

# Entrepreneurship Education and Sustainable Development

Franc Vidic  
Faculty for Entrepreneurship, GEA College  
Dunajska 156, 1000 Ljubljana  
Slovenia  
[franc.vidic@gea-college.si](mailto:franc.vidic@gea-college.si)

**Abstract** — Entrepreneurship and sustainable development ties together concern for the carrying capacity of natural systems with the social challenges facing humanity. The field of sustainable development can be conceptually broken into three constituent parts: environmental sustainability, economic sustainability and sociopolitical sustainability.

Entrepreneurs make every day judgments under uncertainty. Developing new venture strategy is resource-consuming and extremely risky activity. Networked and knowledge society give rise to new challenges. Productive participation in knowledge intensive work requires individuals, their communities, and organizations continuously surpass themselves, develop new competences, advance their knowledge and understanding as well find new opportunities and create new knowledge. This challenge concerns to education, culture and business performance. In order to be able to productive participate in sustainable development; participants must have to learn to go beyond individual efforts and collaborate for the advanced knowledge. Learning process also have to be transformed to as to facilitate corresponding individual and cultural competencies.

The aim of this article is to present results our research and discussion about entrepreneurial education and teaching experience on experimental education, an learning environment which promote sustainable business as opportunity for individuals and community. There is connection between protection clean environment, cultural and social values and sustainable entrepreneurial competitiveness in global market. Implication for research and practice are discussed.

**Index Terms** — Job Opportunities, Sustainable Development, Marketing, Small Business Development, Education

## I. INTRODUCTION

Given the extended period of economic crisis, Europe is in more need than ever of finding a sustainable way to create jobs and growth. Small and medium sized businesses account for 99% of enterprise in Europe and they have been identified as key drivers to achieve the growth and development needed. Entrepreneurs are the driving force behind these businesses and are therefore vital to this process. Entrepreneurship represents an important option for young people. Current figures put the youth unemployment rate at 23.5% in the EU; fostering young entrepreneurs can help to address this, as well as ensuring sustainable growth. In particular, young people need to be reached through education systems in order to achieve this. Support mechanisms, pan-European projects and networks are important ways to bring about these changes, taking advantage of expertise from across the EU. (<http://www.publicpolicyexchange.co.uk/events/DI24-PPE2.php>).

In recent years business has been increasingly viewed as a major cause of social, environmental and economic problems [35]. Additionally, because of demographic change, low birth rates and migration, every third person in the EU will be 60 years old or even older by the year 2030. Demographic change is one of the most important challenges in Europe and its regions. Population numbers are shrinking. Particularly in rural and peripheral regions of Europe, the consequences of demographic change will be and already are drastic. There are some other changes connected to exploitation of resources and pollution. By ignoring the hidden connection between business and the environment, business is missing many opportunities that prevent the threat and collapse of the society [35].

An important scholarly question with significant practical relevance in current and predicted economic environment is how firms can create value, run sustainable development and entrepreneurship. In particular, how do firms create and sustain competitive advantage and identify and exploit new opportunities. This is concerning to advantage and

opportunity seeking behaviours, resulting in value for individuals, organizations and/or society [22].

It is a challenge to ensure responsible and sustainable development. Sustainable development is a pattern of growth in which resource use aims to meet human needs while preserving the environment so that these needs can be met not only in the present, but also for generations to come (ELF-environment, local people, future). Sustainable development strategy framework is grounded on sustainable principles that can be used to sustain and preserve the authenticity of cultural heritage for future generations, whilst appealing to the suppliers, the regulators, and the consumers [5], it is necessary to develop a new marketing model; economic, social and ecological sustainability [34].

Entrepreneurs must develop more universally acceptable processes for sustainable business and marketing. Dominant economic drivers call for maximizing the corporate profit and stakeholder benefits through efficient management of resources and competitive marketing that is responsive to customer's needs. It must be reconceptualised to new marketing orientation paradigm, to achieve greater alignment of long-term commercial performance with the interests of a wider range of stakeholders, including latent or potential customers and communities [34]. Marketing orientation is important and should be defined as: an appreciation that understanding present and potential customer needs is fundamental for providing superior customer value; encourage the systematic gathering and sharing of market information regarding the present and potential customers, competitors as well as other related constituencies and instilled the *sine qua non* an integrated organization-wide priority to respond to changing customer needs and competitor activities to exploit opportunities and circumvent threats [38]. A key issue is concentration on microeconomic and functional management, but the need is a broader view of marketing to adverse sustainable development strategy. Entrepreneurs must develop more universally acceptable processes for responsible marketing.

Within this paper entrepreneurship is seen as entrepreneurship and marketing as a function of interaction occurring between human nature and general environment and proactively managing business processes to protect the natural environment. Chell [6] identifies a set of characteristics that distinguish entrepreneurs: motivation or intention for wealth creation and capital accumulation, ability to recognize »opportunities« as opportunities and judgment – knowing which opportunities to pursue. They develop new ideas, process and respond to data from the environment, recognize and exploit existing opportunities [6]. It can be succinctly defined as any new form of new enterprise, or any new form of business activity [12]. The key of success with entrepreneurship and innovation is moving from the invention of ideas to effective commercialization and acceptance in the market [20].

