

Education for an emerging society

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Abstract

"Social evolution is showing us some **interesting patterns** in the behaviour of our society. It seems that we have in some ways trapped ourselves within the structures that we have created. Throughout the brief history of the educational systems typical of our time, we have encouraged the development of competences in people that best **serve the needs of the structures** of the current paradigm in our culture and not the people. It seems that we have been trained and educated to improve technology, processes and organisations as our primary goal, and have neglected as a result the well-being of people, of the animals, plants and of the planet itself. In this article we point out some **indicators** that are encouraging us to see **new patterns** emerging that relate to our individual and collective consciousness. In the paper we also share some practical examples that present **different approaches to learning**. We can sense changes at many leverage points in our society. For example, at the widest level in our ways of organising, ways of learning, ways of understanding, ways of being and ways of doing. We argue that these changes are often provoked by problems and opportunities of an emerging **"innovation based" thinking**, and by the higher levels of collective and individual consciousness. The paper presents **"systemic thinking"** as one of the key elements when searching for more effective and sustainable new solutions. It also presents a possible **scenario** at the higher education level in a connection with the commercial world as viewed by the Challenge:Future global youth, by the authors' experiences from the field (for example corporate environments and local communities) and by experiences gained from using innovative approaches in the higher-education teaching."¹

Keywords: social patterns, social evolution, innovation based thinking, system thinking, education for emerging society

Social patterns

*"I hear and I forget. I see and I remember.
I do and I understand"- Confucius*

¹ We would like to stress at the beginning that the following article is written from a practitioner's point of view. It mostly presents our personal experiences and points of view that were generated over the last 15 years of our engagements with horizontal structures and systemic approaches in corporate environments, within local communities and in the classrooms. There are hardly any references to academic literature; mainly because we wanted to share our own experiences. We are aware that many of our thoughts and conclusions are under the influence of people, customers, partners that we have met in our practice, and we are deeply grateful to all of them for push us beyond the limits of our own limited perceptions. Most of the thoughts, however, have simply evolved over time and we hope they will contribute to your knowledge, as well. Innovation based societies and systems thinking are here to stay as important enablers for success and we are just starting to understand their true nature.

Looking back at the past 10,000 years, we cannot overlook the fact that human perception of the world has been changing constantly². The various periods of civilisation differ in fundamental characteristics of our perception of the world around us and our perception of ourselves, our value systems, the elements of creation of added value, social structures and our attitude towards the sources of power that affect everything that exists.

Modern 'Western' and 'developed' civilisation is characterised by its pursuit of achievements in science and technology, its vertically focused structures, closed systems and an analytical manner of thinking, understanding and interpreting the interdependence between what we are and with what we coexist.

Over the past 200 years, certain social characteristics have started emerging that in turn eventually started indicating the coming of a new era around the end of the previous century. These changes have been visible in the behaviour of individuals, of society and of social structures. They encourage us to recognise them as more than just changes in the culture. They invite us to start thinking about a new civilisation whose form is becoming increasingly apparent in the stronger presence of elements, such as:

1. systemic thinking

- understanding of the interdependence of all that exists (visible and invisible);
- cross-structural and cross-disciplinary cooperations
- global networks,
- emergence of global values,
- open models of co-creation,
- participative decision-making models

2. eco-consciousness

- focus on finding inner peace,
- interwoven internal and external worlds
- understanding the responsibility we have towards life,
- combining of spiritual and material essence into awareness of a new whole,
- managing social and planetary consciousness,
- formation of a planetary consciousness.

With regard to the elements listed above, I believe that our awareness is becoming more substantial. Simultaneously, changes and events are also occurring with increased frequency. Thus, we can start recognising possible elements of a new eco-oriented **civilisation with a global character**. All civilisations³ of the past were continental in character, both in origin and in their characteristics (the Fertile Crescent (11,000 BP), the Yangtze and Yellow River basins (9000 BP) and the New Guinea Highlands (9000–6000 BP), Central Mexico (5000–4000 BP), Northern South America (5000–4000 BP), sub-Saharan Africa (5000–4000 BP, exact location unknown), eastern USA (4000–3000 BP). We believe that the new civilisation will be global and planetary in scale. It will come out of recognised global values and the need to keep the Planet suitable for the thriving of the human race.

The Evolution of Systems

For hundreds of years up until the end of the previous century, the development of the business world was commonly linked to technological milestones, such as the

² J.Roemischer (2002)

³ <http://en.wikipedia.org/wiki/Civilization>, 24. 06. 2013

steam engine, the microchip, or new materials (nanotechnology). In business environments during that time, value creation was under the influence of a continuous increase in **productivity** (Figure 1), primarily achieved through the development of new technologies, processes and automation.

