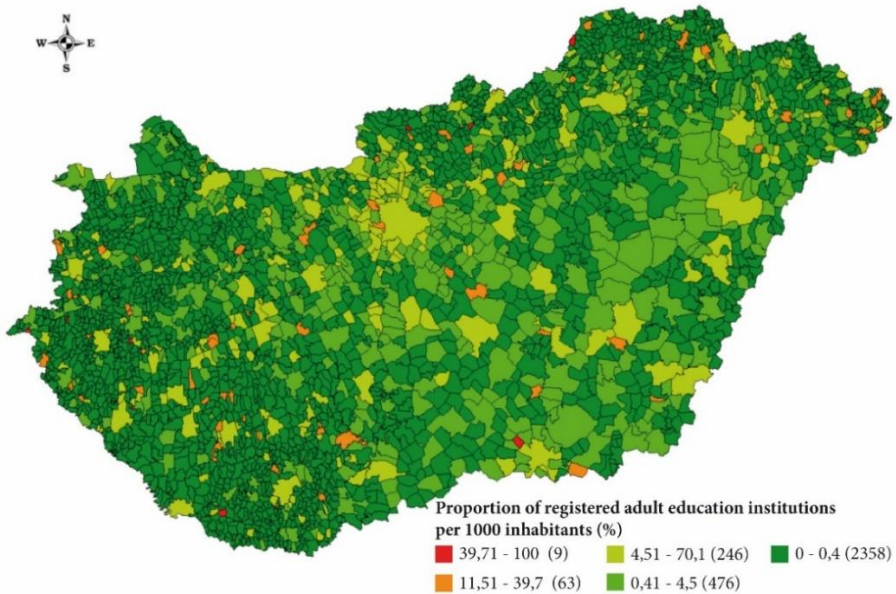
(Source: Census 2011, KSH)

### 6.5. Temporal access to centres per settlement



(Source: GeoX Kft, TEIR)

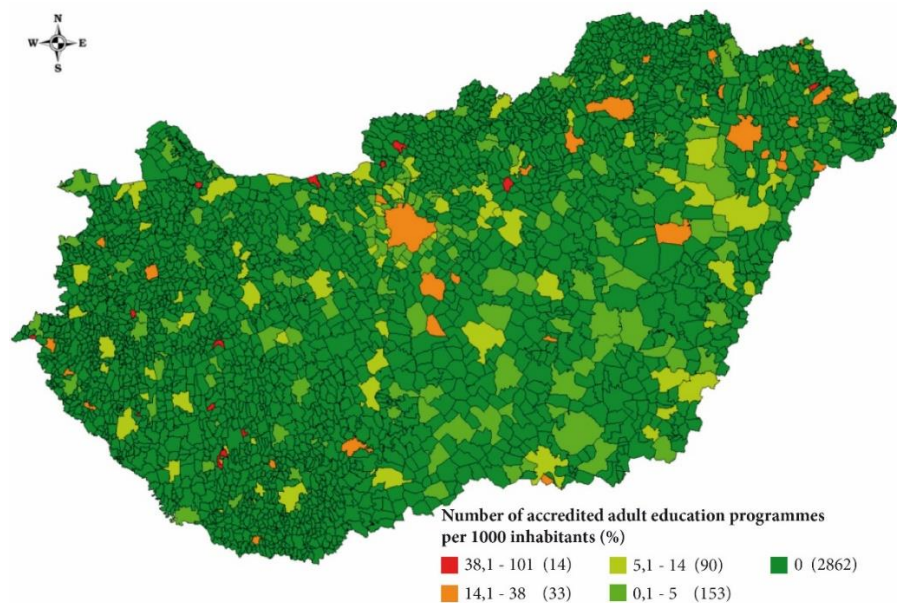
### 6.6. Number of adult education institutions per 1000 inhabitants



(Source: NIVE)