It is important for entrepreneurs to identify an opportunity or a new idea and develop it into a new venture or a project and contribute to society in different ways; for instance as creating new jobs and as stimulating the economic growth [12]. That is the basic function of entrepreneurs. They must follow these sustainable principles: anticipate and meet customers' needs, apply a profitable, socially and environmentally responsible value system and generate positive long-run outcomes in economic, social and environmental terms that are acceptable for primary stakeholders who gain indirect economic, social and environmental benefits [34]. The new approach combines the principle of marketing orientation [27; 38] with makromarketing management approach [24; 30]. Overall, an organization achieves market-based sustainability to extend, so that it strategically aligns itself with the market-oriented product needs and wants of customers and the interests of multiple stakeholders concerned about social responsibility issues involving economic, social and environmental dimension [55].

Knowledge has to become the key to economic resource and the dominant – and perhaps even the only – source of competitive advantage [13]. According to a knowledge based view; the principle function of a firm is the creation, integration and application of knowledge [9; 18; 41]. Learning helps individuals to produce knowledge that is difficult to imitate and superior in use and it can be the source of sustainable competitive advantage [21].

Remember, understand and apply is not enough, people must learn how to analyze, evaluate and create new knowledge. They must create new knowledge. This paper argues that there is a need to move away from the conventional focus of entrepreneurship education onto new venture management, business plans and growth, to a broader concept based on understanding and sustainable long term development. This article has the following structure. The first part is a theoretical background and a discussion about entrepreneurial education and knowledge creation process; in the second part we integrate the results of three different researches, and in the third part we present a dynamic learning model and a training program to promote sustainable entrepreneurship. In the final part we present a discussion and a conclusion. A program/workshop *Development of innovative solutions for sustainable development* is presented in the appendix.

## II. ENTREPRENEURSHIP EDUCATION

“The entrepreneurial mystique? It's not magic, it's not mysterious and it has nothing to do with genes. It's a discipline, it can be learned” [14]. Entrepreneurial education and training seeks to provide participants with knowledge, skills and motivation to encourage entrepreneurial success in a variety of settings. Entrepreneurial learning process is a process in which people acquire, assimilate and organize

newly formed knowledge with pre-existing structures – and how learning affects entrepreneurial action [10]. In the works on this topic, scholars have examined the impact of prior knowledge and learning processes on the accumulation of new knowledge as well as how accumulated knowledge affects the actions [23]. And how can young firms compete with well established firms. While old firms follow established learning routines and sometimes face problems overcoming inertia, young firms with lower levels of inertia are better poised to explore, search and test unique avenues for their products and services [45]. The process of learning and capability development as well as establishing uniqueness in their product offerings is an important part not only in early stages of firm growth, but also in firm survival.

Knowledge has to become the key to economic resource and the dominant – and perhaps even the only – source of competitive advantage [13]. According to a knowledge based view, the principle function of a firm is the creation, integration and application of knowledge [9, 18, 41]. Entrepreneurship education should not be confused with economic or business education, where specific knowledge of economics and management is disseminated. Entrepreneurship involves the promotion of certain personal abilities that provide the basis for enterprising activity and fostering self-employment as the choice of life/career. Naturally, at lower educational levels in particular, students learn about businesses as the core cell of product and service production or means of subsistence, learning about the logic behind the functioning of the economy and the role of entrepreneurs. However, this is not the key element of entrepreneurship education.

United Nations [57] published a declaration on *Education for sustainable development*. Although this declaration focuses on the relationship between the humankind and the natural environment, it also sets sustainability in the broader context of socio-cultural factors and the socio-political issues of equity, poverty, democracy, and the quality of life [cf. 58]. Sustainable enterprises must develop a “capacity to survive, adapt, and grow in face to turbulent change”, and in the meantime “increase shareholder value without increasing material through-put” [15]. Seven challenges are proposed in this respect [16]: (1) creating the 'way of life' of the entrepreneur; (2) sharing of the culture and values; (3) supporting the development of behaviour, attributes and skills; (4) designing the entrepreneurial organization; (5) developing the learning to learn capacity; (6) being sensitive to the demands of different contexts; and (7) adding value to existing ways of learning. The paper concludes that meeting these challenges cannot easily be achieved within the existing structure, values and beliefs of business schools and that new organizations are needed within a university context [16].

Business students today are the business leaders of tomorrow [55]. Entrepreneurial behaviour is affected by and is important for the individual's trust in his/her knowledge, skills and abilities for entrepreneurial activity. Participants must

understand their limits and opportunities and create their own path ways for recovery and reuse of waste streams in place of virgin resources [15] and concrete their own future in dynamic balance [35]. SME development seeks to balance resilience and growth so as to align the creation of abundance: economically, environmentally, and socially and to conserve that value for future generations [17].