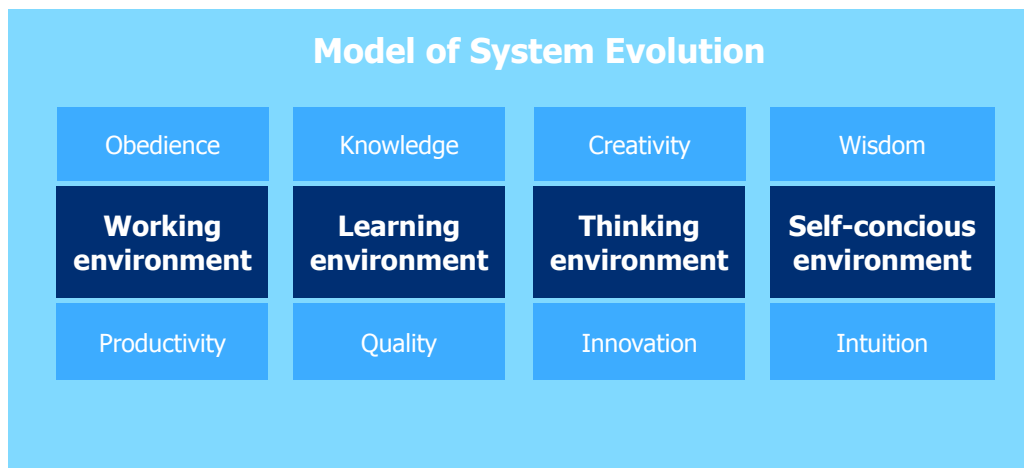


Figure 1: Evolution phases

Source: Bulc, V. [2006]. Ritmi poslovne evolucije (The rhythms of business evolution)

The dominance of productivity as the main measure of value creation started to change due to the proliferation of the global economy, connecting continents, opening state boundaries and encouraging free trade and global cooperation. With these changes occurring Europe could no longer compete on global markets solely on the level of price [European Commission, 2013].

So, in the 1980s, a new driving force for value creation swept across the globe – “the quality” driver (Figure 1). The increase of internationalisation and globalisation in business started pushing organisations, for example those European companies that persisted with creating productivity-based added value, further towards the margin of survival. This was a result of the growing prices of energy, the work force and raw materials. In order to maintain a strong position in the global economy, the European economy needed to use **quality** as a new driving force for value creation. The **process** became the key subject of business observation. The **process of constant improvement** became the primary tool in the hands of management for staying in the competitive game. In order to support this new approach to business, many changes had to take place in systems behaviour: steep hierarchies were replaced by flat hierarchies, management had to invest more in people and not only in technology and material resources. More and more people needed to be included in decision making processes. At the same time, globalisation started to spread more and more strongly around the globe bringing new challenges especially in the form of increasingly diversified markets with more specialised needs.

While productivity was a driving force of added value for a few hundred years, quality held this place for a mere twenty years. Yet, it enabled an increasing interest in knowledge and cooperation and focused attention on different markets (industries, quality segments, regions). Markets were no longer looked at as a single entity but rather as diverse segmented groups, based on the expected quality and the associated price.

Due to the growing influence of the Internet and other modern information technologies that enable global communication, trade and co-operation, the central driving force of generating added value at the beginning of the 21st century, became **innovation**. That is still the case today. The need for establishing identity on the level of objects, individuals, groups and structures is on the rise and the associated needs are becoming increasingly diverse. Instead of products and processes, **correlations** and understandings of relationships are of growing explicit importance. Therefore, **organisational, marketing and social innovations are stepping forward at a rapid rate**. Innovation is driven by relationships with markets based on the needs and behaviours of the targeted groups of customers, by the diversification of the local environment and by the new vibration of the Planet itself (Figure 1).

However, we have started noticing that even innovation alone might not be sufficient any longer to enable networks, organisations, teams and regions to react and adjust quick enough. More and more we are realising that not only technology but also human beings need holistic development in order to understand the possibilities that the well-connected world is offering. So there is yet another dimension emerging as an enabler of value creation - intuition (Figure 1). Modern approaches to decision-making indicate that intuition⁴ might be one of the natural channels for transferring information from our subconscious into the decision-making process⁵. It seems that only those that manage and develop well productivity, quality, innovation and intuition will be fit enough to co-create this new, emerging world. Among the changes of the elements for value creation there is a growing need for changes in other co-living systems that co-create the moment, like education, that are invited to help people to be ready to act in such newly established relationships (networks).

Challenges of innovation-based thinking environments

The evolution of systems has clearly accelerated the pulse of society as a whole. Each system (organisation, community, team) is a living organism with its own inertia and characteristics. If we look at evolution from the aspect of resources and key elements of creating added value, we can clearly see that the speed of change has accelerated dramatically over the past 30 years. While industry and productivity were the key factors of success for over 200 years, quality and knowledge held this role only for approximately 20 years, and innovation and creativity only for 10 years.

We can only guess how we will relate to the unconscious mind and intuition into the future, for they have only started coming to the forefront as differentiating factors for success in this context now that innovation and creativity are becoming necessary/basic elements of existence. We see the answer to the current situation in a transition to a new consciousness that will probably be achieved through drawing on intuitive insight and an increased conscious use of the information we carry in our unconscious. Following the present, and most likely the final stage, the evolution model will probably repeat itself, yet, it will be spirally enhanced through the prism of

⁴ Intuition is a skill inherent in our biological system, a tool we use to access the unconscious (subconscious). Together with acquiring knowledge (learning) and experience (action), it forms a three dimensional information network that provides us with data and information required for making rational decisions. This network transmits experiences, knowledge, wisdom and unconscious messages to the corresponding brain cells where they are used for decision making. The channels themselves are multidimensional, too. They draw information from one's inner world, a team's collective conscious, organisation, community and/or cosmic consciousness. With every interference in these channels or processes, our perception and decision-making are hindered and distorted.