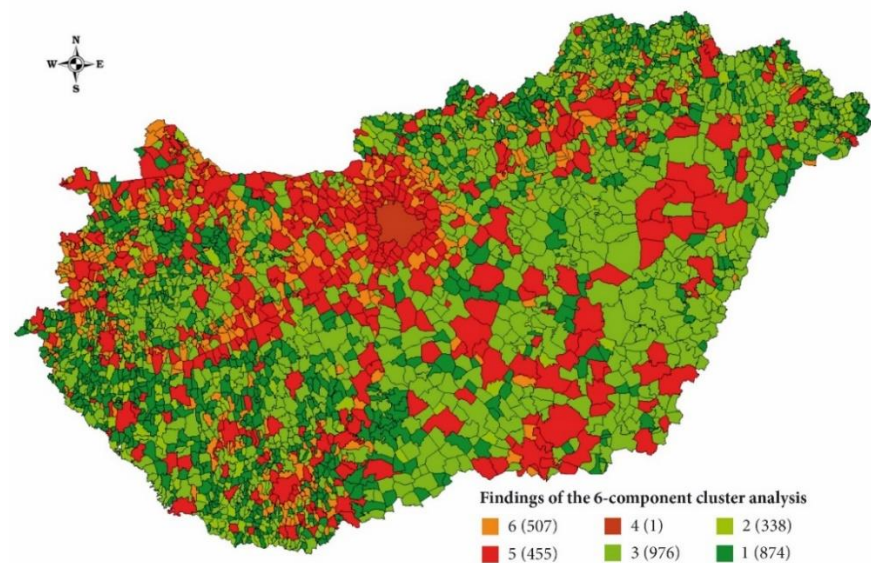


6.7. Number of accredited adult education programmes per 1000 inhabitants



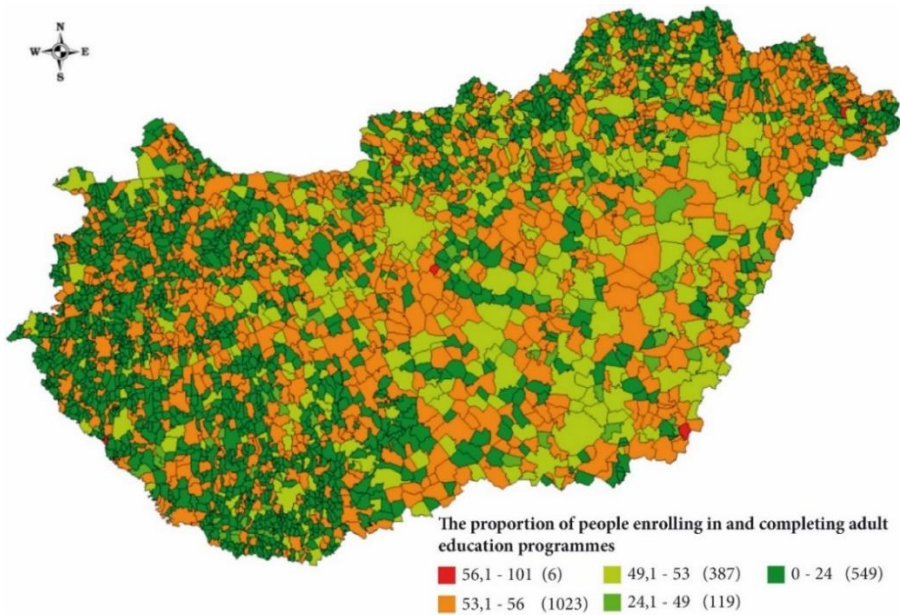
(Source: NIVE)

6.8. The number of people completing their adult education in proportion to the total population



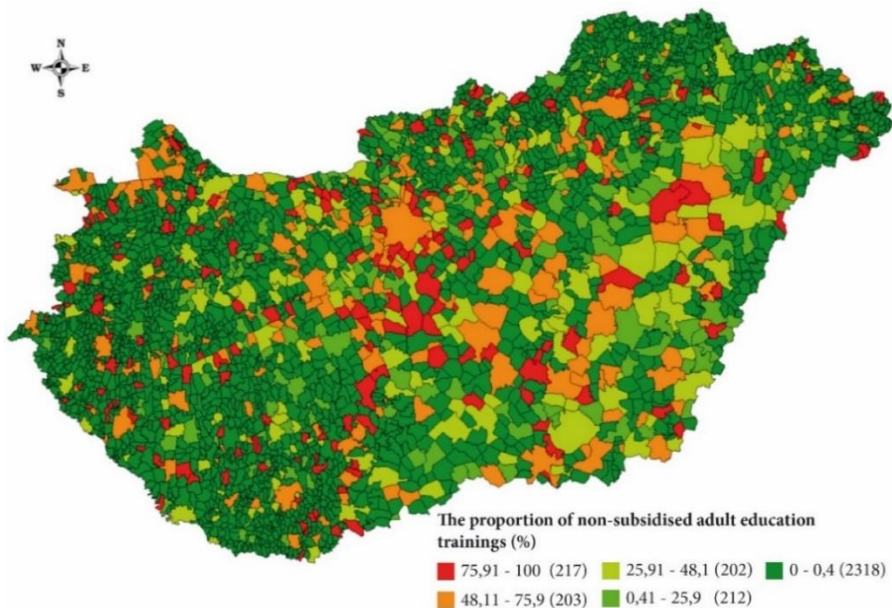
(Source: OSAP 1665)