Holcomb [23] relies on two distinct theoretical frameworks for learning: experimental learning and vicarious learning. Experimental learning assimilates new knowledge through the transformational experience [28]. Vicarious learning also labelled as observational learning, involves modelling the behaviours and actions of others [3].

### III. SOME RELEVANT RESEARCH

A survey about the future of business education suggests that students' and employers' demand for a more sustainable, international and technological future is growing [11]. Working with 37 business schools, Crisp [11] conducted an online survey that attracted 5365 respondents from 137 different nationalities. Some of the key findings are set out. More students value a business education to get a more fulfilling job rather than a more highly paid job, more than 81% agree that business needs to be about more than just maximising shareholder value, more than 80% of the respondents agree that sustainability and ethics should be embedded in all business education programmes.

A survey was conducted among secondary schools in Slovenia [Glas, Drnovšek, Erlih, Kovač, Kranjec, Rebernik, Rus, Žerič, 2006 in 60]. Entrepreneurship topics are dealt with in the scope of educational programmes of secondary schools of economics, i.e. economics secondary school graduate, etc. In some cases, they form a component of the regular curriculum, while in others they are elective. A review of the numerous activities that promote creativity and entrepreneurship among youth in schools reveals that there are considerable differences among schools regarding the offered courses and even greater differences in their implementation. The respondents which we interviewed at schools believe that the available range of courses is greatly influenced by the school management and student structure, whereas the quality of activity implementation primarily depends on the teachers' commitment. In general, there are more opportunities for youth to express their creativity in general upper secondary school than in technical secondary schools. Some schools offer opportunities for expressing and promoting creativity through various projects, but that is not enough. Education makes an important assumption, namely that a certain competence is not developed only within one course, but that teachers of all courses, especially technical ones, are responsible for the competence development. A notable increase in innovative andragogical approaches to teaching has been observed globally, encouraging innovation, creative thinking and a practical approach [46].

In another research, Damjan [2010 in 60] analysed the answers of 255 teachers about the methods they use to promote entrepreneurial competencies in classrooms and schools. The answers were classified into seven categories, from general promotion of entrepreneurial competencies, stating practical examples and own experience, encouragement through exercises, analyzes, preparation of various documents, various forms of team work [presentation, discussions, performances] and active learning techniques in the scope of the course, to very active forms of learning outside the institution. A review of the answers shows that more than one third of teachers is using active forms of teaching, allows students to practically test their ability to find new ideas and solutions. This greatly promotes creativity and enterprise. In statistical terms, these teachers include an increasingly higher number of those who wanted to become entrepreneurs themselves.

By examining various sources, we identified more than 20 different projects at the international, national and local level (Young Entrepreneur, Firm, and others) as well as voluntary initiatives for the promotion of creativity and enterprise among youth. There were also many initiatives to include youth into voluntary and other social activities so as to enable them to greatly integrate in the local community and to develop creative and other potentials. Even though such projects are numerous and mainly focus on the promotion of entrepreneurship and creativity among youth, it can be concluded from the teachers' answers that they cover only a small part of the population at selected schools. Students' participation is greater in schools where the principal and teachers of technical subjects have a stronger interest to cooperate with students and to encourage them to involve themselves in active education. [Damjan, 2010 in 60].

#### IV. DYNAMIC LEARNING MODEL

We need entrepreneurs to meet future challenges. Their mind is never passive; it is perceptually active, delicate, receptive and responsive to stimulus. They cannot postpone its life until after you've sharpened it. Whatever interest attaches to their subject matter, it must be evoked here and now; whatever possibilities of mental life teaching should impart, they must be exhibited here and now. That is the golden rule of education, and it is very difficult to follow [64]. Zeithaml and Rice [62] contended that education and entrepreneurship should cover diverse areas of business, and the field of study should take a broad, integrative, pragmatic and a rational approach. The learning process should be designed so as to anticipate potential obstacles and provide advice on how to avoid them [49]. Knowledge exists and can be created at the individual, group and society level.

We designed a dynamic learning model. We took into account the findings from the primary research [59; 11 and others], from a wide range of technical and scientific articles [16; 29; 41 and others] and from practical experience. The model encourages the strengthening of the entrepreneurial skills of individuals, groups and the social environment so that they are able to change ideas into action. Education should encourage creativity, innovation and critical risk-taking as well as the knowledge of planning, management and goal achievement.

Learning processes are closely related to formal and non-formal activities and experience. Education must be 1) connected with the outside world, 2) a foster and cultivate in-house innovation, and 3) keep record of past negative and positive experiences. Learning is not enough, they must create new knowledge. Knowledge is created by individuals as well as crystalline and connecting it in knowledge system [40]. The model is based on the organizational knowledge creation theory [40]. The cornerstone of this theory is a concept of "tacit knowledge". It covers knowledge that is unarticulated and tied to the senses, movement skills, physical experiences, intuition, or implicit rules of thumb [42]. Tacit knowledge differs from explicit knowledge. Explicit knowledge is articulated. Explicit knowledge, however, is much more tangible and is easier to monitor and employ as a tool, process or a rule. Still it applies that explicit knowledge is only useful when combined with an individual's own experience, contextual understanding and interpretation and then applied to the activities. Tacit and explicit knowledge interact and create new knowledge [41]. Knowledge creation can be understood as a continuous process through which one overcomes the individual boundaries and constrains imposed by information and past learning by acquiring new context, a new view of the world and new knowledge [42a]. Knowledge creation is an idea like a journey from »being to becoming«.

