VYTAUTO DIDŽIOJO
UNIVERSITETO
ŠVIETIMO
AKADEMIJA

Social Clustering in Sustainable Environment

Giedrė Kvieskienė[1], Gerd-Bodo von Carlsburg[2]

[1] Vytautas Magnus University, Education Academy, T. Ševčenkos g. 31, LT-03111 Vilnius, Lithuania,
giedre.kvieskiene@vdu.lt
[2] Heidelberg University of Education, Keplerstraße 87, D-69120 Heidelberg, Germany, b.v.carlsburg@gmail.com

Anotation. In the article we analyses Social clustering theories, Success stories, indicators and Models of the sustainability Algorithms for Smart Education and Social Partnership. Concepts that are conceptualized in. articles, studies, monographs and research reports of G.-B. von Carlsburg, G. Kvieskienė, V. Kvieska, T. Masson, K. Robinson, V. Targamadzė, E. Celiešienė and etc. associated with Smart Education, Child welfare and Positive socialization. This concept is also widely used in Lithuania for the preparation of national and international strategies, concepts, normative documents and projects between both public and non-governmental organizations. The phenomenon of social clustering development not been analyzed sufficiently and its development has been hampered both in Lithuania and in other countries. By analyzing a Smart Education Scenario, both the scientists and Stakeholders experiment to acquire answers about empowering public, private, research institutions and NGOs for daily networking, social clustering, developing social capital and public welfare.

The *object* of this research is social clustering and Smart Education Interfaces.

The *Tasks:*
- Define the features of Smart Education and Clustering.
- Analyze the Main Indicators of Smart Education, based on expert interviews, focus group discussions.
- To Examine and Define the Principles of Social Clustering.
- Create a Social Clustering algorithm and adapting four habits scenarios.

Keywords: *social clustering, sustainable development, smart education, positive socialization, public-private partnership.*

Introduction

Problems of sustainable development are intrinsically tied to the socio-ecological system defined to tackle them. This means that scientists from the relevant field of research as well as the involved societal stakeholders have to be regarded as elements of the socioecological system in question (Jahn, Becker, Keil, & Schramm, 2011). This reality is powerfully evident in Lithuanian regional and community strategies (Adams, 2016) To assure investment in Smart Education, Social Industries, Creative Economy, Social Capital and Regional and Local development theory is related to the Social economy (Kvieskienė & Kvieska, 2012; Kvieskienė, Briedis, Burvytė, Celiešienė, & Čiužas, 2016). The concept of ecosocial innovation is rooted in the ecosocial paradigm, which has developed mainly in the European context of social education, social work, social policy since the 1980s and has connected these fields with the ecological movement, policies and research. It frames the research tradition and disciplinary context also in the research project behind this article (Matthies, Stamm, Hirvilammi, & Närh, 2017). For this article sustainability is defined broadly in order to include not only environmental concerns but also economic and socioecological issues – the triple bottom line now being adopted in the private, public, society and civic communities with creative approach. Sustainability defined as creating and maintaining institutions, communities, economies, and societies that can coexist in harmony with the natural world and with each other far into the future.

The following *tasks* are addressed to meet these goals:

1. Modeling Sustainable Social Cluster Model;
2. Investigate Smart Education Indicators
3. Analyze Social Clustering and Civic Engagement Interfaces

This investigation will select and reveal 12 smart education indicators reflecting smart educational levels, enabling people to master and operate the 3D/3M (Kvieskienė & Celiešienė, 2014) model with multifunctional, multicriterial, multisectoral approach. All problems we put in a guidance for social economy and social cluster competence model aimed at building trust and pragmatic relations with neighbors, colleagues, fellow country people, especially when we must agree upon the important goals. Trust helps to develop not only family but also community, regional, as well as national prosperity. The successful Scandinavian models are based on trust, transparency, social partnership and social cluster, networking. Aspiration for common objective, consensus on the most important priorities of the public interest, successful social partnership between the public, private, civic (NGO) sector and scientific organizations mean that we have not learned even the elementary democracy model. Social economy and social communication models-based research (Kvieskienė &

Kvieska, 2012), services and virtual learning modules[1] have been developed by Lithuania University of Education[2] university researchers together with the social partners since 2009. Fields and issues will be confirmed in a stakeholder consultation process, but some key areas have already been identified, based on the identification social clasterization process by research and policy: sustainable mobility ecosystems; digitisation and citizen participation; caring communities, including citizen activism, social clustering[3], self-organisation, community development; transparency (Kvieskienė & Kvieska, 2012) etc.; diversity inclusion through social enterprises and innovative welfare services (addressing disability, ethnicity, stigmatisation); grass roots cultural education and identity formation. Social innovation is one of the measures foreseen in 25 October, 2011 Communique "Social Business Initiative" adopted by the Commission. Under this initiative 11 actions are foreseen in support of social and business development activities in Europe, i.e.: related to financing, legal systems adaptation, the labeling (and therefore awareness and visibility) and public procurement. Social cluster model based research (Kvieskienė & Kvieska, 2012), interactive gaming, innovative services and NGO partnership modules[4] and can developed by Lithuania NGO and social business experiments with the social partners. The availability of interactive, participatory and smart educational opportunities is a relatively new development our labs in museum, environment and education arenas. The rise of innovative socioeducational theories in the 21th century, which focused on smart education, heralded a change in the way museums, cultural heritage and environments approached informal or in-gallery education and shifting from the traditional broadcast model of in-gallery education to a 21st – century model of education emphasizing interactive and participatory learning.

Community based Clustering with School Leadership

Lithuania has unique characteristics and smart human resources, which should be used to foster competitiveness. Lithuania's economy has grown faster than most other OECD economies over the past 10 years, unemployment continues to fall, and

---

[1] *Viešojo ir NVO sektorių socialinės partnerystės modelis.* Available at: www.nvovaikamskonfederacija. lt/wp-content/.../03/Partnerystes-modelis-Copy.pdf.