6.9. The proportion of people enrolling in and completing adult education programmes



(Source: OSAP 1665)

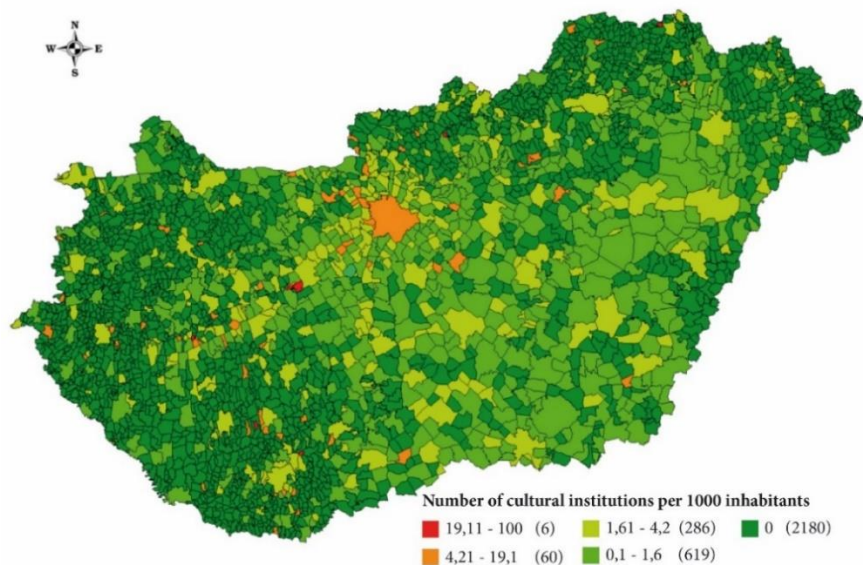
6.10. The proportion of non-subsidised trainings in adult education



(Source: OSAP 1665)

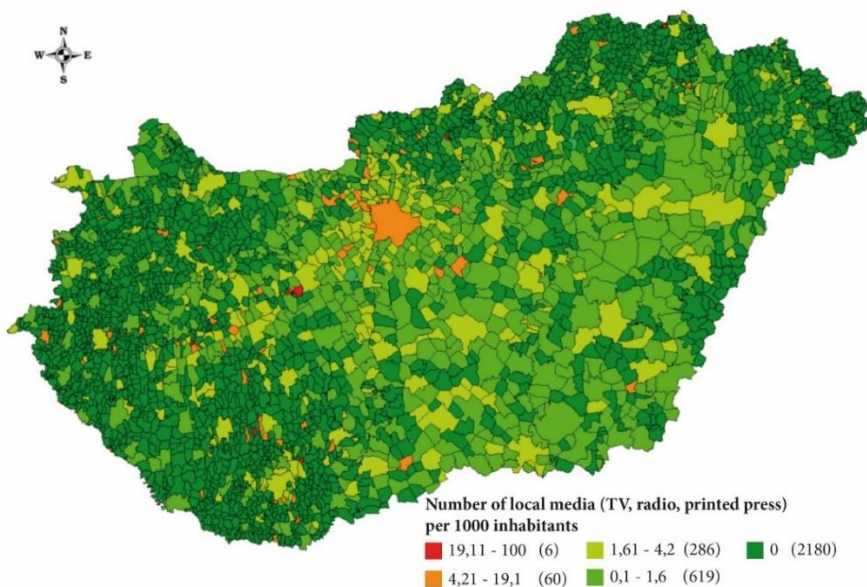


6.11. Number of cultural institutions (community cultural institutions, cinemas, theatres, libraries, archives, museums, zoos and wildlife parks) per 1000 inhabitants