This model integrates individuals, processes, courses, school and the social environment into a dynamic system that promotes the building of creativity, innovation and entrepreneurship competencies. The concept of knowledge conversation raises two important considerations, that of the knowledge system to which it contributes and social justification [42a]. The model treats knowledge as a dynamic set of experience, values, context information and thoughts, offering a framework for evaluation and inclusion of new experience and information. Two individuals will never share exactly the same values, beliefs, observations and viewpoints [42a].

The centre of the proposed model of dynamic learning environment is a student (Fig. 1) living in a certain social environment and taking part in the learning process. The dynamic model integrates the student into the system and adapts to his/her abilities and to knowledge at his/her development stage. In essence, this is the gist of 'synthesizing', during which new, useful, practical, valid and

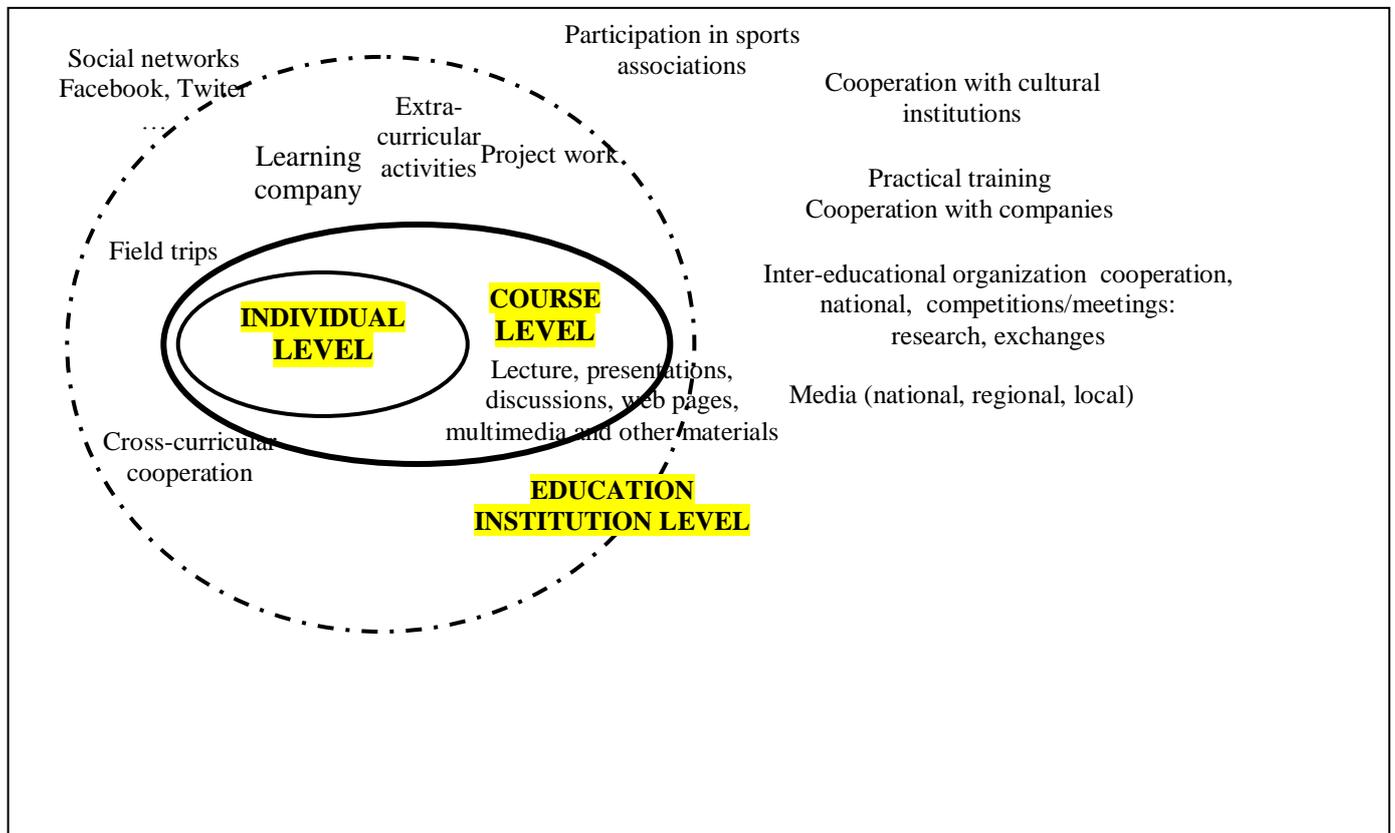
important knowledge is connected to the knowledge system in the education process.