⁵ Bulc V.; Kovačič V.; Batellino U. (2013)

the new consciousness, which means that new aspects will be determined with respect to how we understand and manage productivity, quality, innovation, and intuition.

Behaviours of thinking environments (Figure 1) represent a **significant challenge** for skills, knowledge, habits and behaviour, particularly due to the transitions from old to new concepts:

- from vertical to horizontal and network based structures (interdisciplinary and cross-structural),
- from competition models to coexistence models,
- from closed to open systems of co-creation,
- from controlled markets to a global economy,
- from alliances between countries to cooperative alliances based on behaviours and needs,
- from controlled information to global social networks of individual reporters and information sources.

The above changes have **shaken the foundations of security** on personal and organisational levels, and motivated individuals to join the process of adaptation, improvement and change. However, methods of obtaining knowledge about effective tools for successful implementation of these new concepts are predominantly left to the resourcefulness of each individual and their choices, lacking in expert knowledge.

In turn, this **challenges the education system**, which should be providing people with the tools, knowledge and skills for successful social participation. Yet even a quick analysis of the existing models in educational institutions paints a very different picture. Educational institutions have remained at the level of a working or – in best case – learning environments. Again, to me what is to be aspired to is that individuals be engaged in lifelong learning because this makes them a powerful force. I would argue that universities do not promote 'whole person learning' but rather just 'rote learning' of facts and pre-decided knowledge. Thus, the education system shifts the responsibility for education and training to individuals and/or employers, instead of enabling people to fully utilise the years of 'formal' education process during which time we are able to obtain knowledge with less effort than while we are at work.

Establishing self-conscious environments

The already narrow applicability of knowledge acquired within the official doctrine of educational institutions in the Western world is now also challenged by the characteristics of self-conscious environments. We have begun to identify new elements that importantly influence our existence. These elements come from the non-material world, without tangible evidence, but with visible results. They are enriching the role of science and scientific research methods; they are adaptable and can include (life) energies in their systems (e.g., one's will, the unforeseeable⁶), thus influencing the state and behaviour of everything that exists.

It seems that the most noticeable **changes** in our perception of the world around us are taking place in the following areas:

- understanding of the meaning of personal and group actions for the good of the individual and of society as a whole,

⁶ This is the subject area of Science 2 - promoted, taught and built as a concept and model within ISSS for several years.

- planetary consciousness, which is enriched and strengthened by the consciousness of the individual and vice versa,
- the growing influence of interest groups being established based on their individual needs and behaviours,
- empowerment of the consumer who is awakening to become a conscious and aware being with understanding of inner relationships and relationships with the world around him/her,
- a shift in values from what is desired to what is needed,
- a system of leadership shifting from top-to-bottom and push/pull leadership to the "leadership within"
- a decision making method that in addition to learning (knowledge) and acting (experience) also includes intuition (the unconscious),
- understanding of the difference between linear and comprehensive project development (e.g., design thinking as a form of systemic approach),
- constant challenging of everything that exists and the search for answers beyond the borders of what is known.

The Evolution of structures

The new consciousness has also started to challenge the structures that we created in the past in order to exist as a society. It challenged our attitude towards them, as⁷:

- It often seems that the structures are the **essence of our existence**; something to be protected and defended rather than seen as temporary infrastructures required to support our development. We became intertwined with structures rather than with each other and nature as a whole. We surrendered our power and knowledge to structures, thus making them even stronger and giving them a purpose.
- The transfer of power was simultaneous with the process of **impoverishment**, which stultified our intellect and confined us to a virtual reality far away from natural ecosystems.
- Another process that runs parallel with the transfer of power and the impoverishment of people is the **surrender of responsibility** to structures. As a result of this, we voluntarily distanced ourselves from the role of active co-creators of the system and subordinated our views, relationships, visions and truths to the system and a handful of people who have defended its interests for reasons of self-preservation.

A consequence of the shifting of responsibility is the **creation of expectations**, which places us in a subordinate position in relation to those that we consider responsible for fulfilling them. In the context of society, it is more and more frequently the state, structures and "them" that are held responsible. The state of expectation makes us passive, dissatisfied and disappointed. The formation of expectations and the transfer of power and responsibility towards the system made us **increasingly dependent on the solutions provided by systems** (i.e. the state, a shopping centre, a hospital), of the reliability of systems (i.e. computer systems, telecommunication systems, the media), and the truths evolving under the influence of money and the interests of exclusive groups that act in the name of the systems. In order to compensate for our dependency and loss of power, we reach for

⁷ Bulc, 2012

stimulants (such as drugs, alcohol, gambling, pornography), which make us even more apathetic, “comfortably numb”, indifferent and weak in relation to those systems that are actually our own creations.