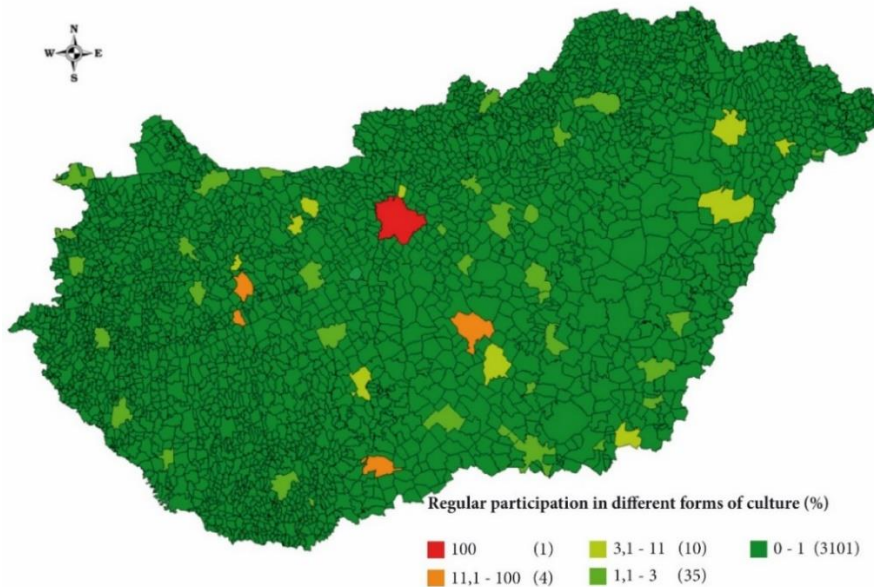
(Source: Ministry of Human Resources, Cultural Statistics System)

6.12. Number of local media (TV, radio, printed press) per 1000 inhabitants



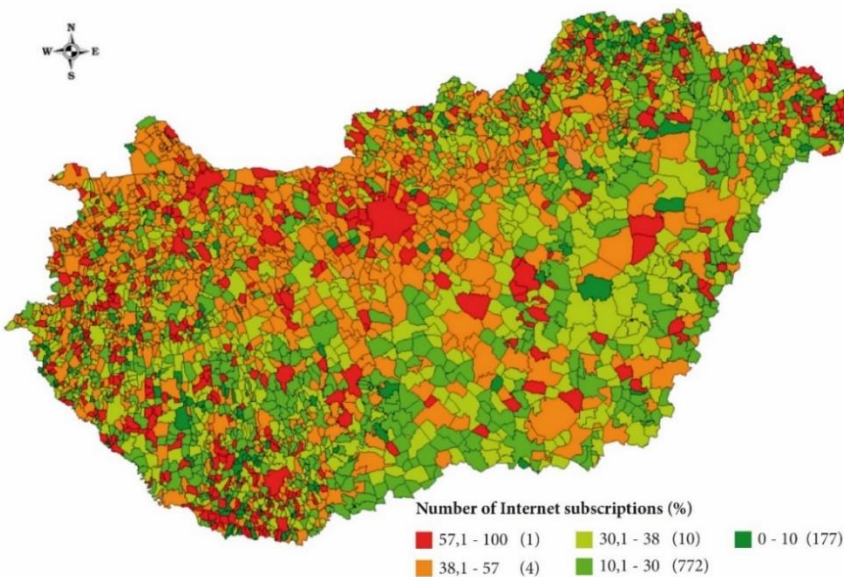
(Source: Ministry of Human Resources, Cultural Statistics System)