The contents and activities that strengthen the competencies of creativity, innovation and entrepreneurship are used to influence active cooperation as well as substantive and social integration into personal activities, in technical subjects at the school level and within the social environment. The existing knowledge is important as a source for identifying and seizing new opportunities. It influences the ability to collect, select and interpret information, which is the intermediate stage in knowledge development. Information comes to life as it is interpreted and assigned importance and value by an individual. It is important to actively overcome challenges: first they are put within a framework, than the collection, combining and integrating of information is enabled along with argumentation aimed at improved understanding and assimilation of new knowledge. Knowledge is dealt with from

two angles: 1) knowledge is possessed by an individual, group and community; 2) knowledge is tacit and explicit [41].

A participant is placed in a dynamic environment that motivates his/her entrepreneurial inclination (innovation, proactivity, competitiveness, independence, risk-taking) and understanding of the dynamics and events in the environment. There is not always a straight boundary between individual levels of the model, as they overlap. Goals and expectations are closely related with motivational issues such as self-efficiency, empowerment, and incentives to collect and share information. The model defines four levels of learning environment (Fig.1). They provide energy, quality and place to delivering, sharing information. Social, cultural and historical context are important for individuals, as such contexts provide the basis for one to interpret information to create meanings. All learning takes a place inside individual human heads [18].

Figure 1: Dynamic learning environment



The basic level represents the “*individual level*” as well as his/her knowledge, skills and characteristics. The ability to learn is connected to his/her behaviour and activities when faced with new experiences, circumstances and contexts. Learning is individual at first, and then through learning, an individual integrates the development and changes in the environment. Individuals' learning depends on perception, generalisations, observations and conceptions that influence how we understand the world and how we take action [51]. Perception, values, beliefs and various experiences of individuals result in various responses. These responses are also influenced by pre-existing knowledge, skills, impact, resources and strength. A perceptual and conceptual framework is formed on a personal level that restricts and dictates our thoughts, beliefs and feelings regarding when, where and why we learn. An individual learns when he/she senses a problem at a *cognitive level* plans and selects criteria for problem solving and defines the steps leading to the solution. An individual has to focus his/her attention and control the results. At a *non-cognitive level*, however, great importance is assigned to interests, goals, belonging, the appetite for knowledge and achievements (whether he/she has more faith in success than failure), and the strategy of behaviour when under stress as well as the learning style and memory strategy.

The next level represents “*course level*” which includes the subject, teachers, other participants and didactical technical support. There is strong connection with the next level – “*education institution level*”, with relevance assigned to the inclusion and interconnectedness of various contents, the curriculum (look at the appendix) as well as teaching methods. A wider framework constitutes the school with its programme, students, teaching and other staff, infrastructure and activities (extra-curricular activities, meetings, field trips, competitions, international and inter-school linkages) and the range of courses. The next level stands for the broader social environment of the student as his/her background and living environment. Education institutions should establish connections among themselves and provide learning in networks in several ways: 1) a school builds networks in the sense of complementary connection. In this case, students learn about specific reactions of partners, various roles of individuals and their willingness to adapt. They learn how to adjust activities to reach common efficiency; 2) interaction within relations among partner schools allows the building of shared skills that are used and transferred into other relations; how to gain a partner, how to keep in contact and various actions that strengthen relations. These could be referred to as experience in relationship building; 3) the third type of learning represents coordination – how to coordinate activities with a partner in relation to other connections; 4) the fourth type is a combination of the above – a school learns how to build a new network.

The “*social community level*” in connection to the environment has to allow the active involvement of every individual. In an environment with an established culture of learning and creativity, the formal and non-formal building of competencies intertwine. These competencies enable a student greater independence, innovation and enterprise. The theory of informal or incidental learning is based on the early works of John Dewey [1938 in 33], explaining the impact of school culture on learning. Learning requires space, opposites, differences, surprises, challenges and response. Individuals learn according to their rational and responsive understanding of the challenge.

People primarily win knowledge by grasping substance [43]. We learn on a personal level, on the group level during courses, on the school level and even on the level of the community. The foundation of learning is individual learning. As individuals establish connections within an organisation, knowledge is upgraded and achievements arise, attributable not only to an individual but also to a team. The ability to learn depends on individuals and the learning context. Learning at a personal level is often associated with the terms giftedness and talent – these two frequently overlap and arise from generic traits of an individual and environmental factors intertwined in varying ratios [19]. Heller – Hany's [Heller, Hany, 1986, in 19] model of success is based on personal traits, talent and the environment. At a broader level (subject, school, social environment), the learning process has to be supported by an organisational structure, processes, etc. that support the entire learning cycle [4] as well as by a suitable psychological environment that is determined by: supportive environment and environmental pressures exerted on an individual, socio-emotional climate, management relations as personal factors (e.g. life experience).