[2] From 2017 Vytautas Magnus University.

[3] Social clusters – innovative development and implementation measures aimed at social innovation for the topical societal social and economic problems. Social clusters are purposefully formed by interest groups enabling joint efforts of policy makers, government agencies, non-governmental organizations (NGOs), research representatives, private enterprises' to effectively implement social innovation and solve social problems (Kvieskienė & Kvieska, 2013, p. 64).

[4] *Viešojo ir NVO sektorių socialinės partnerystės modelis.* Available at: www.nvovaikamskonfederacija. lt/wp-content/.../03/Partnerystes-modelis-Copy.pdf.

public finances have become stable after a long period of deficits and a rising debt.[5] Lithuania's gross domestic product is €34.95 billion a year. That makes it the largest economy of the three Baltic states, but just one-tenth of the size of Poland's economy. Small it may be, but it has been growing fast: Lithuania's economy has almost doubled in size since 2000.[6]

Smart specialization has become a key element of the Lithuania Strategy 2030, which lays down guidelines for the next decade in the development of regional innovation systems, consolidates a "smart-growth principles", "green growth", "inclusion increase" and Cohesion Policy. Smart specialization is a strategic approach to priorities in education and culture, sustainable social services based on tradition and religion as a key for sustainable growth and development in the society.

In this monograph, you will find information about Lithuanian Social Capital for Smart and Sustainable Socioeducation Networking for Sustainable Society. Social industries, organizations and companies, such as the ones working in universal design, social clustering, social advertising, secondary use of things, software or the gamification are normally seen as particularly innovative (Lazzeretti, 2012; Kvieskienė & Kvieska, 2012). Cities and communities are important for social partnerships and social capital: social and creative industries tend to be urban industries, which take advantage of shared knowledge and of a density of specialized customers, suppliers, and workers to create new products (Asheim, Ebersberger, & Herstad, 2012). Businesses benefit both from the diversity of urban environments, which may provide a range of stimulation and from specialization, allowed by urban environments. Furthermore, the recent research states that externalities are related to the city size: larger cities provide greater externalities, making firms in large cities more innovative, more inclusive and friendlier for communities, ed. (Mellander, Florida, Asheim, & Gertler, 2013). The article argues that a greater use of Social Economics (SE) and Social Partnership (SP), including "Public-Private Partnership" (PPP) and "Social Clustering" (SC) paves an innovative way for empowerment all social groups and stakeholders in communities, in private, public and civic sectors in terms of positive socialization and social welfare. In short the use of Smart education (SE), Social Communication and Mediation (SCM) strategies and the Public Private Partnership funded education model to complement (but not replace) other sources of funding education could help resolve some of budgetary capital constraints that have been observed and tangibly hampered educational productivity and performance. We have tried to

---

[5] Reforms in Lithuania are reinforcing economic growth but boosting productivity is still a challenge Available at: http://www.oecd.org/economy/reforms-in-lithuania-are-reinforcing-economic-growth-but-boosting-productivity-is-still-a-challenge.htm.

[6] Seven things to know about Lithuania's economy a crash-course on the Lithuanian economy, which becomes part of the Eurozone on 1 January. Available at: https://www.politico.eu/article/lithuanias-economy-seven-facts-to-introduce-you/.

explain the synergy between Smart Education and Social Innovations and analyze impacts of Social Partnership and Social Clustering on families and community welfare.

Since 1990, the population of Lithuania has shrunk by 23 percent, largely due to migration, with nearly 72 percent of emigrants aged between fifteen and forty-four. This has dramatically changed the county's demographic structure and affected the socio-economical sector in multiple ways. Although Lithuania's economic growth has been impressive, social inequality is still very high, and the risk of poverty is one of the highest among European countries, and life expectancy is comparatively low and strongly dependent on socio-economic background, and the sense of confidence and being a member of the community. Low salaries and poor job satisfaction adversely affect the well-being and contribute to the high emigration level. Proper coordination of the labour market and well balanced social and health policies can all contribute to improvement of both well-being and economic growth. Lithuania officially claims its priorities include support for social and small business initiatives to create more and better job opportunities, especially for low-skilled employees, and socially protected jobs for disabled people. Better access to state support, social inclusion and an adequate income level combined with support to job seekers and training programs would further facilitate integration of out-of-work individuals into the national labor market. Promotion of equity and effectiveness and sustainability of health policies are also instrumental to inclusiveness.

Cohesion Policy for Sustainable Education and wide-scale labor market, unemployment benefits and the pension reform grounded the New Social Model, which pronounced inclusive growth and underpin the sustainability of public finances in Lithuania[7]. In 2013, the European Council decided to start implementation of the Youth Employment Initiative (YEI) to address the issue of young people not in education, employment or training (NEETs). Under this initiative 20 EU member states, where the unemployment rate among 15–24-year-old people exceeded 25% in 2012, received EUR 6.4 billion for implementation of additional measures to reduce unemployment of young people by the year 2018. Lithuania included the YEI into the Operational Program for the European Union Funds' Investments in 2014–2020, where its implementation was assigned a specific objective *to reduce the number of young people aged 15 to 29 not in employment, education or training* set in Priority 7 *Promoting Quality Employment and Participation in the Labour Market*[8].

---

[7] *OECD Economic Surveys Lithuania*. (June 2018). Available at: http://www.oecd.org/eco/surveys/Lithuania-2018-OECD-economic-survey-overview.pdf.

[8] *Lithuania. 4.4 Inclusive program for young people*. Available at: https://eacea.ec.europa.eu/national-policies/en/content/youthwiki/44-inclusive-programmes-young-people-lithuania.