6.13. Regular participation in different forms of culture



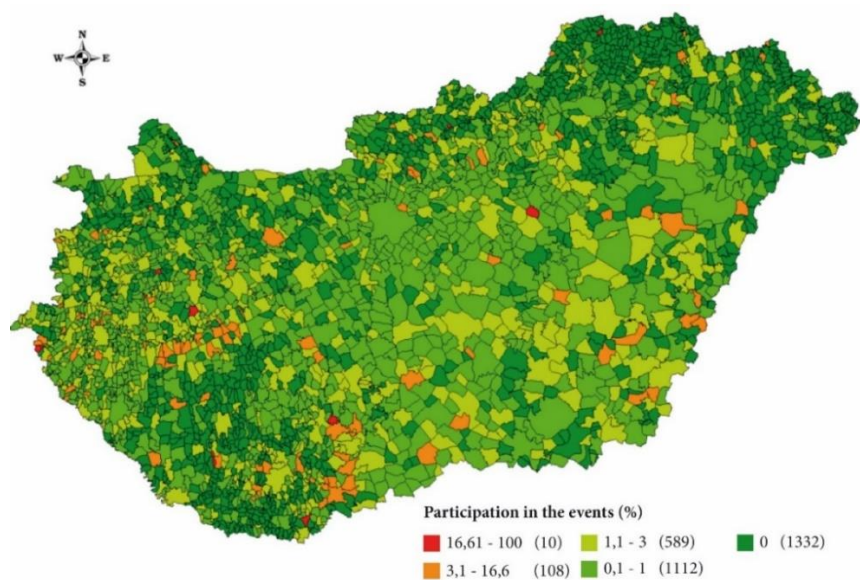
(Source: Ministry of Human Resources, Cultural Statistics System)

6.14. Number of Internet subscriptions ('the proportion of populace with access to at least 30 Mgps band width cable Internet')



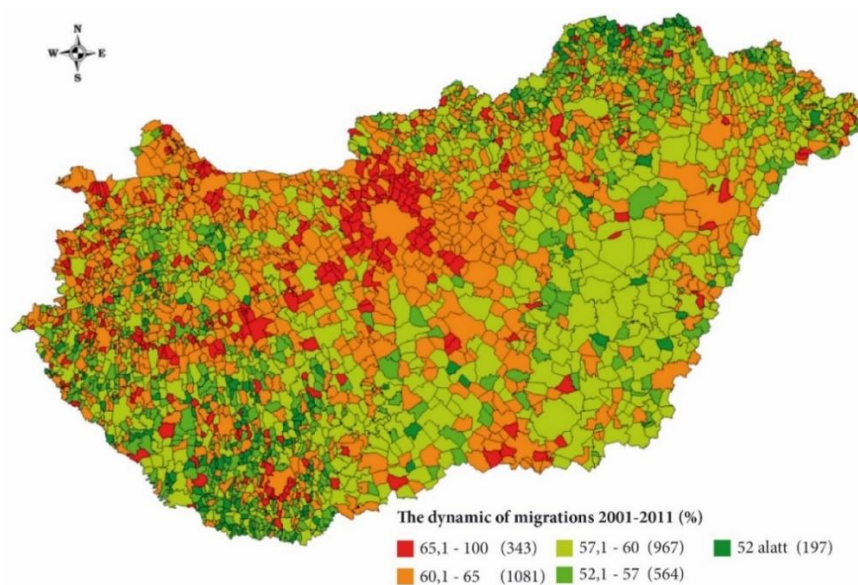
(Source: Census 2011, KSH)

### 6.15. Participation in cultural events in 2011



(Source: Ministry of Human Resources, Cultural Statistics System)

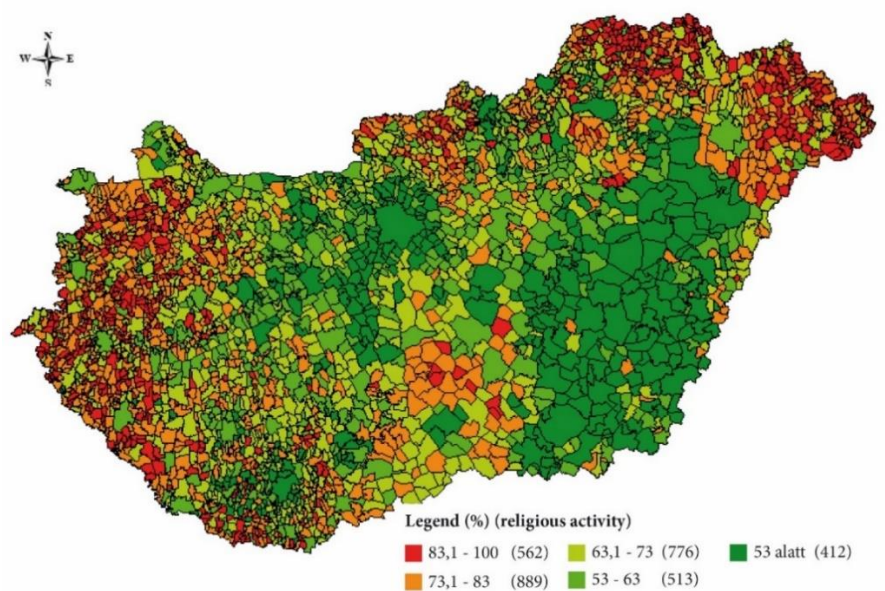
### 6.16. Migration balance (2001-2011)