Learning at an individual level is similar to group-level learning. Individual learning is in the interaction and dynamics of the social environment. Nonaka and Takuchi [41] stress the importance of cooperation. Example: typically, innovation is not the result of an individual but of groups within which individuals interact and upgrade knowledge into tacit knowledge of the group. Tacit knowledge of the group is the aggregate of individuals' tacit knowledge, which is released and balanced with soft teaching approaches such as establishment of mutual trust. Knowledge, knowledge creation and innovation are related to a broader social context of autonomy, giving of draft instructions, team work and encouraging individuals to identify with the task.

Dynamic learning environment is formed as a dynamic unit, connecting various activities, extra-curricular and curricular, while interacting with the environment. It is based on epistemology – *how to know* and ontology – *what one exists for* and incorporates values, context, strength and dynamics of processes for knowledge creation through the interaction of subjectivity and objectivity embraced by the social environment. Information gathering incorporates monitoring of the environment and intelligent data processing

as well as their integration and connection into the system. The culture represented by schools has an influence on behavioural changes, efficiency, success and challenge acceptance. It enables new learning techniques and methods. Celantone [2002 in 31] proves the connection between the drive for knowledge, innovation and success. From learning spring new ideas. Learning is the most important resource to achieve competitive advantage. Knowledge has to be created. Knowledge creation does not merely constitute a response to information. Knowledge is created through interaction among individuals who have various experiences, values, positions and abilities to learn, through information processing, decision making and activities. This combines: information, know-how and everything learned.

A learning process includes processes from *input*: pre-existing knowledge and experience; *content*: content of the subject or programme or purpose; teaching *methods*, which have to focus on an individual's characteristics; and the *result*, defined by the knowledge of an individual, benefits, values and positions. Liao, Fei and Liu [32] refer to authors who describe the learning process: as collection, interpretation and implementation of new knowledge [26], as collection, transmission and storage [Argote, 1999 in 32], as collection, imparting, interpretation and storage of knowledge [Huber, 1991]. Senge [51] distinguishes between five factors that influence learning, i.e.: systems thinking, personal views, mental models, shared vision and team learning. A few years later, he establishes that the world has become more interconnected, business has become more complex and dynamic and work must become more easier to learn. Learning in itself is a dynamic ability and future potential.

In a learning process, we should consider the greater scope of available information, the communication technology capacities and the possibility of combining information. Be it individual or group learning, the process always includes individuals, and while learning by each individual is important, it is not sufficient [26]. Exchange of information has to be targeted [37]. It will only be successful if information is, within the context of other participants, allowing for feedback to be provided, modification and forwarding a new view to the sender.

In these discussions it is necessary to acknowledge management systems which are often equated with the information systems that assist knowledge conversion or information management processes in the organization [42a].

## V. DISCUSSION AND CONCLUSIONS

Increasing population, migrating from rural areas, limitation of available environmental commons, energy and low resources, globalization and economic development and social issues create our common business environment. Environmental and social factors have become increasingly important considerations for enterprises [35; 11]. In Slovenia

the majority of individuals are engaged in entrepreneurial activity to exploit the business activity [48]. Education institutions are an important part of the business supporting system. They must promote entrepreneurship and sustainable business. They must be partners in the entrepreneurial process. Entrepreneurial process begins in an early stage with potential entrepreneurs who believe that they have adequate entrepreneurial skills and who wish to exploit these opportunities. Enterprises succeed in integrating social and environmental sustainability performance into financial projections and strategic business goals; they will expand opportunities for innovation by increasing their opportunities for rapid learning [35].

Knowledge is an important source which helps firms to survive and to make competitive advantage. Knowledge-based success is a multi-dimensional construct of various variables and their specifics: personal traits, social environment and the possibilities of transferring personal potential [19]. The construct is based on *personal predispositions (talents)*: intelligence, creativity, social competencies, musicality, artistic abilities, psychomotor skills and practical intelligence; *personal traits*: achievement and success motivation, achievements control and monitoring of expectations, knowledge drive, ability to cope with stress, other personal traits; *environmental factors*: stimulating a creative environment, the style of learning, an attitude towards success, a family climate, a social response to success and failure, a classroom climate, life experience, differentiation of learning and instructions [19]. The fundamental condition for successful development and gaining of the competencies mentioned above is a high-quality and efficient educational system implemented by well qualified teachers [44]. Thus, school is the crucial factor in the development of innovation and entrepreneurship and other key competencies of youth. They are directly influenced by teachers as implementers of educational programmes and by school as a social community.

Entrepreneurial learning is multi-dimensional: understanding the causes and strengthening of analytical skills, the ability to have a critical, independent perspective when looking for the best solutions and practice. It represents the opportunity of in-depth learning to acquire specific knowledge, gain the ability to find and quickly obtain the information necessary as well as to use it efficiently and the ability to employ the latest technology to organise and search for information. It also triggers the need for further and life-long learning, communication and for networked team work.