It seems that we keep forgetting that everything around us has been created by us and that only we, by ourselves, can a change to systems that will support us in our new needs. So, the change that a new consciousness demands will not be driven and implemented by the structures we have created. The changes will begin to happen within me, within you and within us. This is yet another point that depends on the education system and the level of its transformation in order to lead, and not only follow, social transformation. Only with such an educational system can we hope that the current characteristics of our relationships with structures as stated above can be transcended towards more dynamic, adaptable and open forms.

The Evolution of individuals

The needs of thinking environments and the challenges related to our relationship with structures have clearly shown us that knowledge and the good physical condition of people (employees) are no longer enough for creating added value and for creating and facilitating change. They can be achieved by individuals who have managed to balance all six dimensions of the human being as we know them today (Figure 2).

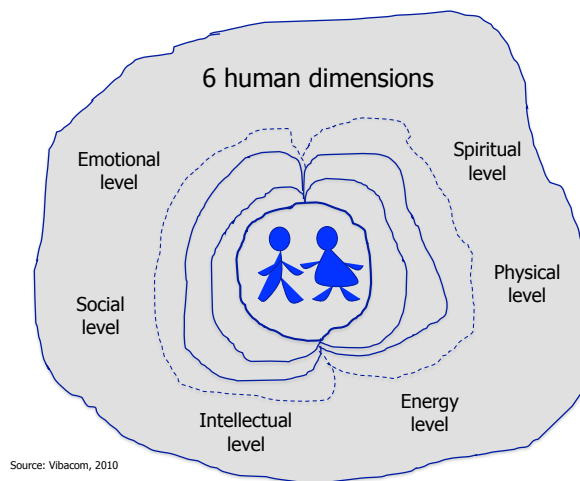


Figure 2: 6 human dimensions

In the past, **physical capital** was the predominant factor in working environments. Employees (work force) had the role of supporting technological solutions (machines), which in turn were the key to higher productivity and added value.

In learning environments (human resources), where the focus of creating added value is on the control of quality and of business processes, **intellectual capital** is more important. There is now a rising need for emotional capital as well.

The need for new qualities is even more expressed in thinking environments, where these new dimensions are taking the lead in shaping (business) success. Thus diligence, knowledge, productivity and quality management are joined by creativity

and innovativeness, which both require successful manifestations of **emotional, social and spiritual capital** as the driving factors of business success (human capital).

Self-conscious environments go a step further. They introduced a new quality to the formula for success, so far largely untapped by the business and academic worlds – **energy capital** – which is reflected in the sensibility for what goes on within and around us and in the ability to realise planned activities and shape ideas into innovation, thereby surpassing the limits of personal success and devising something that is good for society as a whole.

We now understand, but have yet to integrate fully into our activities, that a person has at least **six important dimensions** through which they receive and transmit knowledge and wisdom, realise ideas in practice and use them to coexist successfully in the broader community.

The time for change has come and it is clear where we must attempt to influence and direct the energy of our lecturers, teachers, coaches and mentors.

Innovation-based thinking

New discoveries that are challenging educational systems

The discussion in the previous chapters calls for systemic changes in the processes of education and training, both in mandatory and optional education, as well as cross-generational learning, internal transfer of knowledge, etc. in physical and virtual environments. Diversity in the structure of participants (intercultural, interdisciplinary, international groups) is an additional advantage in these processes. They are reinforced by skills, approaches, methods and processes that we bring to these relationships and with which we actively participate in the education process. The process of learning and education is life-long and each moment and environment that we live in is our classroom.

Based on the evolutionary behaviour of systems and on our practical experience about processes of adaptation in corporate environments, local communities, in the NGO sector and in academic circles, we notice that some areas/topics that could assist in the development of required competencies are particularly neglected. Their **absence** in the general education of individuals **increases stress, physical illnesses and psychosomatic disorders and decreases the level of the manifestation of energy**, which is a prerequisite for the execution of new ideas and inventions and for innovation. We also tend to overlook the close relationship and co-dependency between structures of varied complexity, which are easily identifiable in the example of the interconnectedness of ethics and integrity.

Skills required in thinking environments

An analysis conducted in fifteen companies⁸ showed a surprisingly explicit need expressed by employees to feel safe in order to be able to realise their creative, learning and development potential. Trust among colleagues, in managers, teamwork and communication (access to information) received the highest scores. These factors depend on relationships and do not necessarily require financial or material investments. All they require is a well-developed emotional and spiritual intelligence.

⁸ Bulc, July 2013

In view of the above, it is easier to understand the **key skills (competencies)** necessary for the development of innovation-based **thinking environments**:

Relationships with the external environment (customers, partners, the public; open and closed systems):

- identification of market opportunities based on behaviours and needs,
- understanding of potential/interesting areas of innovation,
- innovation communication and innovative communication (important for all relationships),
- understanding the needs for value creation,
- knowledge about innovation ecosystems (open and closed).

Relationships among employees (horizontal, vertical):

- understanding of different methods and forms of leadership (e.g. innovation management and innovative management),
- methods for developing ideas,
- methods of searching for ideas,
- teamwork, various techniques of team reporting and presentations,
- understanding of the building blocks, stages, key factors and sources of the innovation process,
- systems science, behaviour of complex systems (important for all relationships),
- cross-structural cooperation and creative processes,
- project management and project thinking,
- participative models and proactive approaches.