The importance of European Cohesion Policy is in designing multi-sectoral, multi-functional, multicriteria educational, cultural and religious analysis of smart specialization as research and development (R&D) and innovation development priorities are tailored to cater personal, communal, regional, national sustainable development strategy or scenario, considering local resources, competitive advantage and environmental factors (Carlsburg, 2015; Kvieskienė & Kvieska, 2012; Kvieskienė & Celiešienė, 2014). After evaluating modern trends, it can be said that Lithuanian Society can create a prosperity life. Success will depend on various factors: state policy and financial instruments, smart education and development strategies, investment and efficient management of public assets, multifunctional urban centers, universal design of residential areas and most importantly – sustainable development of community participation and engagement. Sustainable development is an important community mobilization tool that develops positive leadership and community capacity, in which it is necessary to validate the local government and other laws (Kvieskienė & Bardauskienė, 2014). We define smart positive socialization as social innovation and creative industries synergy, which is based on a 3D model of education in enabling Sustainable Social Communication, Smart Education, Creative Industries and social capital (PPP: social partnership) (Celiešienė & Kvieskienė, 2014). The Creative Industries concept emerged in Australia in the early 1990s but was given much wider exposure by policy makers in the United Kingdom in the late 1990s, when the Department for Culture, Media and Sport (DCMS) set up its Creative Industries Unit and Task Force. In the process, the DCMS moved the understanding of the concept of creativity a long way from its common association with activities having a strong artistic component, to any activity producing symbolic products with a heavy reliance on intellectual property and created for a wide audience. Emphasizing the key role of intellectual property, has classified creative industries into four broad subsectors where the copyright, patents, trademarks and design structure are the final product. Social Industries are a diverse set of industries, defined as: smart education (project managing; gamification, social advertising); sustainable community based urbanistic; sharing and ring market, secondary use of things art[9] and antiques markets; designer fashion; video, film, and photography; music and the performing and visual arts; publishing; software, computer games, and electronic publishing; radio and television; craft; and design.

Globally, creative industries are estimated to account for more than 7% of the world's gross domestic product (GDP) (World Bank 2003) and are forecast to grow on average by 10% yearly (PriceWaterhouseCoopers 2003). Already these industries represent a leading sector in the OECD (Organisation for Economic

---

[9] *Antrinis daiktų panaudojimas*. Available at: http://idejos.eu/?p=5263.

Cooperation and Development) economies, showing annual growth rates of 5 to 20 per cent (EESC 2003). In the United Kingdom, for example, creative industries already generate revenues of over £110 billion and employ 1.3 million people (UK Dept. for Culture, Media and Sports 2003). Several other developed countries, such as Australia, Canada, Ireland, New Zealand and Sweden, have also been successful in exploiting their foothold in these industries and are increasingly seeing them as a gateway to the new information economy (*United Nations Conference on Trade and Development Distr.*, 2004). Going towards a sustainable, community-based development highlights a several key elements reflecting the positive impact of 3 D/3:

- the importance of vision,
- enabled social partnership and civil society,
- the critical importance of leadership,
- maximum inclusion of civil society – considering the rating and selection of actions (projects or groups).

Community businesses in many cases are more innovative than others. Businesses may sort into areas based on their relative competitive advantage and would otherwise not survive. The innovative performance of businesses in rural communities accessing knowledge from elsewhere and innovating in alternative ways. For example, research on Lithuania case has suggested that community-based innovation is more important for people's welfare and local knowledge spillovers. While some high profile 'innovative communities may appear innovative, whether this is because of local linkages or more prosaic profit and sustainability of those innovations, the importance of communities for innovation may be exaggerated. In 2014–2020 in Lithuania, the structural funds will support an integrated regional development, focused on social inclusion; demographical changes stabilization and citizens' involvement (Kvieskienė & Bardauskienė, 2014).

Human services, intellectual and social capital are inarguably essential to the 21st century economy, which is dynamic, knowledge-based, and increasingly global. Indeed, the United Nations Conference on Trade and Development's Creative Economy Report 2010 asserts: "Adequately nurtured, creativity fuels culture, infuses a human-centered [sic] development and constitutes the key ingredient for job creation, innovation and trade while contributing to social inclusion, cultural diversity and environmental sustainability" (*Introducing the first report on the Creative Economy of California*, 2014).
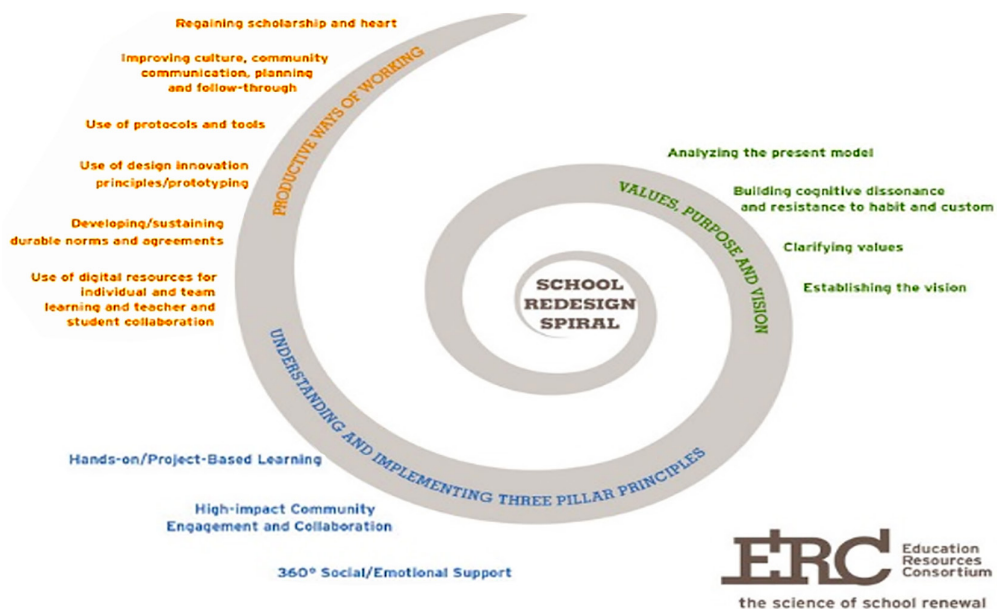
Figure 1. Smart Education: Inclusive and Innovative School Model[10]