The article presents a dynamic model for encouraging creativity, innovation and entrepreneurship and includes several scientific and expert findings as well as a series of partial research studies and experience. The model has to be adapted to individuals and groups, to their knowledge and motives. How to implement a combination of individual factors is best tested on a pilot group and then integrated into regular training and educational processes through regular school programmes for youth. Nevertheless, the importance of

the model as regards adult education must not be neglected. Such a model has a special meaning in the training of those who already have experience due to which they are more inclined towards communication, absorption and in particular merging and combining new knowledge with pre-existing knowledge. During the learning process, the group upgrades its knowledge and capacities (key abilities and competencies) as well as the ability to assimilate and apply new information. In addition, its behaviour and values change and group memory is created. A group that receives knowledge must have sufficient absorptive capacity [7], which depends on pre-existing knowledge, understanding, organisation, connections, available technologies and the ability to use innovation [2; 61]. The pace of learning also depends on the ability to interpret, assimilate and accumulate the knowledge.

Group-level learning is an interactive process, a group experience. By learning, an individual affects others' learning and thus the knowledge of the group. Thereby, a mechanism is established, enabling, supporting and upgrading the use of knowledge. There is interaction among individuals, groups as well as enterprises and other associated organisations. In the framework of interaction, the individual is the agent who influences the thinking, activities and learning of others [33]. Social capital is important. If a group wishes to accept novelties, there must be trust among its members and willingness to share knowledge.

From a practical perspective, the findings can be used. Network and dynamic education environment also seem to offer new culture and opportunity to improve education practice and economic performance in the rural area. New enterprises must be educated to run sustainable business and survive in competitive environment. Given the experience from the established firms, for young firms, this learning process is interactive and includes contrasting learning loops that sometimes progress and other times digress from initially perceived unique ideas [45]. Of course, there are differences between different situations and organizations. But dynamic adaptation and new knowledge creation in a different environment must be created.

The ability to recognise opportunities depends not only on the existing knowledge but also on the processes involving the collection and transformation of information into knowledge (learning). The diverse knowledge of individuals and groups impacts the varied identification of opportunities, combining compatible skills with partners' knowledge results in a unique learning opportunity. Students acquire much knowledge through informal ways. Marsick and Watkins [33] and Timmons [53] believe that the majority of the knowledge is gained through informal learning methods and only a smaller part through formal learning. New knowledge is incorporated into an individual's knowledge. This changes with time and is also reflected in altered behaviour and understanding.

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Appendix

**WORKSHOP -  
DEVELOPMENT OF INNOVATIVE SOLUTIONS FOR  
SUSTAINABLE DEVELOPMENT**

<b>M1: INTRODUCTION TO WORKSHOP</b>		
<b>Number of hours</b>	2	
<b>General objectives</b>	Brief introductory workshop aims to introduce the participants to the program content, purpose and objectives Presentation of the program in the context of the entire project EURUFU Mutual information of participants Preparation of the participants to the workshop	
<b>Competencies</b>		
<b>Operational objectives</b>	<b>Informative objectives</b>	<b>Formative objectives</b>
	Learn the importance of lifelong learning	Think about their future seriously
	Be prepared to work in groups	Their decision is life long education
	Think about entrepreneurship as an option for their career development and in the system of sustainable development	
<b>Individual work</b>	Beginning of thinking about their own idea	
<b>Participant obligation</b>	They decide to participate on workshop or not	
<b>Methodology</b>	- Introduction presentation - Discussion ....	
<b>Other</b>	Participants receive a presentation brochure	

<b>M2: Dream and reality</b>		
<b>Number of hours</b>	4	
<b>General objectives</b>	Introduction to Workshop Matching personal, business goals Local values, environment and business opportunity Force field analysis Integration of macro and micro changes and their connections to opportunities SWOT analysis Participants Integration and opening, team building	
<b>Operational objectives</b>	<b>Informative objectives</b>	<b>Formative objectives</b>
	Understanding of various environmental factors	They understand basic opportunities how to use SWOT analyze
	They understand that the looting of natural, cultural resources, and pollution is not a solution	They are aware of the values of the environment and culture
	Understanding the importance of sustainable development	They understand what is sustainable business
	Understand the importance of interpersonal relationship	Do you know how to open up to other
		They are able to listen and accept arguments of others

<b>Practical training</b>	- Searching common solution at case study - »Creative drumming« – creative workshop. Team building. ....
<b>Individual work</b>	Designing ideas of what would be an opportunity in their neighborhood and the hometown  A review of the topics of relevant chapters in the literature Vidic, F. (2012): ERUFU-Power point presentation Vidic, F. (2013): Pisanje dobrega poslovnega načrta (poglavja od 1 do 2.4) Review for interesting information on the web
<b>Participant obligation</b>	- Design innovative idea: "My contribution to local environment"
<b>Methodology</b>	- Lecturing - Case studies - Creative workshop - Discussions
<b>Other</b>	Students receive all the materials: transparencies, handbook: " Writing a good business plan", Workshop Catalog,