Relationship with ourself:

- techniques for developing emotional and spiritual intelligence,
- the use and development of intuition,
- objective and critical judgement,
- empathy, curiosity,
- cross-structural cooperation,
- lateral thinking,
- understanding of the ethical principles of society,
- holistic and balanced personal development.

Titles with similar topics can be found in study materials, but a closer look reveals that their content, methods and techniques are still based on the needs of working and learning environments. The content also needs to be revised (not just the titles). We are faced with the challenge of having to **connect elements of creativity with elements of empathy** to lay a solid **systemic** foundation for wisdom, intuition and everything else that we need to make our evolutionary step more purposeful.

Skills required in self-conscious environments

If we look at only a few **skills and areas of knowledge (competencies)** required for the successful development of self-conscious environments, we notice that most of them are not addressed directly by educational systems; they are left to arbitrary (unconscious) development, or self-initiated and self-directed learning, and we are therefore much less able to use them in a meaningful and controlled manner (Bulc, April 2013):

- managing emotions, particularly blocks and fears,
- managing and changing dysfunctional habits,
- developing relationships (with self and with everyone with whom we share this time and space);

- developing values, particularly ethics and empathy,
- developing personal identity and the identity of our products, services, solutions and the systems we set up around them,
- developing sustainable systems,
- managing integrity,
- managing and re-evaluating our beliefs,
- respecting biological and cultural diversity in practice,
- respecting animate and inanimate nature, based on its energies and our dependency upon them,
- maintaining curiosity about what we don't know,
- developing holistic systems and systemic approaches and thinking, which enable a more clear and precise understanding of mutual influence and of the consequences of our actions.

So how will the education system respond to these needs? This challenge is even more difficult since new discoveries are made with such speed that the content of many text books becomes obsolete almost at the moment they are written.

Let me illustrate this with a few examples:

- When geneticists discovered all the elements of our genetic code several years ago they had to conclude that they were no closer to understanding the formula of life than before this discovery. This led to a strong shift in our understanding the role of genes in the development of a human being; they found that the development of a person is greatly influenced by one's environment, the impulses one's body receives from it and their transfer to the elementary (cellular) level, since these impulses activate parts of the genome, causing one to develop according to the given conditions (ability to adapt as a fundamental characteristic of all living beings)⁹;
- Quantum physicists announced several years ago that all that exists is essentially a vibration (material and immaterial, in animate and inanimate nature), which makes us very sensitive to impulses from the environment (approximately 45000 per second)¹⁰;
- Our findings about the incomprehensible multidimensionality of the universe and its infinite possibilities make the existence of other life in the universe plausible and probable;
- The power of human energy, which we can use to discover, develop and enhance our potential through various techniques, is known both to experts and to the "general public". The ability to self-heal, an awareness of unconscious insight, enhancing the capacity of our mental and physical ability with natural methods that are kind to both people and nature, have increasingly become general knowledge.¹¹

Practice shows us that most people find self-conscious environments even more challenging than thinking environments. This is perhaps largely due to the need for

⁹ The Music of Life, Denis Noble, <http://musicoflife.co.uk/index.html> July 7, 2013

¹⁰ The Music of Life, Denis Noble, <http://musicoflife.co.uk/index.html> July 7, 2013

¹¹ <http://www.youtube.com/watch?v=JnA8GUtXpXY>, (July 2013)

comprehensive (holistic) development of individuals, and for the development of systems thinking, that we all need to embrace in order to be able to address the most complex challenges of the contemporary world.

Systems thinking

The 21st century is opening the door more and more to systems thinking.¹² Systems thinking has been defined as an approach to problem solving, by viewing "problems" as parts of an overall system, rather than reacting to a specific part, outcomes or events and potentially contributing to further development of unintended consequences. Systems thinking is not one thing but a set of habits or practices within a framework that is based on the belief that the component parts of a system can best be understood in the context of relationships with each other and with other systems, rather than in isolation. Systems thinking focuses on cyclical and networked relationships rather than on linear cause and effect.

Leverage points of the system thinking civilisation

Leverage points, where the shift from the old to the new happens, help us understand the scope of the necessary changes and to develop a systemic and systems approach to adaptation (*Figure 3*) to the currents of a potential new civilisation:

- **ways of organising** (processes, structures, approaches; individuality, cooperation with others)
- **ways of learning** methods (experiential, learning from other people and from plants, animals, our planet and the universe; learning from our past, future and present)
- **ways of being** (behaviour, relationships, responses, participation, beliefs, engagement)
- **ways of doing** (approaches, tools, services, solutions, products)
- ways of **understanding** (approaches to research, discovery, development, innovation)
- **ways of valuing** (new definitions of growth and perception of power, new customs, rituals, ethical norms, empathy and providing security)

Leverage points can serve as inspiration and support in the search for contextual, methodological and structural changes in education and learning processes, so that students, employers and employees can successfully prepare themselves for the