Smart Education – is positive socialization strategy, which relies on positive psychology methodological provision and use of innovative technologies of social partnership approaches family, institutional, community, regional and global levels. Positive socialization we understand how smart educational tool that through a systematic institutional, political, technological, social and regional systematic approach in order to discover the criteria to ensure the public interest in shaping the socio-economic policies and decision-making. Over the past decades, youth empowerment models and strategy become increasingly important not only in research but also in the global development organizations studies. The youth policy-oriented research, social networks and international organizations initiative enables young people to participate more in the national and global level decision-making. A systematic analysis of implied and synthesis, which will create new of Smart Education of youth empowerment is based on the theory underlying the adequate formation of young people competences portfolio of options and measurement criteria. Smart and sustainable education and its sustainability, as well as the quality of education are widely discussed and controversially perceived in theoretical literature. Smart Education as a central indicator of integration and growth is encouraged by additional focus on simulation and education based on creative design. Happy and

---

[10] *School Re-Design* & *New School Innovation*. Available at: http://www.educationresourcesconsortium. org/school-re-design/.

creative personality is the most important starting point for positive socialization and sustainable education system. Smart Education in the practice and theoretical research analyzes pecularities through quality services, public arena, tradition, fashion, software, tourism, leisure industry and connects it with creativity and social safety. This phenomenon is directly related to Creative Economy and Social Capital, which is rapidly increasing through the creation of new jobs, creating new market requirements in response to market expectations. The creative economy and social capital are based on ideas rather than on physical capital, it includes social industries and social communication technologies. The new information, digital content technologies, startups opens new spaces and reduces costs. The second feature – increasing interactivity which bounds together creative view of the creator and the consumer. With iterative master plans, Singapore turned in a hub for international trade, transportation and technology (Karadağ, 2013). Since Adam Smith highlighted the importance of geography in creating the "wealth of nations" – as a result of natural conditions, transport accessibility, and geographic location near sea routes or navigable rivers, – much attention has been paid in the economics literature to the creation and distribution of economic wealth. People, groups and countries were apparently unable —as a result of many controllable and uncontrollable factors— to share the available resources —and the income accruing from these resources – in a balanced way. This has led to unequal or unbalanced economic development and in many cases – in particular from a global perspective – to a sharp cleavage between poverty and richness, not only between people but also between nations (Nijkamp, 2016). Current concepts and strategies for regional development and regional policy differ from the endogenous regional development concepts of the 1980s and 1990s. At that time, the aim of these concepts was to reduce the gap between urban centers and peripheral areas. As alternative concepts, within the framework of development trends dominated by urban centers, these approaches, privileging locally induced innovation strategies turned out to be too weak. Therefore, many rural and mountain tourist regions no longer have enough economic strength to pursue sustainable and coherent development. One of the consequences of this change is the growing depopulation of mountain regions (OECD, Territorial Reviews, 2011). At the same time, civil society and political representatives perceive "sustainability" as a guiding principle for future development efforts. Alpine countries and the European Union established comparable postulates in the "Alpine Convention" (Haßlache, (2017). The concept of sustainability should integrate particularly well into the regional Alpine policy owing to the specific patterns, initial situation and overall conditions of mountain regions. In this way, new fields of action may ensue to counter the population out flux from mountain regions (Boesch et al., 2009; Siegrist et al., 2010). In the sustainable development capital stock model (Siegrist et al., 2009; Brunner et al., 2010), the capital includes the resources available on an economic site or which are

to be created, so that a region may develop with respect to sustainable development. They represent the site's intrinsic economic potential; it is important to acknowledge this potential and develop it through joint effort. Capital stock takes the form of four different types of capital, which cannot be fully substituted, i.e.:

1. Natural capital (flora and fauna, natural landscape, water, raw materials, etc.). For more information (Lukesch et al., 2010).

2. Social capital (values and standards, traditions, participation and cooperation, etc.).

3. Economic capital (real capital in the form of infrastructures, means of production, organizational structures, institutions and businesses, etc.).

4. Human capital in the form of specialized knowledge and skills, physical and mental health, etc.

These four capital stocks thus form the basic resource for creating a region's wealth, or in other words, a site is potential. The task of regional policy, flag shipped by sustainable development, is to determine site potential, heighten public awareness and exploit capital stocks without depleting them; on the contrary, they must be continually developed. Participatory processes support this strategy.

For managing this new phenomenon, we analyze smart positive socialization scenarios. We understand positive socialization (Kvieskiene, 2005) as a smart educational tool that through systematic institutional, political, technological, social, ecological and regional approach discovers the criteria to ensure the public interest in shaping the socio-economic policies and decision-making. Over the past decades, citizen empowerment models and strategy become increasingly important not only in research but also in the global development studies. The research oriented to citizen enabling policy, social networks and international organizations initiatives enables people to participate more in decision making on the national and global levels. A systematic analysis of preferences education and synthesis will create new forms of smart education and of citizen empowerment is based on the theory underlying the adequate formation of people competencies portfolio of options and measurement criteria. Smart and sustainable education and its sustainability, as well as the quality of education, are widely discussed and controversially perceived in theoretical publications.