(Source: Census 2011, KSH)

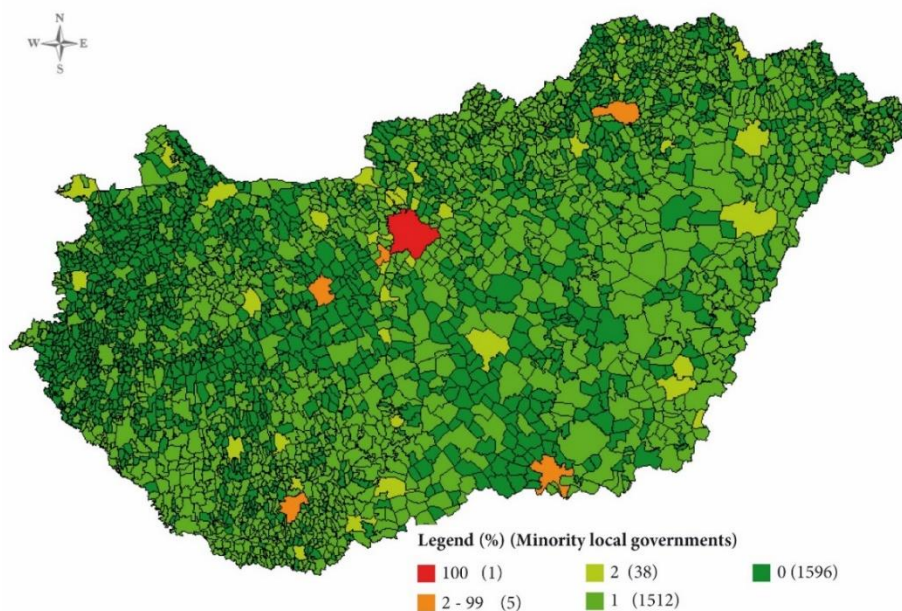


6.17. Religious activity (number of believers per 1000 inhabitants)



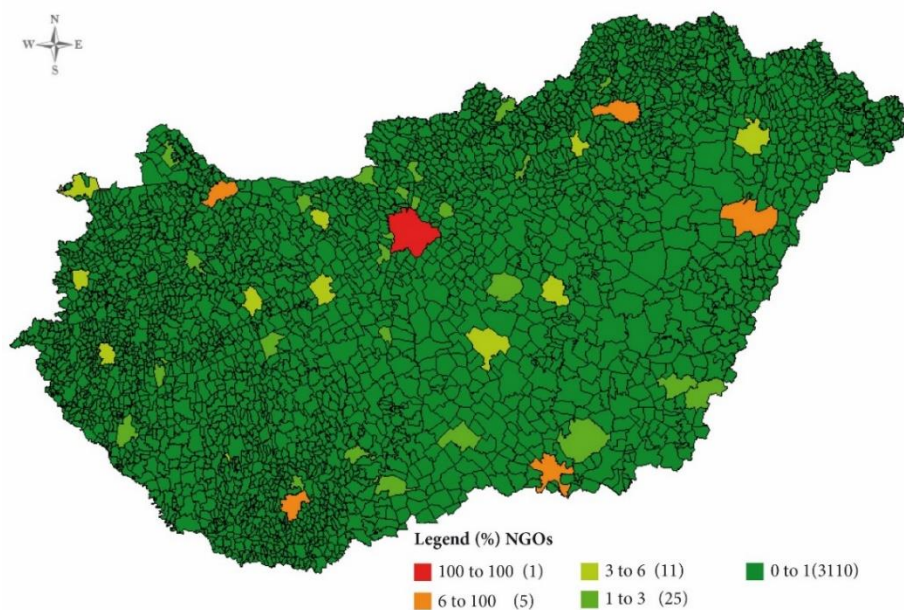
(Source: Census 2011, KSH)