¹² **Systems thinking** is the process of understanding how things, regarded as systems, influence one another within a whole. In nature, systems thinking examples include ecosystems in which various elements such as air, water, movement, plants, and animals work together to survive or perish. In organisations, systems consist of people, structures, and processes that work together to make an organisation "healthy" or "unhealthy". http://en.wikipedia.org/wiki/Systems_thinking, (July 2013)

challenges before us. Through observation of the above leverage points we can also identify their **mutual co-dependency** and understand how **systemic consciousness as a whole** is formed. All leverage points adapt to the development of the various forms of

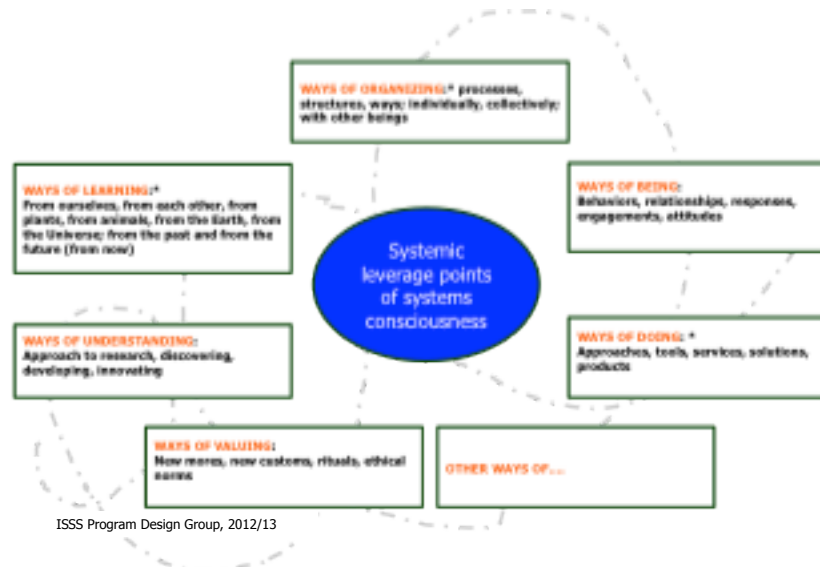


Figure 3: Systemic leverage points, ISSS Program Design Team, 2012/13

consciousness (*Figure 3*). We can therefore claim with reasonable certainty that our era brings a change in our understanding of what knowledge is necessary and how it should be obtained. This is summarised in the following thought:

"Due to the high frequency of change in the relationships between individuals and structures, and in behaviour and the needs of individuals, there is a growing need in the process of education for methods of lateral and holistic learning, dynamic and active obtaining of information, models of logical thinking, increasing creative potential, establishing dynamic global networks, self-organisation and networking, multi-level target-oriented communication, inclusive development of social capital and establishing of conditions for the **successful development of individuals and their skills**. We must be aware that that each living being carries a unique message for the development of our planet. Neglecting anyone as a carrier of this message is a loss for us all. Furthermore, it is of key importance that we are able **to understand how and why** the amendment/change of approaches, models and tools had to happen; what to take into account in dynamic processes of development, when and for how long." (Bulc, July 2013).

The above areas of change have a special significance with respect to leverage points. Learning methods and methods of obtaining information call for the most urgent changes, but also hold the greatest opportunities for educational systems.

From the aspect of upgrading systemic consciousness, the most immediate opportunities lie in two leverage points: methods of acting and methods of understanding. Changes in these two areas can be achieved quickly and can also initiate long-term adaptation in other areas.

Practical cases

"An education that is important [is one] that presents an example of how you integrate into community, how you transfer a set of values and communicate to communities notions of leadership for those who are coming behind you." **Dr. Brenda Armstrong, Director of Admissions for the Duke School of Medicine, Houston**

Experience from lecturing "Innovation Management and Innovative Management"¹³

Environment: graduate study programme, 200-300 students of Slovenian and Serbian nationality and of various ages and profiles, with various backgrounds;

Values supported by the subject: originality, understanding of the essence of new content, teamwork, mutual support and inquisitiveness;

Skills developed by the subject: cross-structural cooperation, systemic approach, modern communication tools, project management, managing an innovation process from idea to execution, new management methods (inside out leadership), holistic approach to challenges, understanding of mutual influence of various business elements, with special emphasis on innovation ecosystems;

Non-traditional aspects of the approach:

- **Materials:** students can use study materials in a variety of formats (films, articles, YouTube videos, websites, printed books, electronic study materials, state-of-the-art electronic environment (e-classrooms), webinars);
- **Implementation:** the implementation promotes proactivity and own initiative, various communication channels are used for communication with students, content is in various formats, mentor offers strong support throughout the course of study, students always work in study groups;
- **Work methods:** *lateral thinking* and a *holistic approach to challenges* are emphasised; no learning by heart is expected (when the student decides to take an exam they can use all available literature and support materials; the emphasis is on their ability to answer questions in a comprehensive manner with the use of these materials); the students are encouraged to use logical thinking, intuitive responses and a holistic approach to challenges (in project work, the students are encouraged to identify actual needs and prepare feasible innovative solutions to test their knowledge in practice); the final project report requires students to highlight experience gained through the project, newly acquired knowledge and added value created with the project); we have also introduced a logically connected *cross-structural integration of subjects*. Integration is conducted at several levels: students from different groups are reassigned to form new teams; students have a single project

¹³ DOBA, 2009 - 2013, <http://www.doba.si/>

which they systematically upgrade and amend through the various subjects in the education process.