Smart Education as a central indicator of integration and growth is encouraged by additional focus on simulation and education based on creative design. Happy and creative personality is the most important starting point for positive socialization and sustainable education system. It should be emphasized that smart specialization strategies and scenarios prepared in preparation for a new EU financial programming phase (2014–2020) to all the European Union countries. Some of them, like Lithuania, is preparing its own strategy for the entire country, others are developing separate strategies for different regions or communities. These changes in the socio-political

forces help to make a more intelligent analysis of socialization, which calls for a review of existing socialization strategies and practices to ensure compliance with inclusive and creative public education priorities (LSPA feasibility study in 2014) (*NLP Association*, 2014). In order to integrate the optimal criteria for assessing the sustainability of intelligent education, we have to select 12 of global indexes, which can measure the adaptation of the educational insights of this is crucial for the assumptions and factors on a global, national, regional and individual institutional / organizational levels. In the face of an emerging networking learning ecosystem, many traditional schooling methods are increasingly being called into big question. New finding in neuroscience are reshaping old ideas about performance and cognition. Schools must become the leaders and main actors of design to community based culture, personalized learning experiences, supported by gamification, integrated by subjects and projects, social networking and communication, visualization and active participation in social life activities. Schools must take a central leadership as critical subjects for promoting their communities' socioecological wellbeing. Their leaders must become leaders with new competencies to involve and enabling school and other social partner's communities and learn together innovate, solve problems and to create and transmit knowledge. At the heart of educational institutions over the next ten years will be more and more diversity and difference, and explosion of our current system into a multifunctional, multifactorial, multisector or panoramic school model, which prototypes we can find in the best our practices.

Table 1

Smart Education Indicators (Exspert opinion)

Sustainability Measurement Index	Smart Education Determinants
Education Policy Index (structure: cost of education of (1) the learner in high school; (2) the learner institution of higher education; GDP to science (3), pre-school coverage (4), informal (5) education, community / public interest activities (6)	**Learning within sustainable environment in changing environment (Identification)** / Smart education determinants – this is a compromise between each individual's unique skills learning processes and learning individualization in connection with the integration into a common learning space, operating under uncertainty
Education Competitiveness and Social Differentiation Index (structure: the quality of secondary education in scientific production and dissemination (publications, citation index, number of monographs) (1), inclusion rate (students, students with disabilities or special needs) (2), higher education ended a number of people). (PiSSA, PIAAC studies) (3).	**Alternatives and Promotion of Diversity** / Development of potential for Equal Opportunities insight/intelligence – the ability to adapt socio determinate integration and inclusion and ensuring the education of socialization.

Sustainability Measurement Index	Smart Education Determinants
Integral Sustainable Educational Prerequisites Index: Structure: (1) State welfare ("Legatum" the world's wealth index); (2) Child Welfare (UNICEF index); (3) globalization (Maastricht index); (5) The index of Social Capital, Democracy Education, social networks (clusters) and the number of changes; unemployed and not studying of young people (NEET indicator).	**Impact and Autonomy Insight** / Smart Education determinate – this is a problem-solving generation, living in a new or unfamiliar environment in a broader (or interdisciplinary) context of work and academic environments in the context of synergy in education Vocational education and training
Smart Modeling of Positive Socialization. Responds to active citizenship in order to prepare the younger generation to evaluate themselves and to project positive social change.	**Active citizenship and inclusion / Positive Socialization Insight** / Smart Education determinate – is an integral sustainable educational empowerment through active citizenship initiating positive change.

Smart positive socialization as social innovation is based on the idea of the embodiment, based on 3D (multisector, multi-functional, multifactorial or panoramic criteria) modeling in educational, cultural arenas to simulate sustainable development and social capital. In this way, the Smart Education running (or) creating breakthrough trends and new opportunities to quickly and creatively use knowledge, innovation, learning, networking and widest possible range of individual and public (community) well-being, with rational costs now and in the future.

Social economy can be influenced by culture and the new challenges arising in respect of the economic crisis and the growing criticism of modernism in relation to social partnership, social innovation, networking, clustering concepts and socio-exosystemic approach. The ecosystem approach was formulated during the 1990s as a strategy for the integrated management of land, water and living resources (Development of the ecosystem approach). The twelve principles were set out at a meeting in Malawi in 1998 (*Convention on Biological Diversity*, 1998), which was organized under the auspices of the Convention on Biological Diversity (CBD). The social economy is based not only on individual skills, but also on collective knowledge of the various social industries. Successful communities and regions are based on smart, innovative and multifunctional design of environment, public spaces which includes social partnership between public, private and civic organizations. The ecosystem approach is a holistic and inclusive look to the natural environment. It helps to apply current thinking about ecosystem services (what nature does for people) in line with the commonly accepted goal of sustainable development. It is the primary framework for action under the international Convention on Biological Diversity (CBD).

Figure 2. Ecosystem Approach[11]

The ecosystem approach does not replace the many strategies and methods already in place to improve the way people work. Instead, it is intended to inform everyone's thinking about how the environment is connected with society. The approach is:

- **Holistic** (considers the environment as a system/an eco*system*);
- **Inclusive** (recognises that everyone's knowledge and know-how has a place in decisions); **Adaptive** (emphasises that we need to keep on learning, based on experience).

Ecosystem approach encourage us to choose Community based management, which is a participatory and creative process – as much art as science – involving the negotiation of decisions acceptable to key stakeholder groups (EU, 2014). From the beginning, the private, public partnership are adopted a particular Community Based (CB) Model based on the "Working with People" (WWP) approach and a bottom-up process that includes the affected population and all the 3 D/3M Principe (Multisector, multifactorial, multifunctional) in the community level. The model was a true multidisciplinary association that consisted of participatory planning coordinated by a research institutes (university included), the local and regional public administration, civil society, and private business sectors. The model was coined later with the phrase "Working With People (WWP)" (De Los Ríos-Carmenado, & Ortuño, 2016), which is understood as a professional practice developed by a team and that aims to connect knowledge and action through a common tasks, which in addition to the technical value of the projects incorporates the value of the people that participate and develop during the planning process. Trust is the cornerstone in

---

[11] *Ecosystem Approach*. Available at: https://ecosystemsknowledge.net/ecosystem_approach.

the families, schools, communities, when we dealing with people interdependently at work. Trust forms the foundation for effective communication, positive socialization and relationships, motivation and contribution of discretionary energy, the extra effort that people voluntarily invest in work.