6.18. Proportion of minority local governments per 1000 inhabitants



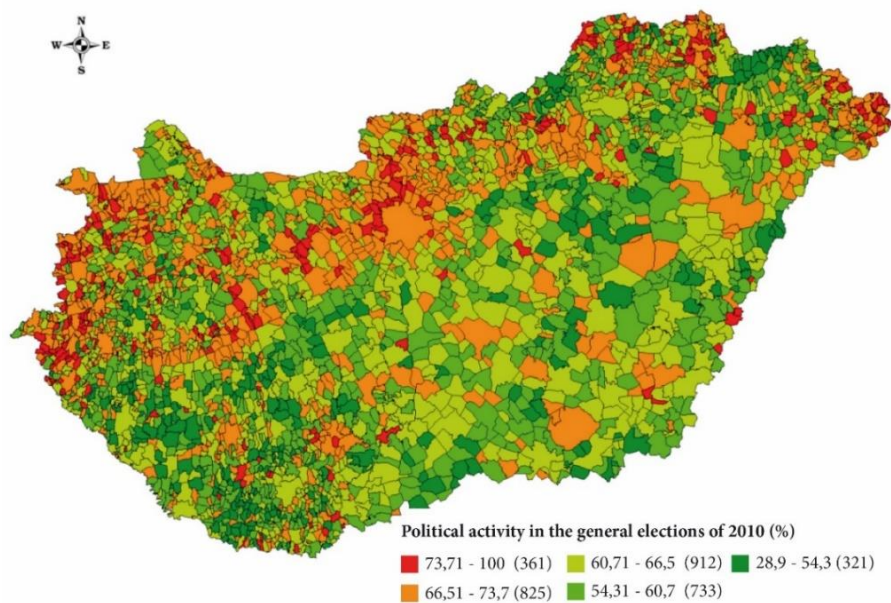
(Source: Census 2011, KSH)

### 6.19. The proportion of NGOs per 1000 inhabitants



(Source: Census 2011, KSH)

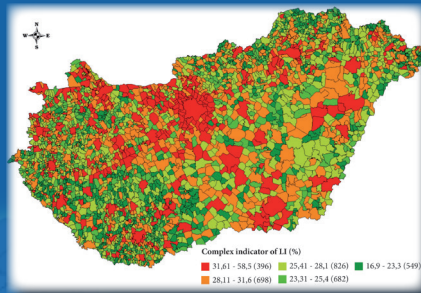
### 6.20. Political activity (proportions of turnout in the general elections of 2010)



(Source: National Election Office)



# Learning Regions in Hungary



The map presents three different types of LR's in the country.

- Budapest, the capital, together with its urban area emerge as the leading LR of Hungary.
- Three sectors are shown on the map, starting from Budapest and leading to the Western, to the South Western and the South Eastern part of Hungary. These three sectors could also be called the LR's of Hungary. The Western sector is consisted of a conurbation area with newly upgraded higher education institutions and plants of the outstanding German car factories. The South Western sector embraces Székesfehérvár with its traditional and modernised manufacturing as well as the Balaton area. The South Western sector could be called an LR mostly created by educational and cultural indicators. The South Eastern sector is characterised by Kecskemét as an emerging centre of German car manufacturing (Mercedes) as well as by Szeged.
- Further parts of the country emerge on the map. They are typical urban centres with their vicinities. These territories offer a 'climate' with densed communication networks, more instensive community life and stronger social interactions. They are the 'learning cities' of Hungary; they are also the centers of the Hungarian government administration.
- The 'learning communities' (points in red) show initial signs of economic, political and cultural activities. They could (at least some of them) be the starting points of future 'learning cities'.

Thus, the concepts of 'learning region' become a powerful tool to understand the socio-economic processes of the given social and territorial units and to contribute to their further developments. The LeaRn Project--following its predecessors, the Canadian CLI, the European ELLI and the German Atlas of Learning--proves that a multidimensional vision of human learning--cultural and community learning besides the formal and non-formal learning--may lead to a better understanding and a more embraced vision of the human development of the territory where we live.