Response: student responses were very positive, both in terms of their experience and with respect to the projects they developed. Methods used in the implementation of the study subject simulated an actual business environment and encouraged the development of competencies students will actually need. There were also negative experiences among students due to the challenges of leading teams, assigning tasks and responsibilities and the issue of equality in teams. All this provided them with valuable experiences that increase their confidence and independence, and also improve their preparedness for real-life challenges.

Experience from lecturing "Social Skills"

Environment: traditional graduate studies, 40 students from more than 10 countries of approximately the same age (20-24).

Values supported by the subject: thinking beyond the limits of what we know, empathy, respect, trust.

Subject mission: motivate students to use evolutionary approaches, innovation communication and innovative communication, and proactive socialisation; presentation of models of progressive thinking; promoting social innovation; gaining practical experience for the development of social skills, demonstrating the power of the collective conscious.

Skills developed by the subject: communication, personal interaction and development of group interaction, team building, 'no box' thinking.

Non-traditional aspects of the approach: the subject is presented in a manner that provides direct experiential learning; students perform various tasks throughout the course; frequent changes in team structures; through each individual exercise, the students are gradually setting up a theoretical framework, which they test on concrete tasks and critically assess and upgrade each other's work. All the materials prepared through group work are exhibited in the classroom throughout the duration of the study subject, so that the students are able to form a complete picture. There is no exam for the subject. Student grades are a combination of participation in classes, self-assessment and team assessment and the lecturer's assessment of the team project; the team task must be performed in three weeks, it must be practical and leave a lasting impression among the chosen stakeholders; the essence of the project report is in understanding the skills required for its implementation; students must be able to identify skills they did not possess but would have been useful in the project and to determine the effects of the project on stakeholders' end, identify which skills the project helped develop, both internally and with external participants; the subject also includes business role-playing which awakens the students' sensitivity, intuition and inquisitiveness.

Response: each hour of building a field of trust improved the students' confidence, the quality of their results and enthusiasm about the learnt content; the opportunity for the students to participate in drafting a textbook through guided workshops and experience the strength of the collective conscious in practice gave the students a trustworthy tool for the future, increased their confidence in themselves, their colleagues and individual and group finding of solutions; through the constant changes in team structure the students developed mutual respect, respect for diversity based on different cultural backgrounds, thought patterns, linguistic

specifics and different interpretations of body language; all this contributed to their self-confidence in communication, joint creativity and relationships; their experience with uncovering the unconscious and the power of intuition significantly broadened their perception and behaviour.

The Challenge:Future Youth proposals

Challenge:Future (C:F) is a global platform for youth empowerment. It has developed an unique innovation model built on the principles of true empowerment, balanced innovation, and active co-creation of the future. For more than four years C:F has demonstrated repeated success in the large-scale engagement of global youth aged 18-30 in more than 200 countries worldwide. This success is built on its capacity to accelerate learning, innovation and impact by creating a variety of unique innovation ecosystems. C:F's most recent annual project: The Future of Work is a perfect illustration of such capacity. They managed to engage 1.360 teams of students from 106 countries, C:F platform received 700.000 page views and the community benefited from a record-high participation in the voting process with 22.000 votes. All in less than four months! Challenge:Future leans strongly towards the use of human-centered innovation methodologies while solving personal, business, and global challenges. May it be participatory, user-centered, or integrated design, the goal is the same: to foster dialog, engagement and collaboration among all parties involved. In this chapter we share the C.F youth's view on the future of education.

Dilemmas and challenges pointed out by the youth

Students pointed out the following most concerning challenges from the current system:

- Degrees no longer ensures employment.
- Decline in student attention span and lack of engaging teaching methods.
- Increase in college expenses, job-education mismatch and unemployment.
- The specializing vs generalizing debate.
- Increased student confusion and slacking due to lack of physical presence and guidance from teachers.
- Risky to specialise in a dynamic economy.
- The online education lessons are lacking human interaction, therefore limiting the young people in their holistic development that is so needed in the modern world to succeed.
- Lack of standardised duration for high school may cause slower student turnover.

Student's propositions for a better higher education

1 *Volunteering*

"We believe that volunteering opens the eyes of students to possibilities and builds a strong community, apprenticeship helps students work with experienced mentors to

really understand and appreciate different trades of life and finally entrepreneurship challenges students to take risks and builds a resilient character.”¹⁴

2 Ethics as part of education

- Ethics should not be a subject but a way of dealing with challenges and issues in real time situations.
- Ethics should be addressed in schools regularly, dealing with a real life issues and situations, explaining to the students why ethical dilemmas occur and how to deal with them.
- The school system should contribute towards building the character that would be able to face the (business) challenges and reject, avoid or transform questionable situations.
- The school system should help to establish a higher social awareness and cooperation in the field of ethics and ethical behaviour.