Figure 3. Sustainable performance based on "Working with People" (De Los Ríos-Carmenado, & Ortuño, 2016)

It is recognized in the strategy of smart, sustainable and inclusive growth "Europe 2020" that lifelong learning and development of abilities are the most important elements when responding to current economic crisis and population aging as well as considering a broader economic and social strategy of the European Union[12]. The Project is specifically focused to different social power groups in diferent power groups and sectors is particularly disintegrated in the social sector which does not have control over responsibility. Therefore, indexes of social exclusion remain unchanged, social sector is divided into separate functions fulfilment of which is expensive, unified and ineffective. In order municipalities could legalize umbrella service sector in a particular geographic area (state, region, municipality, eldership), it is necessary to enable a connecting component (coordination and case manager) who could coordinate public sector, business, NGO as well as organizations and institutions which represent them and which operate in a certain field and which are competent to perform social, educational, cultural, health promotion and safety

---

[12] *European Council Resolution on a renewed European agenda for adult learning 2011/C 372/01.* Available at: http://eur-lex.europa.eu/legal-content/LT/TXT/HTML/?uri=CELEX:32011G1220(01)&from=LT.

functions and ti represent properly a particular settlement, community, region, state. Rudiments of social clusters can be found in the local communities or regions where they can be initiated in the best way. They are influenced by the local resources, organizations, steaholders and institutions peforming similar functions and social-ecological infrastructure whose managers should gather together for the common goal. The guidelines hve been prepared in accordance with a successful international and national experience and recommendations[13],[14]. In order training would meet the requirements of the European documents we rely on opinion of the European Economic and Social Committee regarding structural and conceptual changes: preconditions are required when developing a globally competitive European industrial structure which is based on knowledge and research (Europe is passive or leading?)[15] and which specifies the following tasks:

- To strengten both cohesion and the cutting-edge results and thus consider the level of econimic development;
- To establish goals and to create measures considering overall nature of many policies (e.g. environment, innovations) and despite this fact to coordinate such policies effectively;
- To allocate work in the European level and to the member states based of business logic, and
- To establish in the binding manner the measures accepted and to confirm differences.

When we start planning modelling of the social cluster, first of all we will define competencies which need to be developed and to depict the guidelines of preparation of educational measures.The Eurobarometer survey conducted in 2018 shows that half of all young people surveyed suppose that voting in elections is the most effective way of participation in the public life.

---

[13] See for more details: Guidelines for Cluster Development A Handbook for Practitioners. Available at: http://www.minpo.hr/UserDocsImages/Podr%C5%A1ka%20razvoju%20klastera/4.Smjernice%20za%20razvoj%20klastera.pdf; The Unido ApproAch to Business Investment Technology Services Key Principles and Project Experiences for Inclusive Growth Cluster Development. Available at: https://www.unido.org/fileadmin/user_media_upgrade/What_we_do/Topics/Business__investment_and_technology_services/CUP/UNIDOs_CLUSTER_APPROACH.PDF.

[14] See for more details: Promotion of sustainable development by strengthening social clustering of public sector: Available at: http://www.socialcluster.lt/; *Partnership of public, private and NGO sector. Research report.* (2014). Available at: http://www.esparama.lt/documents/10157/490675/Tyrimas+NVO+akademija.pdf/259b08bc-4236-455c-a315-169b23e4ef42; *Model of social partnership of public and NGO sectors.* (2014). Available at: http://www.nvovaikamskonfederacija.lt/wp-content/uploads/2016/03/Partnerystes-modelis-Copy.pdf.

[15] *Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions – A lead European market initiative{SEK(2007) 1729} {SEK(2007) 1730}.* Available at: http://eur-lex.europa.eu/legal-content/LT/TXT/?uri=CELEX:-52007DC0860.

RANK	COUNTRY	Economic Quality	Business Environment	Governance	Education	Health	Safety&Security	Personal Freedom	Social Capital	Natural Environment
	ADJUST PILLAR WEIGHTING	x1	x1	x1	x1	x1	x1	x1	x1	x1
1	Norway	7	11	3	4	8	1	9	3	8
2	New Zealand	14	2	2	18	17	24	2	1	4
3	Finland	12	6	1	1	25	11	11	14	3
14	Germany	11	12	10	20	24	16	19	16	13
26	Estonia	33	25	20	11	44	38	34	69	6
33	Poland	38	47	38	24	41	23	54	76	47
36	Lithuania	56	58	35	30	72	39	37	98	18
40	Latvia	54	55	46	28	77	41	45	113	16

Econonic Quality
Business Environment
Governance
Education

Health
Safety&Security
Personal Freedom
Social Capital
Natural Environment

Figure 4. Countries ranked according Legatum study 9 sub-indices

Thus, the society's pursuit for changes is limited to vote and expectation for representation. Only every fifth respondent supposes that the government elected can be effectively controlled after elections, e.g. by engaging in public political debates, demonstrations or by joining non-governmental organizations and their activity. One third of the respondents recognize importance of personal initiative in the context of social problems solving as effective[16]. When we compare the total indicators in the scoreboard of the innovations union, we can see that we particilly stand behind in the fields of cooperation and enterprise, systems of scientific research and economic impact.

In the wealth index (2018) Lithuania was in the 36 place (Norway 1; Finland 3; Germany 14; Estonia 26; Latvia 40). This place is fairly high. However, (and this is very surprising) even compilers of the index admit that not the real situation but exaggerated pessimism ruins a quality of life in Lithuania. Otherwise, the place could be higher. According to them, Lithuania's economy is growing rapidly, but the residents are still dissatisfied with the country's economy; compared to most other countries infrastructure of communications are better developed in Lithuania (especially high-speed Internet and use of mobile communications), costs of business establishment are low, but Lithuanians still think that conditions for business are bad; in terms of educational situation Lithuania was in the 30 place, but in opinion of the locals the educational system is still poor; the health care system is adequate,

---

[16] Standard Eurobarometer 86 [interactive]. (2016). *European Commission* [date of review: the 12th of January 2017]. Available at: http://ec.europa.eu/COMMFrontOffice/publicopinion/index.cfm/Survey/getSurveyDetail/instruments/STANDARD/surveyKy/2137.