<b>M3: Sustainable development and growth</b>									
<b>Number of hours</b>	5								
<b>General objectives</b>	Business direction map Product development Market development Marketing strategies								
<b>Operational objectives</b>	<table border="0"> <tr> <td><b>Informative objectives</b></td> <td><b>Formative objectives</b></td> </tr> <tr> <td>Understanding the micro-environment characteristics</td> <td>Self awareness Identify opportunities and their applications</td> </tr> <tr> <td>Learning from other analytical understanding of good practice</td> <td>Actively ask questions</td> </tr> <tr> <td></td> <td>The web-based resources</td> </tr> </table>	<b>Informative objectives</b>	<b>Formative objectives</b>	Understanding the micro-environment characteristics	Self awareness Identify opportunities and their applications	Learning from other analytical understanding of good practice	Actively ask questions		The web-based resources
<b>Informative objectives</b>	<b>Formative objectives</b>								
Understanding the micro-environment characteristics	Self awareness Identify opportunities and their applications								
Learning from other analytical understanding of good practice	Actively ask questions								
	The web-based resources								
<b>Practical training</b>	Visiting selected companies, interviews with entrepreneurs ....								
<b>Individual work</b>	- Looking for best practices, learn from them, and prepare short report. - A review of the topics of relevant chapters in the literature - Vidic, F. (2012): ERUFU- Power point presentation - Vidic, F. (2013): Pisanje dobrega poslovnega načrta (poglavja od 1 do 2.4) - Review for similar information on the web								
<b>Participant obligation</b>	Work on their own business ideas: What is value added How to design their own microenvironment, and proper microclimate for their own business								
<b>Methodology</b>	- Lecturing - Case studies - Creative workshop - Discussion								

<b>M4: BEST PRACTICE</b>					
<b>Number of hours</b>	6				
<b>General objectives</b>	- Critical thinking and learning from neighborhood and available sources - Critical listening and communication with entrepreneurs - Improve self motivation for autonomy and decision making activities .....				
<b>Operational objectives</b>	<table border="0"> <tr> <td><b>Informative objectives</b></td> <td><b>Formative objectives</b></td> </tr> <tr> <td>Students observe the characteristics of the different companies</td> <td>Know how to search ideas</td> </tr> </table>	<b>Informative objectives</b>	<b>Formative objectives</b>	Students observe the characteristics of the different companies	Know how to search ideas
<b>Informative objectives</b>	<b>Formative objectives</b>				
Students observe the characteristics of the different companies	Know how to search ideas				

	Become familiar with the basic rules of communication Learn from best practices Became learning-oriented, they collect, analyze and interpret data	Know how to ask questions Know how improve their basic business ideas Know hoe to search and use web-based resources
<b>Practical training</b>	Visiting selected companies, interviews with entrepreneurs	
<b>Individual work</b>	- A review of the topics of relevant chapters in the literature - Vidic, F. (2012): ERUFU- power point presentations - Review for interesting information on the web	
<b>Participant obligation</b>	Work on own business idea: What is my value added, why will follow my ideas How to design their own microenvironment, and proper microclimate realization	
<b>Methodology</b>	- Lecturing - Case studies - Creative workshop - Discussions	

<b>M5: Introduction to business planing and business model development</b>		
<b>Number of hours</b>	4	
<b>General objectives</b>	- From ideas to the business model and business plan - CNVAS business model - The basics of business planning	
<b>Operational objectives</b>	<b>Informative objectives</b>	<b>Formative objectives</b>
	Understanding the importance of the core business	Know how to explain their core business
	They understand importance of different business functions	Know how to explain difference between different business functions
	They are familiar with basics of the business model	Know how to explain business model
	Getting familiar with basics business planning activities	They understand business model and connection to business planning process
	-	Know how to use interne sources
<b>Practical training</b>	- Case studies	
<b>Individual work</b>	- Work on their own opportunity - A review of the substance and the relevant chapters in the literature Vidic, F. (2012): ERUFU- power point presentations Vidic, F. (2013): Pisanje dobrega poslovnega načrta - Review for similar information on the web - Preparing their own business model and business plan ...	
<b>Prticipant obligation</b>	- Students formulate their ideas, prepare business model and business plan ....	
<b>Methodology</b>	- Lecturing - Case studies - Creative workshop - Discussion	
<b>Other</b>	Students get basic instructions for independent work and been invited to Individual mentorship	

<b>M6: Individual MENTORSHIP</b>	
<b>Number of hours</b>	5
<b>General</b>	Assistance to individuals in realizing their own ideas on the development of the

<b>objectives</b>	contribution to the environment, cultural heritage, or developing and implementing their own business ideas	
<b>Competencies</b>		
<b>Operational objectives</b>	<p><b>Informative objectives</b> Students have opportunity to test their own future oriented business idea</p> <p>Work on their own project</p> <ul style="list-style-type: none"> <li>- A review of the substance and the relevant chapters in the literature</li> <li>- Vidic, F. (2013): Pisanje dobrega poslovnega načrta</li> <li>- Review for similar information on the web</li> </ul> <p>Participants should bring and present a draft of their ideas, they must prepare questions to mentors, highlight the dilemmas and prepare themselves for discussion</p>	<p><b>Formative objectives</b> They get confirmation or second opinion</p> <p>They improve their attitude They make important decision about their future</p>
<b>Practical training</b>	Mentoring, consulting, discussion, ...	