3 “Life situation” and the youth engagement

- students want more “Situation-based learning” dealing with a real time problems Experimental learning.
- students propose to move from a specialisation-centred strategy, to an accelerated cultivation of experts and entrepreneurs through customised education and tools.
- students want to participate in the formulation of the educational system they are part of; they want, “.development inclusion of youth, experiential learning and mobile technology...”¹⁵

4 High quality mentorship

- the youth seek presence of highly skilled and experienced mentors that have life-experiences.
- the youth seeks more guidance instead of the “broadcasting” teachings; they need interactions, dialogues, collaboration and cross-generational cooperation.
- they stand by the the saying “Students are born to learn, not to be taught”.

Propositions from the two most progressive teams

The Ignite team stressed, “Through our 3 year university, we will focus on three important methods of education which are volunteerism, apprenticeship and entrepreneurship. We believe that volunteering opens the eyes of students to possibilities and builds a strong community, apprenticeship helps students work with experienced mentors to really understand and appreciate different trades of life and finally entrepreneurship challenges students to take risks and builds a resilient character. These core aspects will be incorporated into modules such as craftsmanship, spirituality and farming. (Figure 2) At IGNITE, we believe that both the modules and the environment the student experiences is important to character

¹⁴ Challenge:Future IGNITE team 2013

¹⁵ Challenge:Future Kawai team, Manila 2013

development. Through the IGNITE model we hope to nurture a society that is Gracious, Green, Giving, Grounded and Grateful (5Gs).¹⁶

The Kawai team has pointed out that, "A lot of classes on theories and standardised knowledge will move to online classes, allowing mobility of the students to be exposed to the field. Classroom setup can be eliminated or reduced to only a few times a week, and shall focus on collaboration with other students, exams or other participative activity. From High School to College, students will be given the freedom to take other classes that are not required, such as life skills, personal financial management, and other fields of interest to foster a holistic growth despite specialisation."¹⁷

Further development of the experiential learning method

The presented examples stress the importance of experiential learning. The key opportunities of teaching these two subjects lie in the development of all forms of knowing beyond only that of intellectual and rational knowing.

Other opportunities lie in increased **interactive support for the process** of learning and in engaging the students in solving **real life challenges** that create actual added value for the chosen audiences. It is also important to **encourage their own authentic ways of thinking**, and **encourage them to make responsible decisions**.

We have made it our own personal challenge to address all **6 human dimensions** (Figure 2) in these study subjects and to contribute to their balanced development. Additional reserves lie in expanding our conscious field, in becoming aware of the role of the intuitive channel in the decision-making process and in how we understand insights.

Conclusion: Education for an emerging society

The conclusions of the previous chapters call for systemic changes in the processes of education and training, both in mandatory and optional education, as well as intergenerational learning, internal transfer of knowledge, etc. in actual and virtual environments. A diversity in the structure of participants (intercultural, interdisciplinary, international groups) is an additional advantage in these processes. They are also reinforced by skills, approaches, methods and processes we bring to these relationships and with which we actively participate in the education process. The process of learning and education is lifelong and each moment and environment we live in are its classrooms.

Based on the evolutionary behaviour of systems and our practical experience from processes of adaptation in corporate environments, local communities, in the NGO sector and in academia we noticed that some areas/topics that could be of huge benefit in the development of the required competencies are particularly neglected. Their **absence** in the general education of individuals **increases stress, physical illnesses and psychosomatic disorders, and decreases the level of**

¹⁶ Challenge:Future IGNITE team, Singapore 2013

¹⁷ Challenge:Future Kawai team, Manila 2013

manifestation energy, which is a prerequisite for execution of new ideas, inventions and innovation. We also tend to overlook the close relationship and co-dependency between structures of varied complexity, which are easily identifiable in the example of the interconnectedness of ethics and integrity.

Shifts in leverage points, awareness and perception of the world demand corresponding changes in all social structures, and particularly in the education process. They call for changes in the content we manage, for the remodelling of the tools we use to shape structures, for the improved, target-oriented integration of learning and working, for the understanding of all levels we can act on, for establishing of new connections that will liberate us, and for responsible and ethical behaviour that maintains the subtle ties of joint co-creation. Teachers, lecturers and experts participating in the shaping of study curricula and work methods have an important role to play in this process. We have the responsibility to be sensitive to the first signals of the necessity of changes and be courageous in addressing them in a learning process that will set the foundation for the future. Therefore, we need to implement changes in our pedagogical approaches and be innovative in setting up the conditions for **"active learning, not listening"**.

In the article we tried to highlight the challenges presented in a modern society by the evolution of business systems, by human relationship with structures, changed sources of and factors in value creation, and awakening of a new awareness which will probably shape up a new civilisation. No matter how much we focus on structures, evolution and societies, at the end it always comes down to each **individual** and his/her ability to adjust and grow in a balanced and holistic manner. The educational process plays a significant role in establishing this balance, therefore changes that follow or recognise the needs in educating an individual, as well as whole societies, are truly necessary. In order to meet the needs of the modern human being, the changes must reflect the characteristics of a **half of the evolution cycle ahead** of an individual ones. May it continue to revolve and evolve!

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