and there are no serious risks in terms of the state security, but anyway Lithuanians feel unsafe in every sense. These conclusions were made *Legatum* Institute in London that performs the study[17].
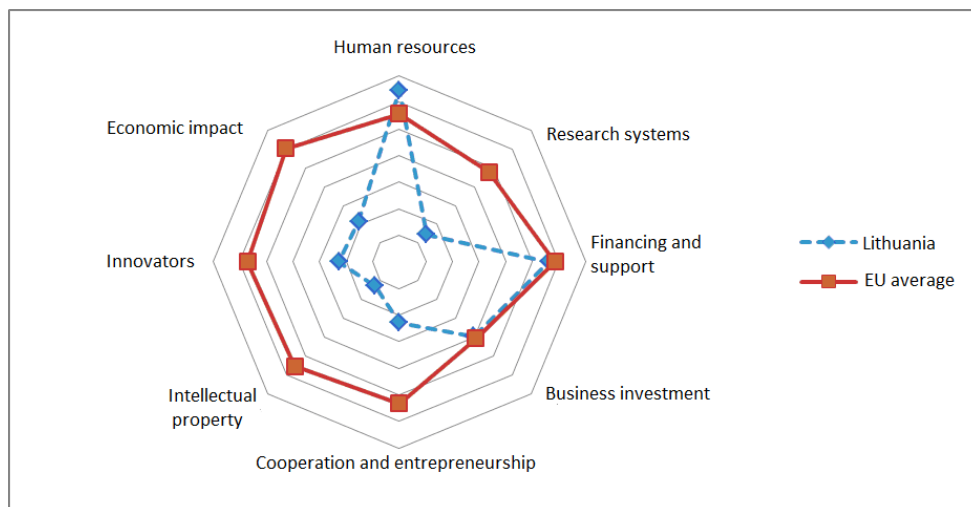

Figure 5. Cumulative indicators of the Innovation Union Scoreboard: comparison of the Lithuanian and EU Average[18]

Conclusions

Community Based Education based on Chris Gibson (2014) idea about further exploring the social industries outside major cities in local places and communities. The article argued at exploring and re-defining the concept of social clustering as both education and economical phenomenon, on the basis of the analysis of several examples such as civic education, social partnership, networking and negotiation. It is interesting to note that according to the authors, creativity is related to a specific "geography", being evident in suburban, rural and remote areas. Another valuable aspect of this monograph is that it is based on a multi-disciplinary approach; in fact, it puts together the point of view of social communications experts, education, and NGO practices analizes, with the objective to explore creativity in diverse places outside major cities, e.g. in small places in terms of population or in term of productive, social marginality. The authors states, that examining new social industries and

---

[17] *Welfare (Legatum) index.* Available at: https://www.prosperity.com/rankings.
[18] *Republic of Lithuania. Partnership Agreement.* Available at: www.esinvesticijos.lt/uploads/.../files/.../ Partnership%20Agreement_ENG_06%2020.d...

find clear priorities helps for educational organizations, communities, regions, find orginal ideas, change culture of education institutions, enabeling citizen initiatives and helps initie new economic activities. On the one hand, new social industries such as small startups, social initiatives helps for education institutions became a community leaders atract parents and children and change theire choise education institutions.

References

Adams, N. (n. d.). Regional Development and Spatial Planning in an Enlarged European Union. Available in: https://books.google.es/books?id=_sPeCwAAQBAJ&dq=Neil+Adams,+Neil+Harris,+2005&hl=lt&source=gbs_navlinks_s.

Antrinis daiktų panaudojimas. Available at: http://idejos.eu/?p=5263.

Carlsburg, G.-B. v. (Hrsg./ed.). (2016). *Strategien der Lehrerbildung. Zur Steigerung von Lehrkompetenzen und Unterrichtsqualität. Strategies for Teacher Training. Concepts for Improving Skills and Quality of Teaching.* (= *Baltische Studien zur Erziehungs- und Sozialwissenschaft.* Band 31). Frankfurt: Peter Lang Edition.

Carlsburg, G.-B. v. (Hrsg./ed.). (2017). *Denk- und Lernkulturen im wissenschaftlichen Dialog. Cultures of Thinking and Learning in the Scientific Discourse.* (= *Baltische Studien zur Erziehungs- und Sozialwissenschaft.* Band 32). Frankfurt: Peter Lang Edition.

Carlsburg, G.-B. v. (Hrsg./ed.). (2019). *Transkulturelle Perspektiven in der Bildung. Transcultural Perspectives in Education.* (= *Baltische Studien zur Erziehungs- und Sozialwissenschaft. Baltic Studies in Educational and Social Sciences.* Band 34). Berlin: Peter Lang.

Carlsburg, G.-B. v., Dammer, K.-H., & Wehr, H. (Hrsg.). (2019). *Hätte ich doch nicht weggeschaut! Zivilcourage früher und heute.* (= *Pädagogik*). 3. Auflage. Augsburg: Brigg.

Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions – A lead European market initiative{SEK(2007) 1729} {SEK(2007) 1730}. Available at: http://eur-lex.europa.eu/legal-content/LT/TXT/?uri=CELEX:52007DC0860.

De Los Ríos-Carmenado, I., & Ortuño, M. (2016). *María Rivera. Private-Public Partnership as a Tool to Promote Entrepreneurship for Sustainable Development: WWP Torrearte Experience.* Available at: http://www.mdpi.com/2071-1050/8/3/199/htm.

Ecosystem Approach. Available at: https://ecosystemsknowledge.net/ecos.

European Council Resolution on a renewed European agenda for adult learning 2011/C 372/01. Available at: http://eur-lex.europa.eu/legal-content/LT/TXT/HTML/?uri=CELEX:32011G1220(01)&from=LT.

Guidelines for Cluster Development A Handbook for Practitioners. Available at: http://www.minpo.hr/UserDocsImages/Podr%C5%A1ka%20razvoju%20klastera/4.Smjernice%20za%20razvoj%20klastera.pdf.

Haßlache, P. (2017). *The protection of Alpine open spaces and the Alpine Convention – a timeline.* Available at: https://www.researchgate.net/publication/312932585_The_protection_of_Alpine_open_spaces_and_the_Alpine_Convention_-_a_timeline.

John, T., Becer, R., Keil, F., & Schramm, E. (2011). Understanding Social-Ecological Systems: Frontier Research for Sustainable Development. In *Implications for European Research Policy.* Available at: https://www.researchgate.net/publication/237402615_Understanding_

Social-Ecological_Systems_Frontier_Research_for_Sustainable_Development_ Implications_for_European_Research_Policy

Karadağ, T. (2013). *In Partial Fulfillment of the Requirements for the Degree of Master of Science in City Planning.* Available at: http://citeseerx.ist.psu.edu/viewdoc/download?do i=10.1.1.633.3072&rep=rep1&type=pdf.

Kvieskienė, G., & Bardauskienė, D. (2014). Į bendruomenę orientuota tvari plėtra. Prieiga per internetą: *socialinisugdymas.leu.lt/index.php/socialinisugdymas/article/view/107/102*

Kvieskienė, G., & Kvieska, V. (2012). *Socialinės partnerystės įtaka inovacijoms. Monografija.* Vilnius: Edukologija, 260 p.

Lithuania. 4.4 Inclusive programs for young people. Available at: https://eacea.ec.europa. eu/national-policies/en/content/youthwiki/44-inclusive-programmes-young-people- lithuania.

Matthies, A.-L., Stamm, I., Hirvilammi, T., & Närh, K. (2017). *Ecosocial Innovations and Their Capacity to Integrate Ecological, Economic and Social Sustainability Transition.* Available at: https://www.mdpi.com › 11 › pdf.

Mellander, C., Florida, R., Asheim, B. T., & Gertler, M. (2013). *The Creative Class Goes Global.* Available at: https://books.google.es/books?id=IRUKAgAAQBAJ&dq=Duranton++Puga ,+2003%3B+Stolarick++Florida,+2006&hl=lt&source=gbs_navlinks_s.

Model of social partnership of public and NGO sectors. (2014). Available at: http://www. nvovaikamskonfederacija.lt/wp-content/uploads/2016/03/Partnerystes-modelis-Copy. pdf.

Nijkamp, P. (2016). *The "resourceful region". A new conceptualization of regional development strategies.* Available at: http://old.aecr.org/images/ImatgesArticles/2016/12/09_Nijkamp. pdf.

OECD Economic Surveys Lithuania. (June 2018). Available at: http://www.oecd.org/eco/ surveys/Lithuania-2018-OECD-economic-survey-overview.pdf.

OECD Territorial Reviews: Switzerland. (2011). Prieiga per internetą: https://books.google. es/books?id=KxyWzH9_nNkC&pg=PA107&lpg=PA107&dq=Regiosuisse,+2010&sourc e=bl&ots=8m-aO-_PCG&sig=ACfU3U1IeC2quCEgFDAExC3Yvcy8UQ_v9g&hl=lt&sa =X&ved=2ahUKEwiW8cOsgKbnAhUJuRoKHTgQDwEQ6AEwDHoECAkQAQ#v=on epage&q=Regiosuisse%2C%202010&f=false.

Partnership of public, private and NGO sector. Research report. (2014). Available at: http:// www.esparama.lt/documents/10157/490675/Tyrimas+NVO+akademija.pdf/259b08bc- 4236-455c-a315-169b23e4ef42.

Promotion of sustainable development by strengthening social clustering of public sector. Available at: http://www.socialcluster.lt/.

Wehr, H., & Carlsburg, G.-B. v. (Hrsg.). (2018). *Kooperatives Lehren und Lernen lernen (= Pädagogik und Psychologie). 5.* Auflage. Augsburg: Brigg.

Socialinė klasterystė tvarioje aplinkoje

Giedrė Kvieskienė[1], Gerd-Bodo von Carlsburg[2]

[1] Vytauto Didžiojo universitetas, Švietimo akademija, Profesinio tobulinimo institutas, T. Ševčenkos g. 31, 03111 Vilnius, giedre.kvieskiene@vdu.lt

[2] Heidelbergo edukologijos universitetas, Vokietija, b.v.carlsburg@gmail.com

Santrauka

Straipsnyje analizuojamos socialinės klasterizacijos teorijos, pristatomi sumaniosios edukacijos atvejai bei socialinės partnerystės tvarumo algoritmų modeliai. G.-B. von Carlsburgo, T. Massono, T. Robinsono, V. Targamadzės, E. Celiešienės ir kt. straipsniuose, mokslo studijose analizuojamos su sumaniąja edukacija ir pozityviąja socializacija susijusios koncepcijos. Šios sąvokos jau gana plačiai vartojamos Lietuvos ir kitų šalių strateginiuose ir moksliniuose straipsniuose, siekiant įgalinti vietos bendruomenės, NVO, privataus ir viešojo sektoriaus partnerystės ir socialinės klasterystės algoritmus. Socialinių klasterių plėtra dar nėra plačiau nagrinėta ir tiek Lietuvoje, tiek kitose šalyse suprantama kaip privatus sektorius. Analizuodami sumaniosios edukacijos švietimo įstaigose scenarijus ir algoritmus mokslininkai, ekspertai ir strategai eksperimentuoja, norėdami gauti atsakymus apie viešųjų, privačių, mokslinių organizacijų ir NVO įgalinimą socialinei klasterystei, socialinio kapitalo plėtrai ir visuomenės gerovei.

Šio tyrimo *objektas* yra socialinės klasterizacijos ir sumaniosios edukacijos sąsajos.

Straipsnio *tikslas* – apibrėžti sumaniosios edukacijos įgalinimą socialinei klasterystei.